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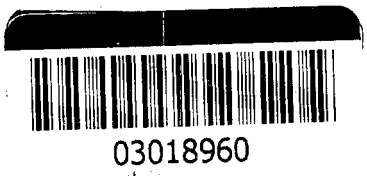
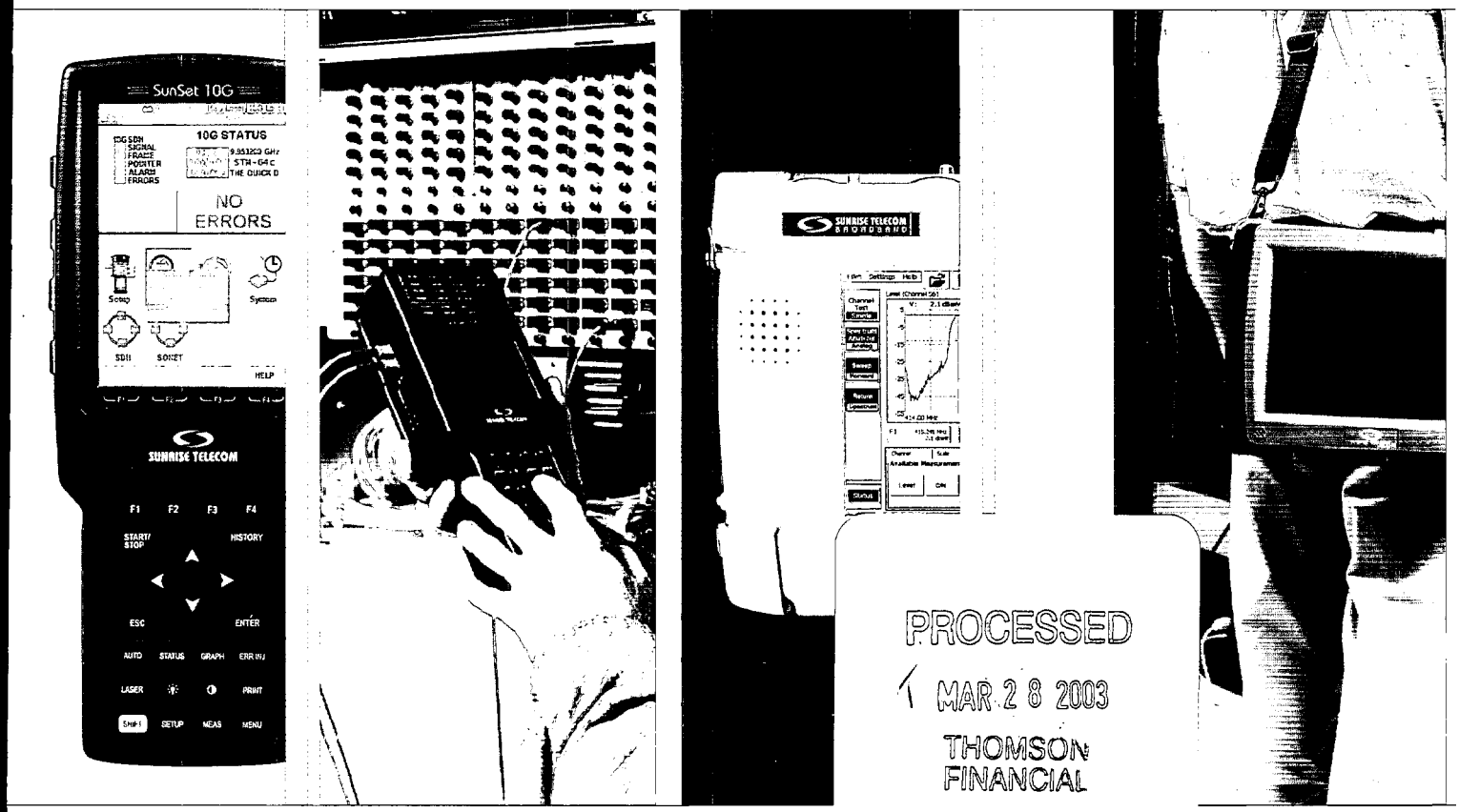


Providing Leading Verification and Diagnostic Solutions to Telecommunications and Cable Service Providers



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SUNRISE TELECOM

To Our Shareholders

Although the telecom and cable markets tumbled through a second weak year in 2002, we minimized losses, grew both revenue and market share in our cable sector, broadened and diversified our revenue base, and innovated industry-leading products.

For 2002, the company posted net sales of $54 million, down significantly from $79 million in 2001, and $113 million in 2000. Despite this dramatic drop in revenue, on a pro forma basis the company operated approximately at breakeven in 2002. Pro-forma net income, excluding amortization of acquisition-related intangible assets and stock-based compensation of $5.2 million, was $0.2 million for 2002, or $0.00 per diluted share. Net loss for 2002 including this amortization was $5.0 million or $0.10 per diluted share.

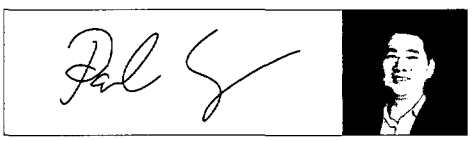
Since our founding in 1991, Sunrise has established a reputation for consistent and sound fiscal management. We strongly leveraged this experience in 2002, paying careful attention to expense control while funding an aggressive development plan under difficult market conditions. Despite a decline in revenue, this discipline enabled us to continue operating with excellent cash reserves, very little debt and break-even cash flow from operations. In fact, since April 2000, we have generated $33 million in cash flow from operations.

In the cable business, our three acquisitions, along with continuing product development and channel integration, give us newfound strength. We now offer a balanced cable solution set from cable headend to customer premises. Overall cable revenues grew 59 percent, from $11.2 million last year to $17.8 million this year, fueled by this year's CaLan acquisition and organic growth of our CM1000 cable modem system analyzer family. We substantially improved our market position and believe we have become the firm number two supplier.

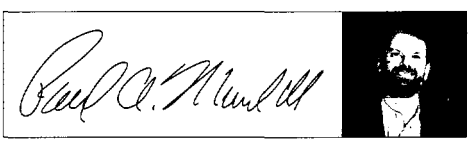
In our telecom business, wireline access, fiber optics, and signaling all experienced revenue declines. However, with the introduction of new products such as our Scalable Test Toolkit (STT) for optical network testing, we look to plant the seeds of future success. With the STT, we're able to capitalize on the growing need for metro DWDM and related installation solutions, broadening our addressable market, and establishing our most compelling offering yet for central office applications. Our vision leverages our strong base in handheld field test sets to move up into central office, manufacturing, and eventually, research and development applications.

Since 1999, we have diversified ourselves from a company with 97 percent of our revenues from wireline access products (principally ADSL) to a company that is now 42 percent wireline access, 33 percent cable, 21 percent fiber optic, and 4 percent signaling. Diversification positions us strongly for long-term growth with a broader range of addressable markets.

Thank you for your interest.

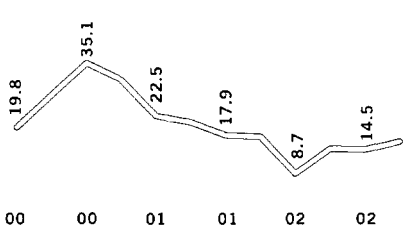


Paul Ker-Chin Chang
Chief Executive Officer,
President and Chairman of the Board

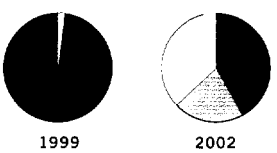


Paul A. Marshall
Chief Operating Officer,
Vice President of Marketing and Director

Net Sales
(In Millions)



Diversified Product Revenue



- Signaling Protocol
- Cable TV
- Fiber Optics
- Wireline Access (Including DSL)

Growth Strategy

- Lab, R&D
- Manufacturing
- Central Office and Head End
- Field Test Equipment

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2002

Commission File Number: 0-30757

Sunrise Telecom Incorporated

(Exact name of Registrant as specified in its charter)

Delaware	**77-0291197**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

302 Enzo Drive, San Jose, California 95138
(Address of principal executive offices, including zip code)

Registrant's telephone number, including area code: (408) 363-8000

Securities registered pursuant to Section 12(g) of the Act:

Common Stock, par value $0.001 per share
(Title of class)

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the Registrant is an accelerated filer (as defined in Exchange Act Rule 12B-2).

Yes ☐ No ☒

As of June 28, 2002, the aggregate market value of the Common Stock of the Registrant held by non-affiliates was $38,529,121.

As of February 28, 2003, there were 49,581,419 shares of the Registrant's Common Stock outstanding, par value $0.001.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the proxy statement for the 2003 Annual Meeting of Stockholders are incorporated by reference in Part III.

SUNRISE TELECOM INCORPORATED

Index to Annual Report on Form 10-K

FOR THE FISCAL YEAR ENDED DECEMBER 31, 2002

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Forward-Looking Statements

This report on Form 10-K contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, including, without limitation, statements regarding possible growth in the market for telecommunications test equipment and new product development. Except for historical information, the matters discussed in this report on Form 10-K are forward-looking statements that are subject to certain risks and uncertainties that could cause actual results to differ materially from those projected due to certain factors, including those discussed below in "Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations—Risk Factors Affecting Future Operating Results" and elsewhere in this report. You should not rely solely on forward-looking statements in this report to support an investment decision. The following discussion should be read in conjunction with the consolidated financial statements and notes thereto included elsewhere in this Report on Form 10-K.

Part I.

ITEM 1. BUSINESS

OVERVIEW

We manufacture and market service verification equipment that enables service providers to pre-qualify facilities for services, verify newly installed services, and diagnose problems relating to telecommunications, cable TV, and internet networks. Our products offer broad functionality, leading edge technology, and compact size to test broadband services; these include wire line access services (including DSL), fiber optics, cable TV networks, and signaling networks. We design our products to maximize technicians' effectiveness in the field and to provide realistic network simulations for equipment manufacturers to test their products. Our customers include incumbent local exchange carriers, cable companies, competitive local exchange carriers, and other service providers, network infrastructure suppliers, and installers throughout North America, Latin America, Europe, Africa, the Middle East, and the Asia/Pacific region.

In October 1991, we were incorporated in California as Sunrise Telecom, Inc. In July 2000, we reincorporated in Delaware and changed our name to Sunrise Telecom Incorporated ("Sunrise"). "Sunrise Telecom," "SunSet," and "SunLite" are trademarks of Sunrise Telecom Incorporated. This Report on Form 10-K also includes references to registered service marks and trademarks of other entities.

INDUSTRY BACKGROUND

High-Speed Data Access

Data traffic in the United States and Canada has surpassed the amount of voice traffic carried on the existing telephone network. Consumers are seeking higher-speed access to bandwidth intensive content and services, such as highly graphical Web sites, audio, video, and software downloads. As an increasing number of Internet users access more and different content, the ability to connect to and receive data from the Internet at high speeds has become and will continue to become more important.

One primary investment area is the redesign of the access network to support broadband access to end users. This portion of the network between the customer's premise and the service provider's central office is also known as the "last-mile." The last mile typically consists of copper wires that operate at substantially lower transmission speeds than those offered in the long-haul segment of a network or by some available broadband alternatives. These copper wires were originally intended to carry only analog circuit-switched, low-speed voice signals and, as a result, have become a

bottleneck that limits high-speed data transmission. Several access technologies are being deployed to support higher-speed Internet access in the networks, including digital subscriber lines, digital cable TV/MODEM, fiber optics, and broadband wireless. In addition, the signaling portion of the network is essential to the integration of new broadband services into the existing telecommunications network. We summarize some of these technologies below.

Wire line Access Technology. Wire line access technology, including DSL technology, transmits data up to 50 times faster than a conventional dial-up modem using existing copper telephone wires. The early adoption of high speed transmission included technologies such as T-carrier, E-carrier, ISDN, and most recently DSL. Digital subscriber line technology, commonly known as DSL, today transmits data up to 50 times faster than a conventional dial-up modem using the existing copper telephone wires. Various implementations of DSL are being developed and deployed, including asymmetric DSL, known as ADSL, symmetric DSL, know as SDSL, high bit-rate DSL, known as HDSL, and integrated services digital network DSL, known as IDSL. Service providers deploying DSL technology include incumbent local exchange carriers, such as SBC Communications, Inc., Verizon Communications, Inc., and Sprint Corporation.

Cable TV Networks. Cable TV operators use two-way cable, cable modems installed in the home, cable modem termination systems installed at major cable concentration points, and network headend equipment designed to interface their cable TV networks to video feeds and other networks. Several cable companies are currently offering broadband access services across two-way cable, including Comcast, Charter Communications, Cox, and TimeWarner Cable.

Fiber Optics. Fiber optic cables use pulses of light to transmit digital information. Because fiber optic cables support thousands of high-speed, local digital connections onto a single higher-speed connection to the central office or the central side of the cable TV network where the video signals emanate, they offer virtually unlimited bandwidth capacity. Due to their high capacity, fiber optic cables are being used increasingly in the access network in both telecommunications and cable TV applications.

Signaling. Telephone systems require a signaling mechanism to set up and end phone calls. These signals serve functions such as supervising or monitoring the status of a line on circuit to see if it is busy, idle, or requesting service; alerting or indicating the arrival of an incoming call; and addressing or transmitting routing and destination signals over the network. Signaling Systems 7, or SS7, is the standard signaling system used by telecom networks worldwide. Signaling networks must support new access technologies to ensure interoperability with the existing telephone network.

The Need for Service Verification Equipment

In order to successfully deploy and maintain broadband networks, service providers rely on sophisticated service verification equipment. This equipment allows service providers to pre-qualify facilities for services, verify proper operation of newly installed services, and diagnose problems. In addition, equipment manufacturers use service verification equipment to test simulated networks during equipment development and verify the successful production of equipment. Service verification equipment can be grouped into the following three types: field verification, remote testing, and alarm and surveillance.

Field Verification Equipment. Field verification equipment is used by service providers to probe the actual wires, cables, or airwaves to verify that a service works. In the case of a service malfunction, a field technician can use the equipment to locate the exact fault so that repairs can be made. Research and development labs, manufacturing departments, and central office technicians also use field verification equipment in their day-to-day operations. Of the three types of service verification equipment, field verification equipment delivers the most detailed service information. Service providers have found field verification to be an effective method to ensure that the lines operate properly.

Remote Test Equipment. Remote test equipment can help verify services and identify certain types of service malfunctions from a centralized location. The equipment is typically controlled by a centralized test system that automates much of the remote testing process. It is commonly used to determine which section within a 3,000 mile circuit has malfunctioned and to diagnose quickly the nature of a customer's complaint. Due to its centralized and automated nature, remote test equipment is an efficient way to complement field test equipment in the deployment and maintenance of broadband networks.

Alarm and Surveillance Equipment. Alarm and surveillance equipment constantly monitors the telephone network, searching for facility or service degradations, including outages. When a problem is noticed, a report may be sent immediately to an automated trouble diagnostic system or to a human operator who interprets the message and decides what further action is required. Corrective action typically involves field verification or remote test equipment to identify and correct specific problems.

Because the competition for subscribers for high-speed bandwidth access is intense, the quality and reliability of network service has become critical to service providers because of the expense, loss of customers, and negative publicity resulting from poor service. Field technicians who use service verification equipment allow service providers to verify and repair service problems effectively and, thus, increase the quality and reliability of the network.

THE SUNRISE SOLUTION

We design and manufacture service verification equipment that enables service providers to pre-qualify facilities for services, verify newly installed services, and diagnose problems relating to wire line access services, including DSL services, fiber optic, cable TV, and signaling networks. Our products also enable equipment manufacturers to test simulated networks during equipment development and verify the successful production of equipment. Our field products offer the following features:

- *Design Flexibility.* We design our products to be flexible and to evolve as customer needs change. Our CM 1000, SunSet MTT, and SunSet xDSL product lines, for example, allow field technicians the ability to upgrade their equipment easily through a variety of plug-in hardware modules. This flexible design allows the customer to adapt the test set to new services and applications as network standards evolve.
- *Customer Driven Features.* Each of our products is tailored to our customers' needs. Our marketing engineers interact with our customers during the design process to ensure that our products are the best available solution for them.
- *Handheld Design.* We design most of our products to be used in the field. The compact, lightweight design of these products enhances field technicians' ability to access problems and verify line operation. The SunSet Ocx, for example, is the first asynchronous transfer mode fiber optic field test set small enough to be held in the palm of a technician's hand.

Because of the design and functionality of our products, we provide the following benefits to our customers:

- *Rapid and Efficient Deployment.* Our products allow field and office technicians to test lines rapidly and efficiently to ensure that they are properly connected to the central office and that they can support a specific type and speed of service. In a single device, our products can be used to pre-qualify facilities for services, identify the source of problems, and verify the proper operation of newly installed service before handing service over to customers.
- *Improved Network Quality and Reliability.* Our products diagnose and locate a variety of problems and degradations in established broadband networks allowing service providers to identify and repair problems and to restore service efficiently.

PRODUCTS

We currently offer two main categories of service verification products: broadband access service verification products and signaling testing products.

Broadband Access Service Verification Products

Our broadband access service verification products support a wide range of access technologies, including DSL, cable TV, and fiber optics, for both U.S. and international standards.

Our products enable technicians to verify if a broadband service has been properly installed and to identify and correct problems in case of an error. Our products are designed to be carried into the field by a technician and have a large graphical display, menu-driven functionality, an easy-to-use interface, and in most cases weigh less than three pounds. Many of our models support plug-in hardware modules that enable technicians to upgrade the test sets quickly and easily.

Within our broadband access testing products, we manufacture service verification equipment for three main technologies: wire line access, cable TV, and fiber optics. We describe our major products in each product category below.

WIRE LINE ACCESS PRODUCTS

Global Wire Line Access and DSL

Global DSL products allow worldwide telecommunications service providers to install and troubleshoot digital copper-based circuits and services. The xDSL and MTT series find data transmission rates and noise margins that can be supported by the line. This series employs modules to test DSL and other digital transmission types, such as T1 which is used by large businesses for broadband access. Our modular architecture allows technicians to use a single unit to test a variety of DSL services. In addition, the flexibility of the modular architecture protects a customer's investment in the test equipment.

SunSet MTT Family	⊖ This Modular Test Toolkit features a handheld test chassis and supports 25 different test modules for a variety of special service, DSL, and physical layer twisted pair test applications. The MTT is based on the SunSet xDSL family, but includes optional next generation twisted pair measurements and a high-resolution color screen.
SunSet xDSL Family	⊖ The original handheld unit for DSL service verification. This product supports all Sunrise DSL modules to allow field technicians to test various types of DSL technologies.
Oculist	⊖ The Oculist puts our DSL technology into a variety of central office and laboratory test applications.
SunSet ISDN, SunLite BRI	⊖ These products support analysis and service verification for the Integrated Services Digital Network, known as ISDN. ISDN is an enhanced digital network that offers more bandwidth than the traditional telephone network.

North American Wire Line Access	
	We design our North American wire line access products specifically for the North American market and support applications common to this market such as T1, a standard for digital transmission in North America used by large businesses for broadband access.
SunSet T1	• Handheld unit that supports transmission testing for T1, including service verification for voice services.
SunSet T10	• Handheld unit that supports transmission testing for T1, with service verification and diagnostics for multiple data protocols and voice services.
International Wire Line Access	
	We design international wire line access products specifically for testing lines outside the North American market and to support protocols common to the international market such as E1, a standard for international digital transmission used by large businesses for broadband access.
SunLite E1	• Pocket-sized unit that supports transmission testing for E1.
SunSet E1, E8	• Handheld units that support transmission testing and service verification for E1 and voice services.
SunSet E20	• Handheld unit that supports transmission testing for E1 and service verification for data, voice, mobile, and other signaling protocols.
SunSet PDH	• Handheld unit that supports transmission testing for E1 and higher transmission rates.
CABLE TV PRODUCTS	
CM500 IP Series *CM100 IP*	• Handheld unit that supports automated analog and digital signal level measurements, including spectrum scan and digital signal power levels.
CM250 IP	• Handheld unit that supports automated analog and digital signal level measurements, as well as MER, pre FEC BER and post FEC BER measurements on 64 QAM and 256 QAM digital carriers.
CM500 IP	• Handheld unit that supports automated analog and digital signal level, MER and BER digital measurements and DOCSIS Cable Modem installation verification.
CM1000	• Handheld unit for installation and troubleshooting of DOCSIS Cable Modem networks. The CM1000 has a built-in cable modem to communicate with the Cable Modem Termination System to characterize the digital performance in both the upstream and downstream paths.
2010/3010B	• Rugged handheld Signal Level Meter (SLM) offers built-in comparison and analysis capability as well as the standard signal level measurements. It can also receive ingress data transmitted by the 3010H.

3010R	Rugged handheld field unit includes forward sweep, return sweep and SLM capabilities. The 3010R can also function as a headend unit for troubleshooting intermittent problems in specific network segments.
3010H	Rack-mounted headend analyzer supports up to ten 3010Rs (field units) simultaneously in a return path mode and an unlimited number of field units as a forward sweep transmitter.
N1776A Network Profiler	Field portable instrument combines the function of a spectrum analyzer, forward and return sweep system, digital analyzer, and Windows CE operating system with the capability to address current and emerging test requirements in a single unit.
AT-2000RQ	Lightweight, portable, rugged, full-featured CATV Spectrum Analyzer that performs advanced field testing including finding fast transient ingress, measuring carrier to noise ratios up to 60 dB at low levels, accurately measuring digital carriers, data logging, QIA (QAM Impairment Analysis), and complex proof of performance testing.
AT-2000HMQ	Rack-mounted headend Spectrum Analyzer provides remote headend testing and verification of both analog and digital downstream and upstream signals from 1 MHz to 1 GHz.
realWORX	realWORX Performance Verification Systems provide automated verification of downstream and upstream signal quality on a continual basis from a headend or hub site. realWORX verifies the quality of downstream QAM and Analog CATV channels and ensures that the Return Path Ingress levels are within acceptable limits.
FIBER OPTIC PRODUCTS	
Scalable Test Toolkit (STT)	A portable, modular unit designed to test core, metro, and access optical networks. STT supports SONET, SDH, DWDM, Ethernet, and fiber cable testing through a family of stackable test modules.
PMDE	Advanced simulation product for the lab environment, the PMDE realistically introduces PMD (a leading cause of signal degradation in high bit rate optical networks) into optical components, instruments, and networks to test performance.
SunSet OCx *SunSet 10G*	Handheld units that support transmission testing for multiple varieties of SONET. The OCx includes both electrical and optical signal testing and performs service verification for various services such as Asynchronous Transfer Mode (ATM).
SunSet SDH *SunSet 10G*	Handheld units that support fiber optic transmission types, such as SONET and Synchronous Digital Hierarchy, for traditional North American and international digital transmission types. The SDH includes both electrical and optical signal testing and performs service verification for various services such as Asynchronous Transfer Mode (ATM).
SunLight family	Family of handheld optical testers for fiber cable installation, troubleshooting, and maintenance.

SIGNALING TESTING PRODUCTS	
3GMaster	• Central office unit to monitor Second and Third Generation Mobile networks. Applications include billing verification, troubleshooting roaming and internetworking problems, network traffic statistics, and quality of service testing.
NeTracker	• Portable or central office unit that supports the multiple protocols, data rates, and interfaces found in today's emerging Voice over IP networks. Applications include service verification, protocol analysis, voice quality testing, and stress testing for the VoIP environment.
Ghepardo	• Central office unit to analyze major signaling protocols, including SS7 and standard data communication protocols. Web-based user interface allows users to control the product, including customization of test functions, from anywhere in the world using standard web-browser software.

The percentage of our total revenue contributed by each class of products were as follows:

	Year ended December 31,			
	2002	2001	2000	1999
Wire Line Access	42%	62%	80%	97%
Cable TV	33%	14%	4%	2%
Fiber Optics	21%	19%	12%	1%
Signaling	4%	5%	4%	0%

CUSTOMERS

Our customers include telecommunications service providers, cable network operators, network infrastructure suppliers and installers, technicians and engineers in North America, Latin America, Europe, Africa, the Middle East, and the Asia/Pacific region. The following is a selected list of our customers in 2002.

AT&T Corporation
AOL Time Warner, Inc.
Bell Canada Enterprises, Inc.
BellSouth Telecom, Inc.
Centurytel Supply Group, Inc.
Charter Communications, Inc.
Comcast Cable
Cox Communications, Inc.
CSC Holdings, Inc.
Dotcom Telecommunications Sdn
Reliance Infocomm Ltd
SBC Communications Inc.
(consisting of Ameritech Corporation, Nevada Bell, Pacific Bell, Southern New England Telephone, Advanced Solutions, Inc., and Southwestern Bell Telephone Company)
Solectron
Synchronous Communications
Telkom SA, Ltd
Verizon Communications, Inc.

As of December 31, 2002, we had sold versions of our products to over 2,000 customers in over 60 countries. No individual customer accounted for 10% or more of our net sales in 2002 and 2001. Affiliates of SBC Communications accounted for approximately 6% of our net sales in 2002, 5% in 2001, and 16% in 2000. During 2000, 17% of our net sales were to Lucent Technologies, either directly or indirectly through the contract manufacturer Solectron. Besides SBC Communications and Lucent Technologies/Solectron, no individual customer accounted for 10% or more of our net sales in 2000. We expect, however, that we will continue to depend upon a relatively limited number of customers for substantially all of our revenues in future periods. See "Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations—Risk Factors Affecting Future Operating Results—Customer Concentration."

SALES, MARKETING AND CUSTOMER SERVICE

Sales. We sell our products to telecommunications service providers, cable network operators, network infrastructure suppliers and installers, technicians, and engineers through manufacturers' representatives, independent distributor organizations, and our direct sales force.

In the United States, we sell our products through manufacturers' representatives who are supported by our in-house direct sales force. Manufacturers' representatives are paid on a commission basis and have exclusive rights in their respective regions. Our manufacturers' representatives or direct salesmen solicit orders from the customer, and we ship our products directly to the customer. We pay commissions once we have received payment from the customer. Our direct sales force includes a team of regional sales managers who direct the efforts of our manufacturers' representatives and regional account managers who focus on specific accounts within a region.

Outside the United States, we sell our products through independent distributor organizations, which are directed by our regional directors of marketing and sales. We sell our products to the distributor at a discount from the end user price, and the distributor then resells the products to the end user. International sales, including North American sales to Canada, were $16.1 million or 30% in 2002, $29.7 million or 38% in 2001, and $30.1 million or 27% in 2000. We expect that international sales will continue to account for a significant portion of our net sales in future periods. In addition to our network of international distributors, we have sales employees based in Anjou, Canada; Beijing, China; Tokyo, Japan; Seoul, Korea; Modena, Italy; and Geneva, Switzerland. See "Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations—Risk Factors Affecting Future Operating Results—Risks of International Operations."

We sell our products predominantly to large telecommunications and cable service providers. These types of customers generally commit significant resources to an evaluation of our and our competitors' products and require each vendor to expend substantial time, effort, and money educating them about the value of the vendor's solutions. Consequently, sales to this type of customer generally require an extensive sales effort throughout the prospective customer's organization and final approval by an executive officer or other senior level employee. The result is lengthy sales and implementation cycles, which make sales forecasting difficult. In addition, even after a large service provider has approved our product for purchase, their future purchases are uncertain because we generally do not enter into long-term supply agreements or requirements contracts with those parties. Delays associated with a customer's internal approval and contracting procedures, procurement practices, and testing and acceptance processes are common and may cause potential sales to be delayed or foregone. As a result of these and related factors, the sales cycle of new products for large customers typically ranges from six to twenty-four months. Over the past year, our major customers have decreased their volume of orders, implemented longer purchase cycles, and decreased capital expenditures for telecom and cable equipment.

We generally do not sell our products with rights of return, and on the few occasions when we have agreed to provide customers with rights of return, we have deferred recognition of sales revenue until the rights of return have lapsed. We generally do not provide extended payment terms to our customers.

Marketing. We market and promote sales of our products by the following activities:

- Our product marketing group researches new opportunities, prepares product definitions with our research and development group, and defines new features to create new products;
- The overall marketing group hosts a variety of seminars several times a year in the United States, Asia, Europe, and Latin America to improve the sales effectiveness of our manufacturers' representatives and international distributors;

- Our product marketing engineers, regional sales managers, and account managers travel extensively with our manufacturers' representatives and international distributors to develop new product opportunities with customers and to support their presentations;
- The marketing communications group maintains a public Web site, publishes brochures and specification sheets, and generates press releases and publicity to increase our recognition in the telecommunications industry;
- Our technical publications group prepares user's manuals, field manuals, quick reference guides, and product operation videos to serve the needs of our users;
- Our training department prepares customer training presentations and sponsors Sunrise University, a factory-based training program for our customers.

Customer Service. We believe that customer service following the sale of our products is a critical ingredient to our success. We provide customer service in numerous ways, including the following:

- providing rapid instrument repair services;
- operating a 24 hour per day telephone support line to help customers who are having difficulty using our products in their particular application;
- maintaining a proprietary Web site containing on-line, up-to-the-minute product repair information for our distributors' international repair centers, with a factory-certified technician training program for our distributors' international repair center technicians; and
- measuring the satisfaction of our customers and communicating this information to our quality group.

SEASONALITY

Our sales tend to be seasonal in nature and are typically tied to the buying patterns of our customers. Prior to 2000, the largest volume of quarterly sales had usually been during the last calendar quarter of the year, as customers spent the unused portions of their annual budgets. In 2001 and 2000, there was a change in this fourth quarter seasonality as our customers had fewer remaining unused budget dollars available to generate an increase in the fourth quarter seasonal sales. In 2002, however, we saw a return to the pre-2000 pattern, with increased sales in the fourth quarter. Market conditions in our industry are currently too uncertain for us to predict whether or not this pattern will persist. The first quarter of any given year has historically been a light period for orders because our large customers typically do not release their budgets for the year until mid-quarter. We expect that our quarterly operating results may fluctuate significantly and will be difficult to predict, given the nature of our business. Many factors could cause our operating results to fluctuate from quarter to quarter in the future, including the lengthy and unpredictable buying patterns of our customers, the degree to which our customers allocate and spend their yearly budgets, and the timing of our customers' budget processes.

BACKLOG

Our backlog of customer orders at December 31, 2002 was approximately $4.4 million compared to approximately $1.5 million at December 31, 2001. Variations in the size and delivery schedules of purchase orders that we receive, as well as changes in customers' delivery requirements may result in substantial fluctuations in the amount of backlog orders for our products from quarter to quarter.

RESEARCH AND DEVELOPMENT

We have assembled a team of highly skilled engineering professionals who are experienced at designing telecommunications and cable TV service verification test equipment. Our engineering personnel have expertise in a

number of fields, including interfacing test equipment with digital loop carrier, voice and data switching technology, local loop equipment, and operations support systems. We spent approximately $17.4 million on research and development in 2002, $18.5 million in 2001, and $17.6 million in 2000. Research and development represents our largest direct employment expense. At December 31, 2002, we had a total of 138 employees engaged in research and development in San Jose, California; Norcross, Georgia; Anjou, Canada; Modena, Italy; Taipei, Taiwan; and Geneva, Switzerland.

We believe that our continued success depends on our ability to anticipate and respond to changes in the telecommunications industry and anticipate and satisfy our customers' preferences and requirements. Accordingly, we continually review and evaluate technological and regulatory changes affecting the telecommunications industry and seek to offer products and capabilities that solve customers' operational challenges and improve their efficiency. In general, we spend anywhere from two months to four years developing a new product.

REGULATIONS AND INDUSTRY STANDARDS

Our products are designed to comply with a significant number of industry standards and regulations, some of which are evolving as new technologies are deployed. In the United States, our products must comply with various regulations defined by the Federal Communications Commission and Underwriters Laboratories as well as industry standards established by Telcordia Technologies, Inc., formerly Bellcore, and the American National Standards Institute. Internationally, our products must comply with standards established by the European Committee for Electrotechnical Standardization, the European Committee for Standardization, the European Telecommunications Standards Institute, telecommunications authorities in various countries, and with recommendations of the International Telecommunications Union. The failure of our products to comply, or delays in compliance, with the various existing and evolving standards could negatively impact our ability to sell our products.

MANUFACTURING

Our production process consists of planning, procurement, fabrication, rework, system assembly, system final test, software option customization, and shipping. We purchase substantially all parts, including resistors, integrated circuit boards, LCDs, and printed circuit boards, from distributors and manufacturers worldwide. We package these parts into kits and send them to contract manufacturers to assemble them into printed circuit boards. We perform substantially all remaining manufacturing operations. We maintain sourcing and manufacturing operations in San Jose, California; Norcross, Georgia; Anjou, Canada; Taipei, Taiwan; and Modena, Italy. In 2001 and 2002, we performed the majority of sourcing, contract manufacturing, and final assembly in San Jose, California and Taipei, Taiwan. Our San Jose, California and Modena, Italy operations are ISO 9001 certified. In 2002, we increased our manufacturing capacity in Taiwan, while reducing capacity in San Jose to increase overall production cost effectiveness.

Our subsidiary in Taiwan, Taiwan Sunrise Telecom Company Limited, is a turn-key manufacturer and local procurement operation. We also own an equity interest of 10% in Top Union, a manufacturing company located in Taipei, Taiwan that has performed board level manufacturing as part of the Taiwan Sunrise Telecom Company Limited turn-key operation. We intend to continue increasing the use of our Taiwan subsidiary for complete turn-key manufacturing to help lower our manufacturing costs.

In our manufacturing process, we purchase many key products, such as microprocessors, bus interface chips, optical components, and oscillators, from a single source or from that source's sole supplier. We rely exclusively on third-party subcontractors to manufacture certain sub-assemblies, and we have retained, from time to time, third party design services in the development of our products. We do not have long-term supply agreements with these vendors. In general, we make advance purchases of some products and components to ensure an adequate supply, particularly

for products that require lead times of up to nine months to manufacture. For a discussion of the risks associated with our reliance on these third parties, see "Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations—Risk Factors Affecting Future Operating Results—Dependence on Sole and Single Source Suppliers."

A total of $25.8 million of our net property and equipment is located in the United States and $2.3 million is located in other countries. See "Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations—Risk Factors Affecting Future Operating Results—Risks of International Operations."

COMPETITION

The market for field verification test equipment is fragmented and intensely competitive, both inside and outside the United States, and is subject to rapid technological change, evolving industry standards, regulatory developments, and varied and changing customer preferences and requirements. We compete with a number of United States and international suppliers that vary in size and in the scope and breadth of the products and services offered. The following table sets forth our principal competitors in each of our product categories:

Product Category	Principal Competitors
Wire Line Access	Acterna Corporation; Agilent Technologies, Inc.
Fiber Optics SONET/SDH	Digital Lightwave, Inc.; Acterna Corporation; Agilent Technologies, Inc.
Cable TV	Acterna Corporation; Agilent Technologies, Inc.
Signaling	Inet Technologies, Inc.; NetTest

We expect that, as our industry and market evolve, new competitors or alliances among competitors could emerge and acquire significant market share. We anticipate that competition in our markets will increase with the result that we will face greater threats to our market share, price pressure on our products, and the likelihood that, over time, our profitability may decrease. However, some of our competitors are experiencing unprecedented financial difficulties due to the generally difficult times in the telecommunications marketplace. As some of these competitors are impacted to a greater degree than we are, these difficulties may also present some opportunities for us to increase market share by better maintaining our business operations in comparison.

We believe that the principal competitive factors in our market include the following:

- continued high level of investment in research and development and marketing;
- speed of new product development and introductions to market;
- depth of product functionality;
- ease of installation, integration, and use;
- system reliability and performance;
- price and financing terms;
- technical support and customer service;
- size and stability of the vendor's operations; and
- compliance with government and industry standards.

INTELLECTUAL PROPERTY AND PROPRIETARY TECHNOLOGY

Our intellectual property, including our proprietary technology, processes and know-how, trade secrets, patents, trademarks, and copyrights, is important to our business and to our continued success. We have six patents relating to

communications testers, and we have filed several applications for additional patents with the U.S. Patent and Trademark Office and with foreign patent offices. Our research and development and manufacturing process typically involves the use and development of a variety of forms of intellectual property and proprietary technology, although no one particular form of this intellectual property and proprietary technology is material to our business. In addition, we incorporate software, some of which we may license from several third party sources. These licenses generally renew automatically on an annual basis. We believe that alternative technologies for this licensed software are available both domestically and internationally.

We protect our proprietary technology by the following means:

- relying on intellectual property law, including patent, trade secret, copyright, and trademark law and by initiating litigation when necessary to enforce our rights;
- limiting access to our software, documentation, and other proprietary information; and
- entering into confidentiality agreements with our employees.

In the future, we may receive notices from holders of patents that raise issues as to possible infringement by our products. As the number of telecommunications test, measurement, and network management products increases and the functionality of these products further overlap, we believe that we may become subject to allegations of infringement given the nature of the telecommunications industry and the high incidence of these kinds of claims. Questions of infringement and the validity of patents in the field of telecommunications technologies involve highly technical and subjective analyses. These kinds of proceedings are time consuming and expensive to defend or resolve, result in substantial diversion of management resources, cause product shipment delays, and could force us to enter into royalty or license agreements rather than dispute the merits of the proceeding initiated against us. For more information regarding the risks to our intellectual property, see "Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations—Risk Factors Affecting Future Operating Results—Intellectual Property Risks."

EMPLOYEES

At December 31, 2002, we had a total of 404 full-time employees, consisting of 220 in the United States, 82 in Taiwan, 35 in Italy, 50 in Canada, five in Korea, five in Switzerland, four in China, and three in Japan. We also had 12 temporary employees at December 31, 2002. Of the total full-time employees, 138 were engaged in research and development, 104 were engaged in sales, marketing and customer support, 115 were engaged in operations, and 47 were engaged in administration and finance. None of our employees is subject to a collective bargaining agreement. The employees of our Pro.Tel subsidiary are protected by certain provisions of Italian law. We believe that our relations with our employees are good. See "Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations—Risk Factors Affecting Future Operating Results—Dependence on Key Employees."

EXECUTIVE OFFICERS

The names and ages of our executive officers as of December 31, 2002 are as follows:

Name	Age	Position(s)
Paul Ker-Chin Chang	44	Chairman, Chief Executive Officer, and President
Paul A. Marshall	45	Chief Operating Officer, Vice President Marketing, Acting Chief Financial Officer, and Director
Raffaele Gerbasi	41	Vice President and General Manager Cable Broadband Group
Scott E. Green	37	Corporate Controller
Jeong E. Joo	38	Chief Technology Officer

Paul Ker-Chin Chang co-founded Sunrise in October 1991 and has served as Chairman, Chief Executive Officer, and President since that time. From 1984 to 1991, Mr. Chang was employed as Engineering Supervisor for the Wiltron division of Anritsu Corporation, a manufacturer of communications test equipment. Mr. Chang holds an M.S. in Electrical Engineering from the University of Kansas at Lawrence and a B.S. in Physics from Tunghai University in Taiwan.

Paul A. Marshall co-founded Sunrise in October 1991 and has served as Chief Operating Officer since December 1999, as Vice President of Marketing since March 1992, Acting Chief Financial Officer since October 2002, and as a director since October 1991. Mr. Marshall also served as Chief Financial Officer of Sunrise from March 1992 until December 1999. From 1980 to 1992, Mr. Marshall held various positions with the Wiltron division of Anritsu Corporation, most recently as Marketing Staff Engineer. Mr. Marshall holds an M.B.A. from the Harvard Business School and a B.S. in Mechanical Engineering from the University of California at Davis.

Raffaele Gerbasi joined Sunrise in January 2001 and has served as Vice President and General Manager Cable Broadband Division since September 1, 2001. Mr. Gerbasi has served as President of the Sunrise Telecom subsidiary Avantron since January 8, 2001 following the acquisition of Canada-based Avantron Technologies, Inc., a manufacturer of advanced test equipment for the cable broadband industry. Mr. Gerbasi formed Avantron Technologies in 1989 as a wholly-owned division of Dynastie Electronics and held the position of President prior to its acquisition by Sunrise. A graduate of the Radio Electronic Television School, Mr. Gerbasi started his career in the cable broadband industry in 1979. From 1979 to 1984, Mr. Gerbasi was employed as Technical Services Manager for Incospec Electronics, a Canadian cable broadband equipment company. In 1984, Mr. Gerbasi joined Dynastie, a cable broadband service and engineering company and became President and sole owner in 1987.

Scott E. Green joined Sunrise in February 2000 and has served as Corporate Controller since October 2002. Mr. Green also served as Assistant Controller from March 2001 to October 2002 and Accounting Manager from February 2000 to March 2001. Before joining Sunrise, Mr. Green was an Accounting Manager with ITT Industries from May 1997 to February 2000. Prior to 1997, Mr. Green held Senior Accountant positions with the public accounting firms Deloitte & Touche LLP and KPMG LLP. Mr. Green is a certified public accountant and a certified management accountant and is a member of the American Institute of Certified Public Accountants, and the Institute of Management Accountants. Mr. Green holds an M.B.A. from the University of California at Irvine and a B.A. in economics from the University of California at Berkeley.

Jeong E. Joo joined Sunrise in March 1994 and has served as Chief Technology Officer since July 2001. Mr. Joo served as Director of Engineering—New Technologies from December 2000 to July 2001. Since joining Sunrise in 1994, Mr. Joo has held lead engineering development and management positions in the Engineering Department, contributing most recently to our fiber optics products. Mr. Joo held Engineering Management positions with Taihan Electric Wire, Co. Ltd., a telecom electronics company in Korea, from 1988 to March 1994. Mr. Joo holds a BSEE from Chungang University, Seoul, Korea.

AVAILABLE INFORMATION

Our Web site is *http://www.sunrisetelecom.com*. We make available free of charge, on or through our Web site, our annual, quarterly and current reports, and any amendments to those reports, as soon as reasonably practicable after electronically filing such reports with the Securities and Exchange Commission (SEC). Information contained on our Web site is not part of this report.

ITEM 2. PROPERTIES

Our headquarters and manufacturing facility occupies 91,700 square feet in San Jose, California. As of December 31, 2002, we also leased 10,000 square feet of office and manufacturing space in Montreal, Canada; 16,500 square feet of office and manufacturing space in Norcross, Georgia; 10,000 square feet of office and manufacturing space in Modena, Italy; 26,290 square feet of office space in Taipei, Taiwan; 6,742 square feet of office space in Santa Rosa, California; and 2,000 square feet of office space in Geneva, Switzerland. We lease sales offices in Beijing, China; Seoul, Korea and Tokyo, Japan.

ITEM 3. LEGAL PROCEEDINGS

From time to time, we may be involved in litigation relating to claims arising out of our day-to-day operations. As of December 31, 2002, we were not engaged in any legal proceedings that were expected, individually or in the aggregate, to have a material adverse effect on our business, financial condition, results of operations or cash flow.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

During the quarter ended December 31, 2002, there were no matters submitted to a vote of the security holders.

Part II.

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

INFORMATION ABOUT OUR COMMON STOCK

Our common stock has been traded on the Nasdaq National Market under the symbol "SRTI" since our initial public offering on July 13, 2000. The following table sets forth, for the periods indicated, the highest and lowest closing sale prices for our common stock, as reported by the Nasdaq National Market.

2002	High	Low	2001	High	Low
First Quarter	$4.22	$2.45	First Quarter	$14.00	$3.25
Second Quarter	$3.65	$1.76	Second Quarter	$ 9.21	$5.40
Third Quarter	$2.18	$1.26	Third Quarter	$ 6.60	$4.47
Fourth Quarter	$2.45	$1.35	Fourth Quarter	$ 5.15	$3.51

As of December 31, 2002, we had approximately 96 stockholders of record of our common stock. Because many of our shares are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of beneficial stockholders represented by these record holders.

We did not declare or pay any cash dividend on our common stock in 2002 or 2001. We currently intend to retain any earnings for use in our business and do not anticipate paying any cash dividends in the foreseeable future. In the future, our board of directors may determine otherwise.

USE OF OUR INITIAL PUBLIC OFFERING PROCEEDS

During July 2000, we received net proceeds totaling approximately $51.6 million from our initial public offering. To date, we have used $38.2 million of these net proceeds to acquire complementary businesses, products or technology; construct our corporate headquarters; repay amounts drawn under our line of credit; and repay notes payable. Funds that have not been used have been invested in money market funds, auction rate securities and marketable debt securities. None of the costs and expenses related to the offering were paid directly or indirectly to any director, officer, general partner of Sunrise or its associates, persons owning 10 percent or more of any class of equity securities of Sunrise, or an affiliate of Sunrise.

We intend to use the remaining net proceeds of the offering for working capital and general corporate purposes and capital expenditures made in the ordinary course of our business. We may also acquire additional complementary businesses, products or technology with the remaining proceeds of the offering.

ITEM 6. SELECTED FINANCIAL DATA

The table below sets forth summary consolidated financial information for the periods indicated. It is important that you read this information together with the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our audited consolidated financial statements and the notes thereto included elsewhere in this Annual Report on Form 10-K.

	Years Ended December 31,				
	2002	2001	2000	1999	1998
	(in thousands, except per share data)				
Consolidated Statement of Operations Data:					
Net sales	$ 54,333	$ 79,059	$113,481	$61,465	$28,535
Cost of sales	17,973	25,509	32,994	14,736	7,590
Gross profit	36,360	53,550	80,487	46,729	20,945
Operating expenses:					
Research and development	17,373	18,490	17,555	10,694	6,203
Selling and marketing	16,768	20,329	22,694	15,215	7,764
General and administrative	11,322	13,779	9,790	3,912	2,243
Total operating expenses	45,463	52,598	50,039	29,821	16,210
Income (loss) from operations	(9,103)	952	30,448	16,908	4,735
Other income, net	771	2,569	1,909	327	224
Income (loss) before income taxes	(8,332)	3,521	32,357	17,235	4,959
Income tax expense (benefit)	(3,333)	704	11,972	6,291	1,588
Net income (loss)	$ (4,999)	$ 2,817	$ 20,385	$10,944	$ 3,371
Dividends	$ —	$ —	$ —	$ 223	$ 89
Earnings (loss) per share: (1)					
Basic	$ (0.10)	$ 0.06	$ 0.43	$ 0.25	$ 0.08
Diluted	$ (0.10)	$ 0.05	$ 0.41	$ 0.24	$ 0.07
Shares used in computing earnings per share: (1)					
Basic	49,854	50,195	47,374	44,667	44,537
Diluted	49,854	51,325	49,610	45,824	45,003

	December 31,				
	2002	2001	2000	1999	1998
			(in thousands)		
Consolidated Balance Sheet Data:					
Cash and cash equivalents	$ 36,440	$ 48,713	$ 56,298	$ 8,615	$ 5,030
Working capital	52,771	64,862	81,967	16,360	10,164
Total assets	118,921	126,621	125,556	38,266	17,193
Notes payable, less current portion	1,177	1,065	1,047	638	—
Total stockholders' equity	105,769	111,753	105,644	25,471	13,570

(1) See Note 1 of the notes to consolidated financial statements for a detailed explanation of the determination of the number of shares used to compute basic and diluted earnings per share.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

In addition to the other information in this report, certain statements in the following Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) are forward-looking statements. When used in this report, the word "expects," "anticipates," "estimates," and similar expressions are intended to identify forward-looking statements. Such statements are subject to risks and uncertainties that could cause actual results to differ materially from those projected. Such risks and uncertainties are set forth below under "Risk Factors Affecting Future Operating Results." The following discussion should be read in conjunction with our consolidated financial statements and notes thereto included elsewhere in this report.

OVERVIEW

We develop, manufacture, and market service verification equipment to pre-qualify, verify, and diagnose telecommunications, cable, and Internet networks. We design our products to increase technicians' effectiveness in the field and to provide realistic network simulations for equipment manufacturers to test their products. Our customers include incumbent local exchange carriers, competitive local exchange carriers, other service providers, and network infrastructure suppliers and installers throughout North America, Latin America, Europe, Africa, the Middle East, and the Asia/Pacific region.

Sources of Net Sales

We sell our products predominantly to large telecommunications and cable TV service providers. These types of customers generally commit significant resources to an evaluation of our and our competitors' products and require each vendor to expend substantial time, effort, and money educating them about the value of the proposed solutions. Delays associated with potential customers' internal approval and contracting procedures, procurement practices, and testing and acceptance processes are common and may cause potential sales to be delayed or foregone. As a result of these and related factors, the sales cycle of new products for large customers typically ranges from six to twenty-four months. During the past two years, we have observed a significant decline in capital spending in the telecommunications industry, which may lengthen the sales cycle further. Substantially all of our sales are made on the basis of purchase orders rather than long-term agreements or requirements contracts. As a result, we commit resources to the development and production of products without having received advance or long-term purchase commitments from customers. We anticipate that our operating results for any given period will continue to be dependent to a significant extent on purchase orders, which can be delayed or cancelled by our customers without penalty.

Historically, a significant portion of our net sales has resulted from a small number of relatively large orders from a limited number of customers. However, no customers comprised more than 10% of our sales in 2002 and 2001. In 2000, there were two customers that comprised 16% and 17% of our net sales. In 2001, $6.3 million, or 8%, of our sales were from our Copper Loop Test Head sold to Lucent Technologies or to Solectron, a contract manufacturer for Lucent Technologies. Solectron integrated this product into the Stinger DSLAM product that it manufactures for Lucent Technologies. The initial order for the Cooper Loop Test Head was completed during the second quarter of 2001, and the prospects for significant future orders of the Copper Loop Test Head product remain uncertain. Overall, we anticipate that our operating results for a given period will be dependent on a small number of customers.

Our sales have been seasonal in nature and tied to the buying patterns of our customers. Prior to 2000, the largest volume of quarterly sales had usually been during the last calendar quarter of the year, as customers spent the unused portions of their annual budgets. In 2001 and 2000, there was a change in this fourth quarter seasonality as our customers had fewer remaining unused budget dollars available to generate an increase in the fourth quarter seasonal sales. In 2002, however, we saw a return to the pre-2000 pattern, with increased sales in the fourth quarter. Market conditions in our industry are currently too uncertain for us to predict whether or not this pattern will persist. The first

quarter of any given year has historically been a light period for orders because our large customers typically do not release their budgets for the year until mid-quarter. We expect that our quarterly operating results may fluctuate significantly and will be difficult to predict, given the nature of our business. Many factors could cause our operating results to fluctuate from quarter to quarter in the future, including the lengthy and unpredictable buying patterns of our customers, the degree to which our customers allocate and spend their yearly budgets, and the timing of our customers' budget processes.

Currently, competition in the telecommunications and cable equipment market is intense and is characterized by declining prices due to increased competition and new products and due to declining customer demand. Due to these market conditions and potential pricing pressures from large customers in the future, we expect that the average selling price for our products will decline over time. If we fail to reduce our production costs accordingly or fail to introduce higher margin new products, there will be a corresponding decline in our gross margin percentage. See "Risk Factors Affecting Future Operating Results—Competition" and "—Risks of the Telecommunications Industry."

A substantial portion of our net sales comes from customers located outside of the United States, and we believe that future growth may require expansion of our sales into international markets. Currently, we maintain a manufacturing facility in Taipei, Taiwan; manufacturing, research, development, and sales facilities in Modena, Italy; manufacturing, research, development, and sales facilities in Anjou, Canada; and research and development facilities in Geneva, Switzerland and Hamburg, Germany. We also have a representative liaison office in Beijing, China, a foreign sales corporation in Barbados, and sales offices in Tokyo, Japan and Seoul, Korea.

We have a small amount of sales denominated in Euros and the Canadian dollar and have, in the past, used derivative financial instruments to hedge our foreign exchange risks. As of December 31, 2002, we had no derivative financial instruments. To date, foreign exchange exposure from sales has not been material to our operations. We have also been exposed to fluctuations in non-U.S. currency exchange rates related to our manufacturing activities in Taiwan. In the future, we expect that a growing portion of international sales may be denominated in currencies other than U.S. dollars, thereby exposing us to gains and losses on non-U.S. currency transactions. We may choose to limit this exposure by using hedging strategies. See "Risk Factors Affecting Future Operating Results—Risks of International Operations."

Cost of Sales

Our cost of sales consist primarily of the following:

- direct material costs of product components, manuals, product documentation, and product accessories;
- production wages, taxes, and benefits;
- allocated production overhead costs;
- warranty costs;
- the costs of board level assembly by third party contract manufacturers; and
- scrapped and reserved material purchased for use in the production process.

We recognize direct cost of sales, wages, taxes, benefits, and allocated overhead costs at the same time we recognize revenue for products sold. We expense scrapped materials as incurred.

Our industry is characterized by limited sources and long lead times for the materials and components that we use to manufacture our products. If we underestimate our requirements, we may have inadequate inventory, resulting in additional product costs for expediting delivery of long lead time components. An increase in the cost of components

could result in lower margins. Additionally, these long lead times have in the past, and may in the future, cause us to purchase larger quantities of some parts, increasing our investment in inventory and the risk of the parts' obsolescence. Any subsequent write-off of inventory could result in lower margins. See "Risk Factors Affecting Future Operating Results—Dependence on Sole and Single Source Suppliers."

Operating Costs

We classify our operating expenses into three general operational categories: selling and marketing, research and development, and general and administrative. Our operating expenses include stock-based compensation expense, amortization of certain intangible assets, and, through December 31, 2001, amortization of goodwill. Effective January 1, 2002, and in accordance with Statement of Financial Accounting Standards ("SFAS") No. 142, *Accounting for Goodwill and Other Intangible Assets*, goodwill is no longer amortized. We classify charges to the research and development, selling and marketing, and general and administrative expense categories based on the nature of these expenditures. Although each of these three categories includes expenses that are unique to the category type, each category also includes commonly recurring expenditures that typically relate to all of these categories, such as salaries, amortization of stock-based compensation, employee benefits, travel and entertainment costs, allocated communication costs, rent and facilities costs, and third party professional service fees. The selling and marketing category of operating expenses also includes expenditures specific to the selling and marketing group, such as commissions, public relations and advertising, trade shows, and marketing materials. The research and development category of operating expenses includes expenditures specific to the research and development group, such as design and prototyping costs. The general and administrative category of operating expenses includes expenditures specific to the general and administrative group, such as legal and professional fees and amortization of identifiable intangible assets.

We allocate the total cost of overhead and facilities to each of the functional areas that use overhead and facilities, based upon the square footage of facilities used, or the headcount in each of these areas. These allocated charges include facility rent, utilities, communications charges, and depreciation expenses for our building, equipment, and office furniture.

In 2002 and 2001, we recorded amortization of deferred stock-based compensation expense of $1.9 million and $2.1 million, respectively, related to the grant of pre-IPO options to purchase our common stock at exercise prices subsequently deemed to be below fair market value. Total compensation expense related to these options, which were granted in 1999 and the first quarter of 2000, is amortized on a straight-line basis, over the respective four-year vesting periods of the options, to the departments of the employees who received these below-market option grants. During 2002 and 2001, we allocated amortization of deferred stock-based compensation expense of $0.3 million to cost of sales, $0.7 million and $0.8 million, respectively, to research and development expense, $0.6 million to selling and marketing expense, and $0.3 million and $0.4 million, respectively, to general and administrative expense. At December 31, 2002, $2.1 million of deferred stock-based compensation expense remained to be amortized, of which $1.9 million is expected to be amortized during 2003.

Also, during 2002 and 2001, we charged $3.3 million and $5.1 million, respectively, to general and administrative expense for amortization of intangible assets obtained through various business acquisitions.

Acquisitions

On February 22, 2000, we acquired Pro.Tel. Srl and subsidiaries ("Pro.Tel."), an Italian manufacturer of distributed network signaling analysis equipment, its U.S. affiliate, and the assets of an unrelated U.S. distributor, for $4.7 million in cash, acquisition costs, and short-term notes payable and 500,001 shares of our stock, valued at $5.0 million. We accounted for this acquisition using the purchase method of accounting and, accordingly, recorded goodwill and other

intangible assets of $8.9 million, to be amortized on a straight-line basis over their original estimated useful lives of two to five years. At December 31, 2001, we had $2.8 million in unamortized goodwill remaining from the Pro.Tel. acquisition. In accordance with SFAS No. 142, we ceased amortizing this goodwill as of January 1, 2002. We will review goodwill for impairment on an annual basis as required by SFAS No. 142. In addition, we recorded deferred stock-based compensation for stock options granted to employees of Pro.Tel. in the first quarter of 2000 in the amount of $6.5 million, to be amortized on a straight-line basis over the four year vesting period of the options. Concurrent with the acquisition, we entered into non-compete agreements with certain employees of Pro.Tel. that will result in payments to these employees totaling $0.5 million over four years, provided that the employees perform as agreed to under the agreements. We are amortizing the corresponding non-compete assets on a straight-line basis over their four-year estimated useful lives.

On January 8, 2001, we acquired Avantron Technologies, Inc. ("Avantron"), a Canadian company that specializes in the design and manufacture of cable TV/modem spectrum analyzers and performance monitoring systems, for $11.9 million in cash, acquisition costs, and short-term notes payable. We accounted for this acquisition using the purchase method of accounting, and, accordingly, recorded goodwill and other intangible assets of $10.4 million, to be amortized on a straight-line basis over their original estimated useful lives of five years. At December 31, 2001, we had $5.2 million in unamortized goodwill remaining from the Avantron acquisition. In accordance with SFAS No. 142, we ceased amortizing this goodwill as of January 1, 2002. We will review goodwill for impairment on an annual basis as required by SFAS No. 142.

On February 28, 2002, we acquired the CaLan Cable TV test business from Agilent Technologies for approximately $7.2 million in cash and acquisition costs. We recorded acquired identifiable intangible assets of $3.5 million, to be amortized on a straight-line basis over their original estimated useful lives of two-and-a-half to five years, and goodwill of $2.6 million, which we will review for impairment on an annual basis as required by SFAS No. 142.

On June 19, 2002, we acquired the ADSL Tester business from Integrated Telecom Express, Inc. ("ITeX") for approximately $100,000 in cash. We recorded goodwill of $68,000, which we will review for impairment on an annual basis as required by SFAS No. 142.

On September 4, 2002, we acquired Luciol Instruments SA ("Luciol"), a Swiss corporation specializing in fiber optic measurement and instrumentation, for approximately $1.2 million in cash and acquisition costs. We recorded acquired intangible assets of $0.1 million, to be amortized on a straight-line basis over their original estimated useful lives of five years, and goodwill of $1.3 million, which we will review for impairment on an annual basis as required by SFAS No. 142. Concurrent with this acquisition, we entered into a non-compete agreement with certain former owners of Luciol that will result in payments to the former owners totaling approximately $187,000 over four years, provided that they perform as agreed to under the agreements. We are amortizing the corresponding non-compete assets on a straight-line basis over their four-year estimated useful lives. We also entered into employment agreements with these same former owners that will result in bonus payments to the former owners totaling approximately $482,000 over four years, in addition to their regular salaries and subject to certain conditions, primarily related to their continued employment by Sunrise.

On February 28, 2003, we acquired substantially all of the assets of GIE GmbH ("GIE"), a German corporation located in Mannheim, specializing in wireless and RF measurement instrumentation for a total of approximately $520,000 in cash and acquisition costs. We also entered into non-compete agreements totaling $100,000 with the shareholders of GIE, which are payable over four years.

We believe that acquisitions and joint ventures may be an important part of our growth and competitive strategy. See "Risk Factors Affecting Future Operating Results—Acquisitions."

Critical Accounting Policies

Our consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America, and we have prepared our discussion and analysis of our financial condition and results of operations based on these financial statements. The preparation of these financial statements requires us to apply accounting policies using estimates, assumptions, and judgments that affect the reported amounts of assets, liabilities, revenues, and expenses. We base our estimates on historical experience and various other assumptions that we believe to be reasonable. Actual results may differ from these estimates, assumptions, and judgments.

We consider "critical" those accounting policies that meet both of the following criteria: They require our most difficult, subjective, or complex judgments, which often result from a need to make estimates about the effect of matters that are inherently uncertain, and they are among the most important of our accounting policies to the portrayal of our financial condition and results of operations. These critical accounting policies are determination of our allowance for doubtful accounts receivable, valuation of excess and obsolete inventory, accounting for warranty reserves, deferred income tax assets and liabilities, and revenue recognition.

We determine our allowance for doubtful accounts receivable by making our best estimate considering our historical accounts receivable collection experience and the information that we have about the status of our accounts receivable balances. If future conditions cause our collection experience to change or if we later obtain different information about the status of any or all of our accounts receivable, additional allowances for doubtful accounts receivable may be required.

We determine the valuation of excess and obsolete inventory by making our best estimate considering the current quantities of inventory on hand and our forecast of the need for this inventory to support future sales of our products. We often have only limited information on which to base our forecasts, and if future sales differ from these forecasts, the valuation of excess and obsolete inventory may change.

We offer a three-year warranty covering parts and labor on our wire line access products and fiber optic products sold in the United States, and generally offer a one-year warranty covering parts and labor for our products sold in all other countries, with the option to purchase a two-year extended warranty. Our cable TV and signaling products are covered by a one-year warranty. At the time we recognize revenue from a product's sale, we determine the reserve for the future cost of meeting our obligations under the standard warranties by considering our historical experience with warranty costs. If the future costs of meeting these obligations differ from the historical experience, additional reserves for warranty obligations may be required.

We account for income taxes using the asset and liability method. Under this method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis and for the future tax consequences attributable to operating loss and tax credit carryforwards. In assessing the recoverability of deferred tax assets, we consider whether it is more likely than not that all or some portion of the deferred tax assets will be realized. The ultimate realization of certain deferred tax assets is dependent upon the generation of future taxable income during the periods in which the related temporary differences become deductible. If we obtain information that causes our forecast of future taxable income to change or if taxable income differs from our forecast, we may have to revise the carrying value of our deferred tax assets, which would affect our net income in the period in which the change occurs. The ultimate realization of certain deferred tax assets is dependent on our ability to carry forward or back operating losses and tax credits. If changes in the tax laws occur that inhibit our ability to carry forward or back operating losses or tax credits, we will recognize the effect on our deferred tax assets in the results of operations of the period that includes the enactment date of the change. Furthermore, we measure our deferred tax assets and liabilities using the enacted tax laws expected to apply to taxable income in the years in which temporary differences are expected to be recovered

or settled. If tax laws change, we will recognize the effect on our deferred tax assets and liabilities in the results of operations of the period that includes the enactment date of the change.

We recognize revenue when earned. Therefore, we recognize revenue from product sales upon shipment, assuming collectibility of the resulting receivable is reasonably assured. When the arrangement with the customer includes future obligations or is contingent on obtaining customer acceptance, we recognize revenue when those obligations have been met or customer acceptance has been received. We defer revenue from sales of extended warranties and recognize it over the extended warranty term, which is generally two years. We recognize revenue for out-of-warranty repairs when we ship the repaired product.

RESULTS OF OPERATIONS

The following table sets forth certain operating data as a percentage of net sales for the periods indicated:

	Percentage of Net Sales		
	Years Ended December 31,		
	2002	2001	2000
Net sales	100.0%	100.0%	100.0%
Cost of sales	33.1	32.3	29.1
Gross profit	66.9	67.7	70.9
Operating expenses:			
Research and development	32.0	23.4	15.5
Selling and marketing	30.9	25.7	20.0
General and administrative	20.8	17.4	8.6
Total operating expenses	83.7	66.5	44.1
Income (loss) from operations	(16.8)	1.2	26.8
Other income, net	1.4	3.3	1.7
Income (loss) before income taxes	(15.4)	4.5	28.5
Income taxes (benefit)	(6.1)	0.9	10.5
Net income (loss)	(9.2)%	3.6%	18.0%

COMPARISON OF YEARS ENDED DECEMBER 31, 2002 AND 2001

Net Sales. Net sales decreased 31%, to $54.3 million in 2002 from $79.1 million in 2001. Sales in 2002 of our wire line access products decreased by $25.7 million, sales of our fiber optics products decreased by $4.0 million, and sales of our signaling products decreased by $1.8 million. These sales decreases were generally due to reductions in capital spending by our customers in the telecommunications industry. These sales decreases were partially offset by a $6.7 million increase in sales of our cable TV products. Of our total increase in sales, $3.6 million was from the CaLan acquisition. The remaining $3.1 million increase was due to our existing product lines, primarily the CM1000, and the increasing acceptance of these products within the cable TV industry.

During 2002, our cable business continued to grow driven by the success of the CM1000 and by the continuing introduction of the 1776 Network Profiler acquired in development from Agilent in our acquisition of Calan. In addition, the CM500 made its first sales at the end of 2002, and represents an extension of the CM1000 family. Overall, we gained market share with our cable products during the year. On the telecom side, introduction of the STT, additional MTT modules, and the SDH STM-16 all provided a source of new revenues to help stabilize performance. Looking ahead, we expect net sales during the first quarter of 2003 to be lower than our reported net sales from the fourth

quarter of 2002 of approximately $16.5 million, but higher than our reported net sales from the first quarter of 2002 of approximately $8.6 million. During the years ended December 31, 2002 and 2001, our quarterly net sales were as follows (in thousands):

	Quarter Ended			
	Mar. 31,	June 30,	Sept. 30,	Dec. 31,
Net sales:				
2002	$ 8,649	$14,730	$14,493	$16,461
2001	$ 22,453	$21,078	$17,952	$17,576
Decrease	$(13,804)	$ (6,348)	$ (3,459)	$ (1,115)

During each quarter of 2002, there was in improving trend in the decrease in sales compared to the same quarter of 2001. Sales in 2002 decreased $13.6 million or 26% in North America, $5.0 million or 45% in Europe/Africa/Middle East, $3.7 million or 32% in Asia/Pacific, and $2.4 million or 65% in Latin America as compared to 2001.

Sales in 2002 decreased $13.6 million or 26% in North America, $5.0 million or 45% in Europe/Africa/Middle East, $3.7 million or 32% in Asia/Pacific, and $2.4 million or 65% in Latin America as compared to 2001.

The decrease in North American sales during 2002 was primarily due to a $18.4 million decrease in sales of our wire line access products, a $2.1 million decrease in the sales of our fiber optics products, and a $1.1 million decrease in the sales of our signaling products. These decreases were partially offset by an $8.0 million increase in the sales of our cable TV products. Of the growth in our cable TV product sales, 45% of the increase in 2002 over 2001 relates to products from the CaLan business acquired during the first quarter of 2002. The decreases in our North American sales were primarily the result of decreased capital spending by our telecommunications customers. In addition, over the past year, some DSL providers have encouraged customer self-installation and have reported that up to 90% of their customers perform self-installation successfully. The self-installation procedure reduces the need for technicians to test for DSL service, reducing the demand for our DSL wire line access products as our equipment is used primarily for troubleshooting rather than installation.

International sales, including North American sales in Canada, decreased to $16.1 million, or 30% of net sales, in 2002, from $29.7 million, or 38% of net sales in 2001. The decrease in international sales in absolute dollars is primarily due to decreased sales of our wire line access product lines and our fiber optics products.

Cost of Sales. Cost of sales consists primarily of direct material, warranty, and personnel costs related to the manufacturing of our products and allocated overhead. Cost of sales decreased 30%, to $18.0 million in 2002 from $25.5 million in 2001. This decrease is primarily due to the decrease in net sales volumes. Cost of sales represented 33% and 32% of net sales in 2002 and 2001, respectively. We expect that cost of sales may increase as a percentage of sales in the future due to possible fluctuations in our overall product mix, if international sales grow as a percentage of total sales, or if pricing pressures increase.

Research and Development. Research and development expenses consist primarily of the costs of payroll and benefits for engineers, equipment, and consulting services. Research and development expenses decreased 6%, to $17.4 million in 2002 from $18.5 million in 2001. This decrease is primarily due to decreased payroll dedicated to research and development activities. Research and development expenses represented 32% of net sales in 2002 and 23% of net sales in 2001. The increase as a percentage of net sales is primarily due to product sales decreasing more rapidly than research and development expenditures, as we continue to invest in product development and expansion of our product lines. Research and development expenses may increase in absolute dollars as we continue to invest in product development and expand our product lines.

Selling and marketing. Selling and marketing expenses consist primarily of the costs of payroll and benefits for selling and marketing personnel, manufacturers' representative and direct sales commissions, travel and facilities expenses related to selling and marketing, and trade show and advertising expenses. Selling and marketing expenses decreased 18%, to $16.8 million in 2002 from $20.3 million in 2001. These decreases are primarily due to reductions in advertising and printing expenses, headcount reductions among selling and marketing personnel, and reduced commission expenses. Commission expenses decreased primarily due to the decrease in our sales, particularly North American sales, on which we make the preponderance of our commission payments. Selling and marketing expenses represented 31% of net sales in 2002 and 26% of net sales in 2001. The increase as a percentage of net sales in 2002 is primarily due to product sales decreasing more rapidly than selling and marketing expenditures and our efforts to continue to develop the market for and sell our products. Selling and marketing expenses may increase in absolute dollars as we continue to invest in our selling and marketing capabilities. In addition, commissions included in the selling and marketing expenses will continue to fluctuate with the fluctuation of revenues and sales mix each quarter.

General and Administrative. General and administrative expenses consist primarily of payroll and benefits, facilities, other costs of our finance and administrative departments, legal and accounting expenses, and amortization expenses for goodwill and other intangible assets related to our business acquisitions. General and administrative expenses decreased 18%, to $11.3 million in 2002 from $13.8 million in 2001. These decreases are primarily due to a $1.8 million decrease in amortization of purchased intangible assets resulting from the cessation of amortization of goodwill related to acquisitions beginning on January 1, 2002. The remaining $0.7 million of the decrease is primarily due to cost reduction measures. General and administrative expenses represented 21% of net sales in 2002 and 17% of net sales in 2001. General and administrative expenses may increase in absolute dollars if we experience growth in our business, expand our infrastructure, or pursue additional acquisitions.

Other Income, Net. Other income, net primarily represents interest earned on cash and investment balances. Other income, net decreased to $0.8 million in 2002 from $2.6 million in 2001. This decrease resulted primarily from a decrease in interest income as our cash, cash equivalents, and investments in marketable securities declined and interest rates declined.

Income Taxes Expense (Benefit). Income tax expense (benefit) consists of federal, state, and international income taxes. We recorded an income tax benefit of $3.3 million in 2002 and income tax expense of $0.7 million in 2001. Our effective income tax rates were 40% in 2002 and 20% in 2001. Our income tax benefit and our change to a 40% effective income tax rate in 2002 were due to our loss before income taxes.

COMPARISON OF YEARS ENDED DECEMBER 31, 2001 AND 2000

Net Sales. Net sales decreased $34.4 million, or 30%, to $79.1 million in 2001 from $113.5 million in 2000. Sales of our wire line access products, including DSL products, accounted for $41.7 million of the net sales decrease and sales of our signaling products accounted for $0.5 million of the net sales decrease. These decreases were offset by an increase of $6.9 million in sales of our cable TV products and an increase of $0.9 million in sales of our fiber optics products. Of the $6.9 million cable TV products sales increase, $5.7 million came from sales by our Avantron subsidiary, which we acquired in 2001, and $1.2 million came from increased sales of our existing product lines.

During the years ended December 31, 2001 and 2000, our quarterly net sales were as follows (in thousands):

	Quarter Ended			
	Mar. 31,	June 30,	Sept. 30,	Dec. 31,
Net sales:				
2001	$22,453	$21,078	$ 17,952	$ 17,576
2000	$19,791	$27,458	$ 35,085	$ 31,120
Increase (decrease)	$ 2,662	$ (6,407)	$(17,133)	$(13,544)

During the first three quarters of 2001, there was a worsening trend in sales from the same quarter in 2000. Sales in 2001 as compared to 2000 decreased $35.9 million, or 41%, in North America, increased $0.8 million, or 8%, in Europe/Africa/Middle East, increased $1.4 million, or 14%, in Asia Pacific,, and decreased $0.7 million, or 17%, in Latin America.

The decrease in North American sales from 2000 to 2001 is due to lower sales of our wire line access products, including DSL, and lower sales of our protocol and fiber optics products. Our wire line access product sales decreased $37.1 million in North America from 2000 to 2001. Of this decrease, $13.2 million was from reduced Copper Loop Test Head sales for Lucent Technologies' stinger DSLAM product, which decreased from $19.6 million in 2000 to $6.3 million in 2001. North American sales of our protocol products decreased $2.0 million and our fiber optics products decreased $2.0 million from 2000 to 2001. The decreases in our North American sales were primarily the result of decreased capital spending by our telecommunications customers. Sales of our cable TV products increased by $5.3 million in North America from 2000 to 2001. Of this increase, $4.1 million was the result of the Avantron acquisition which occurred in the first quarter of 2001 and the remaining $1.2 million came from our existing product lines.

International sales, including North American sales to Canada, decreased to $29.7 million, or 38% of net sales, in 2001 from $30.1 million, or 27% of net sales, in 2000. The decrease in international sales is primarily due to decreased sales of our wire line access product lines, including DSL, which were partially offset by increased sales of our fiber optics products.

Cost of Sales. Cost of sales decreased 23%, to $25.5 million in 2001 from $33.0 million in 2000. This decrease is primarily due to the decrease in net sales from 2000 to 2001. Cost of sales were 32% of net sales in 2001 versus 29% of net sales in 2000. The increase as a percentage of net sales resulted primarily from an increased presence in our sales mix of cable TV products, lower margin wire line access products, and international sales, which tend to carry lower margins than North American sales because they often go through distributor networks.

Research and Development. Research and development expenses increased 5%, to $18.5 million in 2001 from $17.6 million in 2000. This increase is primarily due to costs associated with increased staffing dedicated to research and development activities. Research and development expenses were 23% of net sales in 2001 and 15% of net sales in 2000. The increase as a percentage of net sales in 2001 is primarily due to decreased product sales while research and development expenditures increased, as we continue to invest in product development and expansion of our product lines.

Selling and Marketing. Selling and marketing expenses decreased 10%, to $20.3 million in 2001 from $22.7 million in 2000. This decrease is primarily due to a 49% decrease in commissions expense. Commission expense decreased primarily due to the decrease in our sales, particularly North American sales, for which we make the preponderance of our commission payments. Selling and marketing expenses were 26% of net sales in 2001 and 20% of net sales in 2000. The increase as a percentage of net sales in 2001 is primarily due to decreased OEM sales, which led to lower commission, occupancy, and salary and related expenses as a percentage of sales than in 2000.

General and Administrative. General and administrative expenses increased 41%, to $13.8 million in 2001 from $9.8 million in 2000. General and administrative expenses were 17% of net sales in 2001 and 9% of net sales in 2000. The increase in both absolute dollars and as a percentage of net sales is primarily due to increased amortization of goodwill and other intangible assets related to recent business acquisitions, amortization of deferred stock-based compensation, and increased staffing and related costs associated with the growth of our business as a public company for the full year of 2001.

Other Income, Net. Other income, net increased to $2.6 million in 2001 from $1.9 million in 2000. The increase in 2001 resulted primarily from increased interest earned on higher balances of cash and cash equivalents resulting

from increased cash flow from operations, interest income earned for a full year in 2001 on the net proceeds received from our initial public offering in July 2000, and income earned from a grant from the Italian government.

Income Tax Expense. We recorded income tax expense of $0.7 million in 2001 and $12.0 million in 2000. Our effective income tax rates were 20% in 2001 and 37% in 2000. Our income tax expense and effective income tax rate are lower in 2001 than in 2000 primarily due to lower levels of income.

LIQUIDITY AND CAPITAL RESOURCES

Historically, we have financed our operations and satisfied our capital expenditure requirements primarily through cash flow from operations. Additionally, in July of 2000, we received net proceeds totaling $51.6 million from an initial public offering. To date, we have used $38.2 million of these net proceeds to acquire complementary businesses, products or technology, construct our corporate headquarters, repay amounts drawn under our line of credit, and repay notes payable. Funds that have not been used have been invested in money market funds, auction rate securities, and marketable debt securities.

As of December 31, 2002, 2001, and 2000, we had working capital of $52.8 million, $64.9 million, and $82.0 million, respectively, and cash and cash equivalents of $36.4 million, $48.7 million, and $56.3 million, respectively. As of December 31, 2002, 2001, and 2000, we also had $1.0 million, $3.5 million, and $6.3 million, respectively, in investments in marketable securities.

Cash provided by operating activities was $0.7 million in 2002, $19.8 million in 2001, and $13.4 million in 2000. Operating cash flows decreased during 2002 as compared to 2001 primarily because we went from having net income in 2001 to a net loss in 2002. Furthermore, although we continued to have net collections of accounts receivable and net reductions in inventory purchases during 2002, the amount of these net collections and net reductions was significantly less than during 2001. The factors decreasing operating cash flow during 2002 as compared to 2001 were partially offset by a reduction in payments on our accounts payable and accrued expenses. Operating cash flows increased during 2001 as compared to 2000 primarily as a result of net collections of accounts receivable and a net reduction in inventory purchases. Also, the amount of non-cash charges against net income increased significantly in 2001 from 2000. This was primarily the result of increased goodwill amortization from the acquisition of Avantron Technologies, Inc. in the first quarter of 2001 and increased depreciation resulting from the completion of our new corporate headquarters building in San Jose, CA, also in the first quarter of 2001. The factors increasing operating cash flow during 2001 as compared to 2000 were partially offset by decreases in accounts payable and accrued expenses and in income taxes payable.

Cash used in investing activities was $9.7 million in 2002, $27.8 million in 2001, and $16.9 million in 2000. The $18.1 million decrease in net cash used in investing activities during 2002 from 2001 is primarily due to decreased amounts paid for acquisitions and decreased capital expenditures. Capital expenditures during 2001 included $8.8 million for land and $5.6 million for construction of our facility in San Jose, California, which did not recur in 2002, and we also reduced our expenditures on equipment and other capital assets during 2002. Offsetting these reductions in cash flows used in investing activities was a loan made to our Chief Executive Officer in early 2002. The increase in net cash used in investing activities during 2001 from 2000 is primarily due to increased acquisitions and capital expenditures, partially offset by a reduction in net purchases of marketable securities.

Cash used in financing activities was $3.7 million in 2002 and cash provided by financing activities was $0.6 million in 2001, and $51.3 million in 2000. The increase in net cash used in financing activities during 2002 from 2001 is primarily due to increased repurchases of our common stock and a reduction in proceeds from common stock issued under our Employee Stock Purchase Plan. During 2002, we completed the repurchase of our stock under a plan approved by the Board of Directors in 2001. Under this plan, a total of 1.7 million shares have been repurchased since

2001 for an aggregate total consideration of $5.1 million. The decrease in net cash provided by financing activities during 2001 from 2000 is primarily due to the effect of our initial public offering on year 2000 cash flows.

During 2002, we had a $3.0 million revolving line of credit with a financial institution. The line of credit expired on September 15, 2002, and was not renewed. At December 31, 2002, we did not have any balances outstanding under our remaining lines of credit.

Our outstanding debt at December 31, 2002 consisted primarily of a $0.9 million loan from the Italian government, payable over a period of eight years through semi-annual payments staring in 2004, and thirteen notes payable related to previous acquisitions totaling $0.7 million, that are being paid off in quarterly installments ending in 2006.

We believe that current cash balances and cash flows from operations will be sufficient to meet our anticipated cash needs for working capital, capital expenditures, and other activities for at least the next 12 months. However, a large acquisition of complementary businesses, products or technologies, or material joint ventures could require us to obtain additional equity or debt financing. We cannot assure you that such additional financing would be available on acceptable terms, if at all. Such an acquisition is not anticipated at this time.

OFF-BALANCE SHEET ARRANGEMENTS

As of December 31, 2002, we did not have any material off-balance sheet arrangements that have or are reasonably likely to have a material effect on our current or future financial condition, revenues or expenses, results of operations, liquidity, or capital resources.

CONTRACTUAL OBLIGATIONS

The following table summarizes, as of December 31, 2002, the timing of future cash payments due under certain contractual obligations (in thousands):

	Payments Due In				
	Total	Less than 1 year	1-3 years	4-5 years	More than 5 years
Borrowings and notes payable	$1,587	$ 410	$ 393	$265	$519
Operating lease obligations	1,598	717	737	144	—
Total	$3,185	$1,127	$1,130	$409	$519

RISK FACTORS AFFECTING FUTURE OPERATING RESULTS

***Quarterly Fluctuations*—Because our quarterly operating results have fluctuated significantly in the past and are likely to fluctuate significantly in the future, our stock price may decline and may be volatile.**

In the past, we have experienced significant fluctuations in our quarterly results due to a number of factors beyond our control. In the future, our quarterly operating results may fluctuate significantly and may be difficult to predict given the nature of our business. Many factors could cause our operating results to fluctuate from quarter to quarter in the future, including the following:

- economic downturns reducing demand for telecommunication and cable equipment and services;
- the size and timing of orders from our customers, which may be exacerbated by the increased length and unpredictability of our customers' buying patterns, and our ability to ship these orders on a timely basis;
- the degree to which our customers have allocated and spent their yearly budgets;

- the uneven pace of technological innovation, the development of products responding to these technological innovations by us and our competitors, and customer acceptance of these products and innovations;
- the varied degree of price, product, and technology competition, and our customers' and competitors' responses to these changes;
- the relative percentages of our products sold domestically and internationally;
- the mix of the products we sell and the varied margins associated with these products; and
- the timing of our customers' budget processes.

The factors listed above may affect our business and stock price in several ways. Given our high fixed costs from overhead, research and development, and advertising and marketing, and other activities necessary to run our business, if our net sales are below our expectations in any quarter, we may not be able to adjust spending accordingly. For example, in 2002 our net sales declined 31% from 2001, but our operating expenses only declined 14% because of fixed costs. Our stock price may decline and may be volatile, particularly if public market analysts and investors perceive the factors listed above to exist, whether or not that perception is accurate. Furthermore, the above factors, taken together may make it more difficult for us to issue additional equity in the future or raise debt financing to fund future acquisitions and accelerate growth.

***Declining Sales*—We are experiencing decreased sales and increased difficulty in predicting future operating results.**

As a result of current unfavorable economic and market conditions, our year-to-year sales have been declining, we are unable to predict future sales accurately, and we are currently unable to provide long-term guidance for future financial performance. The conditions contributing to this difficulty include the following:

- uncertainty regarding the capital spending plans of the major telecommunications and cable carriers upon whom we depend for sales;
- the telecommunications and cable carriers' current limited access to capital required for expansion;
- lower near-term sales visibility; and
- general market and economic uncertainty.

Based on these and other factors, many of our major customers have reduced, modified, cancelled or rescheduled orders for our products and have expressed uncertainty as to their future requirements.

***Economic Downturn*—Our operating results and financial condition could continue to be harmed if the telecommunications industry remains over supplied.**

The current economic downturn has resulted in reduced purchasing and capital spending in the telecommunications industry, which has been in a downward cycle characterized by diminished product demand, excess manufacturing capacity and the increasing erosion of average selling prices. The downturn has already adversely affected the businesses and cash flows of many of our customers and has even caused some of them to file for bankruptcy. We are uncertain how long the current downturn will last. Continuation of the downturn or any further decline in our customers' markets or in general economic conditions would likely result in a further reduction in demand for our products and services and also would further limit our customers' ability to pay for the products that they buy from us. All of these circumstances could harm our consolidated financial position, results of operations, cash flows and stock price, and could limit our ability to reach our goals for restoring long-term profitability.

***Long-term Impact of Cost Controls*—The actions we have taken in response to the recent slowdown in demand for our products and services could have long-term adverse effects on our business.**

Our business has been experiencing lower revenues due to decreased or cancelled customer orders. From the third quarter of 2000 through the first quarter of 2002, we experienced sequential declines in orders. In 2002, net sales were significantly below 2000 and 2001. To scale back our operations and to reduce our expenses in response to this decreased demand for our products and services and lower revenue, we have reduced our workforce, restricted hiring, reduced and frozen employee salaries, and reduced discretionary spending.

Since March 2001, we have reduced our workforce, including temporary employees and net of additions, by approximately 29 people, or 7%, and we may experience further workforce reductions in the future in the event current order levels do not improve. In addition, in May 2001 and February 2002, we instituted an average 7% pay reduction in 2001 and an average 10% pay reduction in 2002, applicable to many employees globally, wherever legally permissible. Some of the reductions in pay took effect via a reduction in hours for certain employees, in accordance with local law. We have also tightly restricted any subsequent increase in salaries. In addition to these measures, we are continuing our initiatives to streamline our operations.

There are several risks inherent in our efforts to transition to a reduced cost structure. These include the risk that we will not be able to reduce expenditures quickly enough and sustain them at a level necessary to restore profitability, and that we may have to undertake further restructuring initiatives that would entail additional charges. In addition, there is the risk that cost-cutting initiatives will impair our future ability to develop and market products effectively and remain competitive. Each of the above measures could have long-term effects on our business by reducing our pool of technical talent, decreasing or slowing improvements in our products, making it more difficult for us to respond to customers, limiting our ability to increase production quickly if and when the demand for our products increases, and limiting our ability to hire and retain key personnel. These circumstances could cause our earnings to be lower than they otherwise might be.

***Dependence on Wireline Access Products*—A significant portion of our sales have been from our Wireline Access products. Demand for these products has declined significantly and may decline further.**

Sales of our DSL and other wire line access products represented approximately 42% of our net sales in 2002 and 62% in 2001. Currently, our DSL products are primarily used by a limited number of incumbent local exchange carriers, including the regional Bell operating companies and competitive local exchange carriers who offer DSL services. A competitive local exchange carrier is a company that, following the Telecommunications Act of 1996, is authorized to compete in a local communications services market. These parties, and other Internet service providers and users, are continuously evaluating alternative high-speed data access technologies, including cable modems, fiber optics, wireless technology, and satellite technologies, and may at any time adopt these competing technologies. These competing technologies may ultimately prove to be superior to DSL services and reduce or eliminate the demand for our DSL products.

During 2001 and 2002, the business prospects of many competitive local exchange carriers and incumbent local exchange carriers declined significantly. Some competitive local exchange carriers filed for bankruptcy or went out of business, and many local exchange carriers have experienced significant revenue declines. Due to these and other factors, we have seen a significant decline in demand for our DSL products. If DSL deployment rates decrease or remain flat, demand for our DSL products may decline further. It is not possible to predict whether any decline would be temporary or sustained. Accordingly, our future success is partially dependent upon whether DSL technology continues to gain growing and widespread market acceptance by exchange carriers, end users of their services, and other Internet service providers and users.

In the past, our customers have deployed DSL equipment, including our products, in substantially larger volumes than their subscriber count. Over the past two years, many of our customers have decreased the rate at which they deploy DSL equipment. This decrease has led to a decrease in demand for our products. In addition, the inability of our current or future customers to acquire or retain subscribers as planned, or to respond to increased competition or reduced demand for their services could cause them to reduce further or to eliminate entirely their DSL deployment plans.

***Use of Field Technicians*—If service providers reduce their use of field technicians and continue successful implementation of a self-service installation model, demand for our products could decrease.**

To ensure quality service, our major service provider customers have historically sent a technician, who uses our products, into the field to verify service for installations. SBC Communications, Qwest Communications, Bell South Corporation, and Verizon Communications each encourage their customers to install DSL themselves. Over the past year, some DSL providers have reported that 90% or more of their customers perform self-installation successfully. Additionally, Comcast has begun a self-installation program for cable modem devices. By encouraging customers to install DSL and cable access themselves, these companies intend to reduce their expenses and expedite installation for their customers. To encourage self-installation, these companies offer financial incentives. If service providers continue successful implementation of these plans or choose to send technicians into the field only after a problem has been reported, or if alternative methods of verification become available, such as remote verification, the need for field technicians and the need for our products would decrease.

***Manufacturing Capacity*—If demand for our products does not match our manufacturing capacity, our earnings may suffer.**

Because we cannot immediately adapt our production capacity and related cost structures to rapidly changing market conditions, when demand does not meet our expectations, our manufacturing capacity may exceed our production requirements, and profitability may decline. Conversely, if during a market upturn we cannot increase our manufacturing capacity to meet product demand, we will not be able to fulfill orders in a timely manner, which in turn may have a negative effect on our earnings and overall business.

***Relocation of Manufacturing Facilities*—We are in the process of relocating our production facilities overseas, and problems with the relocation could interfere with our operations.**

To reduce our manufacturing costs, we are transitioning most of our manufacturing operations from our San Jose headquarters to our subsidiary in Taipei, Taiwan. We believe that relocating our production facilities will lower our manufacturing costs, in particular labor costs, provide us with more flexibility to scale our operations to meet changing demand, and allow us to focus our engineering resources on new product development and product enhancements. However, we may not be successful in transitioning our manufacturing operations overseas or maintaining the quality standards that our customers expect. Our failure to smoothly and successfully transition production could temporarily interrupt our operations and adversely impact our ability to run our business. In addition, any failure or significant downtime in our production capabilities could prevent us from fulfilling and shipping customer orders and could harm our business.

***Risks of the Telecommunications Industry*—We face several risks regarding the telecommunications industry, including the possible effects of its unpredictable growth or decline, the possible effects of consolidation among our principal customers, and the risk that deregulation will slow.**

After the passage of the Telecommunications Act of 1996, the telecommunications industry experienced rapid growth. The growth led to great innovations in technology, intense competition, short product life cycles, and, to some extent, regulatory uncertainty inside and outside the United States. However, the course of the development of the

telecommunications industry is difficult to predict. Companies operating in this industry have a difficult time forecasting future trends and developments and forecasting customer acceptance of competing technologies. One possible effect of this uncertainty is that there is, and may continue to be, a delay or a reduction in these companies' investment in their business and purchase of related equipment, such as our products, and a reduction in their and our access to capital. In addition, deregulation may result in a delay or a reduction in the procurement cycle because of the general uncertainty involved with the transition period of businesses.

The growth that occurred after the passage of the Telecommunications Act of 1996 has slowed dramatically, and it is unknown whether or when it will resume. This slowdown has resulted in reduced investment in the telecommunications industry in general and delayed purchase orders for service verification equipment such as our products in particular. It is not possible to predict whether this slowdown will be temporary or sustained.

In addition, the telecommunications industry has been experiencing consolidation among its primary participants, such as incumbent local exchange carriers and competitive local exchange carriers, several of whom are our primary customers. For example, in recent years, GTE merged with Bell Atlantic to create Verizon Communications, Inc., both of which were customers of ours. Continued consolidation may cause delay or cancellation of orders for our products. The consolidation of our customers will likely provide them with greater negotiating leverage with us and may lead them to pressure us to lower the prices of our products.

If deregulation in international markets or in the United States were to slow or to take an unanticipated course, the telecommunications industry might suffer. The effects of which, among others, would be the following:

- a continued general slowdown in economic activity relating to the telecommunications industry and a resulting multiplier effect on the general economy;
- continued reduced investment in the telecommunications industry in general, and in DSL technology in particular, due to increased uncertainty regarding the future of the industry and this technology;
- greater consolidation of providers of high-speed access technologies, which may not favor the development of DSL technology and which might provide these companies with greater negotiating leverage regarding the prices and other terms of the DSL products and services they purchase;
- uncertainty regarding judicial and administrative proceedings, which may affect the pace at which investment and deregulation continue to occur; and
- continued delay in purchase orders of service verification equipment, such as our products, if customers were to reduce their investment in new high-speed access technologies.

***Cable Industry Health*—The cable industry has debt and income problems for the major players.**

The Cable industry has taken on significant debt as companies aggressively consolidated and built up impressive new digital networks to allow them to provide better picture quality, internet access, and even voice telephony. Profits have declined during the last year within the industry, however. As a result, most cable companies expect to reduce their capital expenditures and/or hiring, both of which could adversely impact our cable business more than we now expect.

***Customer Concentration*—A limited number of customers account for a high percentage of our net sales, and any adverse factor affecting these customers or our relationship with these customers could cause our net sales to decrease.**

Our customer base is concentrated, and a relatively small number of companies have accounted for a large percentage of our net sales. Net sales from our top five customers in the United States represented approximately 31%

of total net sales in 2002, 23% in 2001, and 42% in 2000. In general, our customers are not subject to long-term supply contracts with us, are not obligated to purchase a specific amount of products from us or to provide us with binding forecasts of purchases for any period.

The loss of a major customer or the reduction, delay, or cancellation of orders from one or more of our significant customers could cause our net sales and, therefore, profits to decline. In addition, many of our customers are able to exert substantial negotiating leverage over us. As a result, they may cause us to lower our prices for them and they may successfully negotiate other terms and provisions that may negatively affect our business and profits.

***Goodwill Valuation*—Our financial results could be materially and adversely affected if it is determined that the book value of goodwill is higher than fair value.**

Our balance sheet at December 31, 2002 includes an amount designated as "goodwill" that represents approximately 11% of assets and 12% of stockholders' equity. Goodwill arises when an acquirer pays more for a business than the fair value of the acquired tangible and separately measurable intangible net assets. Under accounting pronouncement SFAS No. 142, *Goodwill and Other Intangible Assets*, beginning in January 2002, the amortization of goodwill has been replaced with an "impairment test," which requires that we compare the fair value of goodwill to its book value at least annually, and more frequently if circumstances indicate a possible impairment.

We completed our transitional impairment test of our goodwill as of January 1, 2002 and our annual impairment test during the fourth quarter and determined that goodwill was not impaired. The impairment testing is based on a market capitalization analysis. Accordingly, if our market capitalization were to diminish significantly, the book value of goodwill could be higher than the fair value, and we would need to record a non-cash impairment charge for the difference, which could materially and adversely affect our net income or loss.

***Product Development*—If we are unable to develop new products successfully and enhance our existing products, our future success may be threatened.**

The market for our products is characterized by rapid technological advances, changes in customer requirements and preferences, evolving industry and customer-specific protocol standards, and frequent new product enhancements and introductions. For example, at December 31, 2002, we had approximately $0.6 million of orders for a cable product, which may be delayed or cancelled due to technical issues that must be overcome before the orders can be shipped. Our existing products and our products currently under development could be rendered obsolete by the introduction of products involving competing technologies, by the evolution of alternative technologies or new industry protocol standards, or by rival products by our competitors. These market conditions are more complex and challenging because of the high degree to which the telecommunications industry is fragmented.

We believe our future success will depend, in part, upon our ability, on a timely and cost-effective basis, to continue to do the following:

- anticipate and respond to varied and rapidly changing customer preferences and requirements, a process made more challenging by our customers' buying patterns;
- anticipate and develop new products and solutions for networks based on emerging technologies, such as the asynchronous transfer mode protocol that packs digital information into cells to be routed across a network, and Internet telephony, which comprises voice, video, image, and data across the Internet, that are likely to be characterized by continuing technological developments, evolving industry standards, and changing customer requirements;

- invest in research and development to enhance our existing products and to introduce new verification and diagnostic products for the telecommunications, Internet, cable network, and other markets; and
- support our products by investing in effective advertising, marketing, and customer support.

We cannot ensure that we will accomplish these objectives, and our failure to do so could have a material adverse impact on our market share, business, and financial results.

Further, our percentage of net sales devoted to research and development is near a historic high for the company. If we do not continue to reduce this percentage, our income levels will not return to their desired levels. If we are successful in continuing to reduce this percentage, we may not continue to develop needed new products which could negatively impact our sources for new revenues.

***Sales Implementation Cycles*—The length and unpredictability of the sales and implementation cycles for our products makes it difficult to forecast revenues.**

Sales of our products often entail an extended decision-making process on the part of prospective customers. We frequently experience delays following initial contact with a prospective customer and expend substantial funds and management effort pursuing these sales. Our ability to forecast the timing and amount of specific sales is therefore limited. As a result, the uneven buying patterns of our customers may cause fluctuations in our operating results, which could cause our stock price to decline.

Other sources of delays that lead to long sales cycles, or even a sales loss, include current and potential customers' internal budgeting procedures, internal approval and contracting procedures, procurement practices, and testing and acceptance processes. Recently, our customers' budgeting procedures have lengthened. The sales cycle for larger deployment now typically ranges from six to twenty-four months. The deferral or loss of one or more significant sales could significantly affect operating results in a particular quarter, especially if there are significant selling and marketing expenses associated with the deferred or lost sales.

***Managing Growth and Slowdowns*—We may have difficulty managing expansions and contractions in our operations, which could reduce our chances of maintaining or restoring our profitability.**

We experienced rapid growth in revenues and in our business in 1999 and 2000 followed by a significant slowdown starting in 2001 that has placed, and may continue to place, a significant strain on our management and operations. For example, our revenues increased to $113.5 million in 2000 from $61.5 million in 1999. Yet revenues slowed to $79.1 million in 2001 and $54.3 million in 2002. Our number of employees, excluding temporary employees, increased to 404 at December 31, 2002 from 169 at December 31, 1999 and the 390 at December 31, 2001, but has decreased from 405 at March 31, 2001. As a result of our historical growth, potential future growth, or slowdowns, we face several risks, including the following:

- the need to improve our operational, financial, management, informational, and control systems;
- the need to hire, train, and retain highly skilled personnel in a market in which there may be severe shortages of these kinds of personnel, as we discuss below; and
- the challenge to manage expense reductions as rapidly as revenue slowdowns, without impacting development strategies.

We cannot ensure that we will be able to successfully manage growth or slowdowns profitably.

***Acquisitions*—We have acquired multiple companies and lines of business, and we may pursue additional acquisitions in the future. These activities involve numerous risks, including the use of cash, acquired intangible assets, and the diversion of management attention.**

We have acquired multiple companies and lines of business to date. As a result of these acquisitions, we face numerous risks, including the following:

- integrating the existing management, sales force, technicians, and other personnel into one culture and business;
- integrating manufacturing, administrative, and management information and other control systems into our existing systems;
- developing and implementing an integrated business strategy over what had previously been independent companies;
- developing compatible or complementary products and technologies from previously independent operations; and
- pre-acquisition liabilities associated with the companies or intellectual property acquired, or both.

The risks stated above are made more difficult by most of the companies we have acquired being located outside of the United States. In addition, if we make future acquisitions, these risks will be exacerbated by the need to integrate additional operations at a time when we may not have fully integrated all of our previous acquisitions.

If we pursue additional acquisitions, we will face similar risks as those outlined above and additional risks, including the following:

- the diversion of our management's attention and the expense of identifying and pursuing suitable acquisition candidates, whether or not consummated;
- negotiating and closing these transactions;
- the potential need to fund these acquisitions by dilutive issuances of equity securities or by incurring debt; and
- the potential negative effect on our financial statements from an increase in other intangibles, write-off of research and development costs, and high costs and expenses from completing acquisitions.

We cannot ensure that we will locate suitable acquisition candidates or that, if we do, we will be able to acquire them and then integrate them successfully and efficiently into our business.

***Competition*—Competition could reduce our market share and decrease our net sales.**

The market for our products is fragmented and intensely competitive, both inside and outside the United States, and is subject to rapid technological change, evolving industry standards, regulatory developments, and varied and changing customer preferences and requirements. We compete with a number of United States and international suppliers that vary in size and in the scope and breadth of the products and services offered.

The following table sets forth our principal competitors in each of our product categories.

Product Category	Principal Competitors
Wire Line Access	Acterna Corporation; Agilent Technologies, Inc.
Fiber Optics SONET/SDH	Digital Lightwave, Inc.; Acterna Corporation ; Agilent Technologies, Inc.
Cable TV	Acterna Corporation; Agilent Technologies, Inc.
Signaling	Inet Technologies, Inc.; Nettest

Many of these competitors have longer operating histories, larger installed customer bases, longer relationships with customers, wider name recognition and product offerings, and greater financial, technical, marketing, customer service, and other resources than we have.

We expect that as our industry and markets evolve new competitors or alliances among competitors with existing and new technologies may emerge and acquire significant market share. We anticipate that competition in our markets will increase, and we will face greater threats to our market share and price pressure on our products. Also, over time, our profitability, if any, may decrease. In addition, it is difficult to assess accurately the market share of our products or of Sunrise overall because of the high degree of fragmentation in the market for service verification equipment. As a result, it may be difficult for us to forecast accurately trends in the market, which of our products will be the most competitive over the longer term, and therefore, what is the best use of our cash and human and other forms of capital.

***Dependence on Key Employees*—If one or more of our senior managers were to leave, we could experience difficulty in replacing them and our operating results could suffer.**

Our success depends to a significant extent upon the continued service and performance of a relatively small number of key senior management, technical, sales, and marketing personnel. In particular, the loss of either of our two founders, Paul Ker-Chin Chang or Paul A. Marshall, would likely harm our business. Neither of these individuals is bound by an employment agreement with us, and we do not carry key man life insurance on them. If any of our senior managers were to leave Sunrise, we would need to devote substantial resources and management attention to replace them. As a result, management attention may be diverted from managing our business, and we may need to pay higher compensation to replace these employees.

***Dependence on Sole and Single Source Suppliers*—Because we depend on a limited number of suppliers and some sole and single source suppliers that are not bound by long-term contracts, our future supply of parts is uncertain.**

We purchase many key parts, such as microprocessors, field programmable gate arrays, bus interface chips, optical components, and oscillators, from a single source or sole suppliers, and we license certain software from third parties. We rely exclusively on third-party subcontractors to manufacture some sub-assemblies, and we have retained, from time to time, third party design services in the development of our products. We do not have long-term supply agreements with these vendors. In general, we make advance purchases of some products and components to ensure an adequate supply, particularly for products that require lead times of up to nine months to manufacture. In the past, we have experienced supply problems as a result of financial or operating difficulties of our suppliers, shortages, and discontinuations resulting from component obsolescence or other shortages or allocations by suppliers. Our reliance on these third parties involves a number of risks, including the following:

- the unavailability of critical products and components on a timely basis, on commercially reasonable terms, or at all;
- the unavailability of products or software licenses, resulting in the need to qualify new or alternative products or develop or license new software for our use and/or to reconfigure our products and manufacturing process, each of which could be lengthy and expensive;
- the likelihood that, if these products are not available, we would suffer an interruption in the manufacture and shipment of our products until the products or alternatives become available;
- reduced control over product quality and cost, risks that are exacerbated by the need to respond, at times, to unanticipated changes and increases in customer orders;
- the unavailability of, or interruption in, access to some process technologies; and
- exposure to the financial problems and stability of our suppliers.

In addition, the purchase of these components on a sole source basis subjects us to risks of price increases and potential quality assurance problems. This dependence magnifies the risk that we may not be able to ship our products on a timely basis to satisfy customers' orders. We cannot ensure that one or more of these factors will not cause delays or reductions in product shipments or increases in product costs, which in turn could have a material adverse effect on our business.

***Risks of International Operations*—Our plan to expand sales in international markets could lead to higher operating expenses and may subject us to unpredictable regulatory and political systems.**

Sales to customers located outside of the United States represented 30% of our net sales in 2002, 38% in 2001, and 27% in 2000, and we expect international revenues to continue to account for a significant percentage of net sales for the foreseeable future. In addition, an important part of our strategy calls for further expansion into international markets. As a result, we will face various risks relating to our international operations, including the following:

- potentially higher operating expenses, resulting from the establishment of international offices, the hiring of additional personnel, and the localization and marketing of products for particular countries' technologies;
- the need to establish relationships with government-owned or subsidized telecommunications providers and with additional distributors;
- fluctuations in foreign currency exchange rates and the risks of using hedging strategies to minimize our exposure to these fluctuations, which have been heightened by our acquisitions of Pro.Tel, GIE, and Avantron, whose revenues have been and are likely to continue to be in Euros and Canadian dollars, respectively;
- potentially adverse tax consequences related to acquisitions and operations, including the ability to claim goodwill deductions and a foreign tax credit against U.S. federal income taxes, especially since Italy has a higher tax rate; and
- possible disruptions to our customers, sales channels, sources of supply, or production facilities due to wars, terrorist acts, acts of protest or civil disobedience, or other conflicts between or within various nations and due to variations in crime rates and the rule of law between nations.

We cannot ensure that one or more of these factors will not materially and adversely affect our ability to expand into international markets or our revenues and profits.

In addition, the Asia/Pacific and Latin America regions have experienced instability in many of their economies and significant devaluations in local currencies. 17% of our sales in 2002, 19% of our sales in 2001, and 13% of our sales in 2000 were from customers located in these regions. These instabilities may continue or worsen, which could have a materially adverse effect on our results of operations. If international revenues are not adequate to offset the additional expense of expanding international operations, our future growth and profitability could suffer.

***Concentration of Control*—Our executive officers and directors retain significant control over us, which allows them to decide the outcome of matters submitted to stockholders for approval. This influence may not be beneficial to all stockholders.**

As of December 31, 2002, Paul Ker-Chin Chang, Paul A. Marshall, and Robert C. Pfeiffer beneficially owned approximately 27%, 24%, and 13%, respectively, of our outstanding shares of common stock. Consequently, these three individuals, acting together, control approximately 64% of our outstanding shares of common stock and are able to control the election of our directors and the approval of significant corporate transactions that must be submitted to a vote of stockholders. In addition, Mr. Chang, Mr. Marshall, and Mr. Pfeiffer constitute three of the six members of the board of directors and have significant influence in directing the actions taken by the board. The interests of these

persons may conflict with the interests of other stockholders, and the actions they take or approve may be contrary to those desired by other stockholders. This concentration of ownership and control of the management and affairs of our company may also have the effect of delaying or preventing a change in control of our company that other stockholders may consider desirable.

***Potential Product Liability*—Our products are complex, and our failure to detect errors and defects may subject us to costly repairs and product returns under warranty and product liability litigation.**

Our products are complex and may contain undetected defects or errors when first introduced or as enhancements are released. These errors may occur despite our testing and may not be discovered until after a product has been shipped and used by our customers. Many of the products that we ship contain known imperfections that we consider to be insignificant at the time of shipment. We may misjudge the seriousness of a product imperfection and allow it to be shipped to our customers. These risks are compounded by the fact that we offer many products, with multiple hardware and software modifications, which makes it more difficult to ensure high standards of quality control in our manufacturing process. The existence of these errors or defects could result in costly repairs and/or returns of products under warranty and, more generally, in delayed market acceptance of the product or damage to our reputation and business.

In addition, the terms of our customer agreements and purchase orders which provide us with protection against unwarranted claims of product defect and error may not protect us adequately from unwarranted claims against us, unfair verdicts if a claim were to go to trial, settlement of these kinds of claims, or future regulation or laws regarding our products. Our defense against such claims in the future, regardless of their merit, could result in substantial expense to us, diversion of management time and attention, and damage to our business reputation and our ability to retain existing customers or attract new customers.

***Intellectual Property Risks*—Policing any unauthorized use of our intellectual property by third parties and defending any intellectual property infringement claims against us could be expensive and disrupt our business.**

Our intellectual property and proprietary technology is an important part of our business, and we depend on the development and use of various forms of intellectual property and proprietary technology. As a result, we are subject to several related risks, including the risks of unauthorized use of our intellectual property and the costs of protecting our intellectual property.

Much of our intellectual property and proprietary technology is not protected by patents. If unauthorized persons were to copy, obtain, or otherwise misappropriate our intellectual property or proprietary technology without our approval, the value of our investment in research and development would decline, our reputation and brand could be diminished, and we would likely suffer a decline in revenue. We believe these risks, which are present in any business in which intellectual property and proprietary technology play an important role, are exacerbated by the difficulty in finding unauthorized use of intellectual property in our business, the increasing incidence of patent infringement in our industry in general, and the difficulty of enforcing intellectual property rights in some foreign countries.

In addition, litigation has in the past been, and may in the future be, necessary to enforce our intellectual property rights. This kind of litigation is time-consuming and expensive to prosecute or resolve, and results in substantial diversion of management resources. We cannot ensure that we will be successful in that litigation, that our intellectual property rights will be held valid and enforceable in any litigation, or that we will otherwise be able to protect our intellectual property and proprietary technology.

***Nasdaq Continued Listing Requirements*—if our share price falls and remains below $1.00, we could be delisted from the Nasdaq National Market.**

Nasdaq Marketplace Rule 4450(a)(5) requires companies listed on the Nasdaq National Market to maintain a minimum bid price of $1.00. Recently, our common stock closed as low as $1.26 on September 24, 2002. If the price of our common stock were to trade below $1.00 for 30 consecutive trading days, our common stock could be delisted from the Nasdaq National Market. A delisting would impair our ability to raise additional working capital. Furthermore, because prices for delisted stocks are often not publicly available, a delisting would impair the liquidity of our common stock and make it difficult for you to sell your shares, and you may lose some or all of your investment.

***Anti-takeover Provisions*—Anti-takeover provisions in our charter documents could prevent or delay a change of control and, as a result, negatively impact our stockholders.**

Some provisions of our certificate of incorporation and bylaws may have the effect of discouraging, delaying, or preventing a change in control of our company or unsolicited acquisition proposals that you, as a stockholder, may consider favorable. These provisions provide for the following:

- authorizing the issuance of "blank check" preferred stock;
- a classified board of directors with staggered, three-year terms;
- prohibiting cumulative voting in the election of directors;
- requiring super-majority voting to effect certain amendments to our certificate of incorporation and by-laws;
- limiting the persons who may call special meetings of stockholders;
- prohibiting stockholder action by written consent; and
- establishing advance notice requirements for nominations for election to the board of directors or for proposing matters that can be acted upon at stockholders meetings.

Some provisions of Delaware law and our stock incentive plans may also have the effect of discouraging, delaying, or preventing a change in control of our company or unsolicited acquisition proposals. These provisions also could limit the price that some investors might be willing to pay in the future for shares of our common stock.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We sell our products in North America, Asia, Latin America, Africa, the Middle East, and Europe. As a result, our financial results could be affected by factors such as changes in foreign currency exchange rates. We have a small amount of sales denominated in Euros and the Canadian dollar and have at certain times used derivative financial instruments to hedge our foreign exchange risks. As of December 31, 2002, we had no derivative financial instruments. To date, foreign exchange risks from sales have not been material to our operations.

We are exposed to the impact of interest rate changes and changes in the market values of our investments. Our exposure to market rate risk for changes in interest rates relates primarily to our investment portfolio. We have not held derivative financial instruments in our investment portfolio. We invest our excess cash in depository accounts with financial institutions, in debt instruments of the U.S. Government and its agencies, and in high-quality corporate issuers, and, by policy, we limit the amount of credit exposure to any one issuer. We protect and preserve our invested funds by limiting default, market, and reinvestment risk through portfolio diversification and review of the financial stability of the institutions with which we deposit funds and from whom we purchase debt instruments.

Investments in both fixed rate and floating rate interest earning instruments carry a degree of interest rate risk. Fixed rate securities may have their fair market value adversely impacted due to a rise in interest rates, while floating rate securities may produce less income than expected if interest rates fall. Due in part to these factors, our future investment income may fall short of expectations due to changes in interest rates, or we may suffer losses in principal if forced to sell securities that have declined in market value due to changes in interest rates. Because our investment policy restricts us to conservative, interest-bearing investments and because our business strategy does not rely on generating material returns from our investment portfolio, we do not expect our market risk exposure on our investment portfolio to be material.

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Independent Auditors' Report

The Board of Directors and Stockholders
Sunrise Telecom Incorporated

We have audited the accompanying consolidated balance sheets of Sunrise Telecom Incorporated and subsidiaries (the Company) as of December 31, 2002 and 2001, and the related consolidated statements of operations, stockholders' equity and comprehensive income (loss), and cash flows for each of the years in the three-year period ended December 31, 2002. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Sunrise Telecom Incorporated and subsidiaries as of December 31, 2002 and 2001, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2002, in conformity with accounting principles generally accepted in the United States of America.

As discussed in Note 5 to the consolidated financial statements, effective January 1, 2002, the Company adopted Statement of Financial Accounting Standards No. 142, *Goodwill and Other Intangible Assets.*

KPMG LLP

Mountain View, California
January 24, 2003, except as to Note 17,
which is as of February 28, 2003

SUNRISE TELECOM INCORPORATED AND SUBSIDIARIES

Consolidated Balance Sheets

(in thousands, except share data)

	December 31, 2002	December 31, 2001
ASSETS		
Current assets:		
Cash and cash equivalents	$ 36,440	$ 48,713
Marketable securities	1,023	3,472
Accounts receivable, net of allowance of $1,389 and $675, respectively	13,019	13,997
Inventories	8,143	8,036
Prepaid expenses and other assets	708	714
Income taxes receivable	348	—
Deferred tax asset	4,746	3,135
Total current assets	64,427	78,067
Property and equipment, net	28,126	28,850
Restricted cash	106	—
Goodwill, net	12,656	8,661
Intangible assets, net	8,754	8,144
Deferred tax asset	2,331	1,484
Loan to related party	1,051	—
Other assets	1,470	1,415
Total assets	$118,921	$126,621
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Short-term borrowings and current portion of notes payable	$ 410	$ 453
Accounts payable	1,869	1,703
Other accrued expenses	8,296	9,767
Income taxes payable	—	1,002
Deferred revenue	1,081	280
Total current liabilities	11,656	13,205
Notes payable, less current portion	1,177	1,065
Deferred revenue	314	489
Other liabilities	5	109
Total liabilities	13,152	14,868
Commitments		
Stockholders' equity:		
Preferred stock, $0.001 par value per share; 10,000,000 authorized shares; none issued and outstanding	—	—
Common stock, $0.001 par value per share; 175,000,000 shares authorized; 51,233,309 and 50,424,944 shares issued as of December 31, 2002 and 2001, respectively; 49,477,609 and 50,424,738 shares outstanding as of December 31, 2002 and 2001, respectively	49	50
Additional paid-in capital	68,462	69,943
Deferred stock-based compensation	(2,124)	(4,304)
Retained earnings	39,158	46,244
Accumulated other comprehensive income (loss)	224	(180)
Total stockholders' equity	105,769	111,753
Total liabilities and stockholders' equity	$118,921	$126,621

See accompanying notes to consolidated financial statements.

SUNRISE TELECOM INCORPORATED AND SUBSIDIARIES

Consolidated Statements of Operations

(in thousands, except per share data)

	Years Ended December 31,		
	2002	2001	2000
Net sales	$54,333	$79,059	$113,481
Cost of sales	17,973	25,509	32,994
Gross profit	36,360	53,550	80,487
Operating expenses:			
Research and development	17,373	18,490	17,555
Selling and marketing	16,768	20,329	22,694
General and administrative	11,322	13,779	9,790
Total operating expenses	45,463	52,598	50,039
Income (loss) from operations	(9,103)	952	30,448
Other income, net	771	2,569	1,909
Income (loss) before income taxes	(8,332)	3,521	32,357
Income tax expense (benefit)	(3,333)	704	11,972
Net income (loss)	$ (4,999)	$ 2,817	$ 20,385
Earnings (loss) per share:			
Basic	$ (0.10)	$ 0.06	$ 0.43
Diluted	$ (0.10)	$ 0.05	$ 0.41
Shares used in computing earnings per share:			
Basic	49,854	50,195	47,374
Diluted	49,854	51,325	49,610

See accompanying notes to consolidated financial statements.

SUNRISE TELECOM INCORPORATED AND SUBSIDIARIES

Consolidated Statements of Stockholders' Equity and Comprehensive Income (loss)

(in thousands)

	Common Stock		Additional Paid-in Capital	Deferred Stock-based Compensation	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity	Comprehensive Income (Loss)
	Shares	Amount						
Balances, December 31, 1999	44,913	$ 45	$ 3,915	$(2,065)	$23,576	$ —	$ 25,471	
Exercise of common stock options	671	1	797	—	—	—	798	
Common stock issued under Employee Stock Purchase Plan	40	—	501	—	—	—	501	
Issuance of stock in connection with Pro.Tel acquisition	500	—	5,000	—	—	—	5,000	
Common stock issued in Initial Public Offering	3,817	4	51,604	—	—	—	51,608	
Deferred stock-based compensation	—	—	6,500	(6,500)	—	—	—	
Amortization of deferred stock-based compensation	—	—	—	1,954	—	—	1,954	
Change in unrealized gain on available-for-sale investments, net	—	—	—	—	—	3	3	$ 3
Cumulative translation adjustment	—	—	—	—	—	(76)	(76)	(76)
Net income	—	—	—	—	20,385	—	20,385	20,385
Comprehensive income								$20,312
Balances, December 31, 2000	49,941	50	68,317	(6,611)	43,961	(73)	105,644	
Exercise of common stock options	446	—	398	—	—	—	398	
Common stock issued under Employee Stock Purchase Plan	264	—	1,273	—	—	—	1,273	
Repurchase of common stock	(226)	—	(319)	—	(534)	—	(853)	
Deferred stock-based compensation	—	—	(182)	182	—	—	—	
Amortization of deferred stock-based compensation	—	—	—	2,125	—	—	2,125	
Tax benefit from stock option plans	—	—	456	—	—	—	456	
Change in unrealized gain on available-for-sale investments, net	—	—	—	—	—	19	19	$ 19
Cumulative translation adjustment	—	—	—	—	—	(126)	(126)	(126)
Net income	—	—	—	—	2,817	—	2,817	2,817
Comprehensive income								$ 2,710
Balances, December 31, 2001	50,425	50	69,943	(4,304)	46,244	(180)	111,753	
Exercise of common stock options	268	—	166	—	—	—	166	
Common stock issued under Employee Stock Purchase Plan	315	—	727	—	—	—	727	
Repurchase of common stock	(1,530)	(1)	(2,118)	—	(2,087)	—	(4,206)	
Deferred stock-based compensation	—	—	(319)	319	—	—	—	
Amortization of deferred stock-based compensation	—	—	—	1,861	—	—	1,861	
Tax benefit from stock option plans	—	—	63	—	—	—	63	
Change in unrealized gain on available-for-sale investments, net	—	—	—	—	—	(17)	(17)	$ (17)
Cumulative translation adjustment	—	—	—	—	—	421	421	421
Net loss	—	—	—	—	(4,999)	—	(4,999)	(4,999)
Comprehensive loss								$ (4,595)
Balances, December 31, 2002	49,478	$ 49	$68,462	$(2,124)	$39,158	$ 224	$105,769	

See accompanying notes to consolidated financial statements.

SUNRISE TELECOM INCORPORATED AND SUBSIDIARIES

Consolidated Statements of Cash Flows

(in thousands)

	Years Ended December 31,		
	2002	2001	2000
Cash flows from operating activities:			
Net income (loss)	$ (4,999)	$ 2,817	$ 20,385
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	7,164	8,427	4,271
Amortization of deferred stock-based compensation	1,861	2,125	1,954
Provision for losses on accounts receivable	1,411	844	852
Loss on disposal of property and equipment	309	199	87
Deferred income taxes	(2,458)	368	(3,183)
Changes in operating assets and liabilities (net of acquisition balances):			
Accounts receivable	(386)	4,341	(9,057)
Inventories	439	5,695	(5,775)
Prepaid expenses and other assets	(110)	156	(1,640)
Accounts payable and accrued expenses	(1,864)	(4,580)	6,090
Income taxes receivable and payable	(1,286)	(635)	(977)
Deferred revenue	626	(6)	365
Net cash provided by operating activities	707	19,751	13,372
Cash flows from investing activities:			
Purchase of long-term investment	(4)	—	(241)
Purchases of marketable securities	(3,311)	(19,628)	(6,298)
Sales of marketable securities	5,742	22,475	—
Capital expenditures	(2,514)	(19,375)	(5,614)
Acquisitions of businesses, net of cash acquired	(8,552)	(11,274)	(4,717)
Loan to related party	(1,050)	—	—
Net cash used in investing activities	(9,689)	(27,802)	(16,870)
Cash flows from financing activities:			
Increase in restricted cash	(106)	—	—
Payments on short-term borrowings	(49)	(177)	—
Proceeds from notes payable	273	577	—
Payments on notes payable	(517)	(626)	(1,649)
Repurchase of common stock	(4,206)	(853)	—
Net proceeds from issuance of common stock	727	1,273	52,108
Proceeds from exercise of stock options	166	398	798
Net cash provided by (used in) financing activities	(3,712)	592	51,257
Effect of exchange rate changes on cash and cash equivalents	421	(126)	(76)
Net increase (decrease) in cash and cash equivalents	(12,273)	(7,585)	47,683
Cash and cash equivalents, beginning of year	48,713	56,298	8,615
Cash and cash equivalents, end of year	$ 36,440	$ 48,713	$ 56,298
Supplemental disclosure of cash flow information:			
Cash paid for interest	$ 24	$ 44	$ 125
Cash paid for income taxes	$ 642	$ 808	$ 15,958
Noncash investing and financing activities:			
Stock issued for acquisitions of Pro.Tel	$ —	$ —	$ 5,000
Promissory note issued in connection with acquisition	$ —	$ —	$ 1,000
Deferred stock-based compensation	$ —	$ —	$ 6,500

See accompanying notes to consolidated financial statements.

Notes to Consolidated Financial Statements

(1) Business and Significant Accounting Policies

(a) Business

Sunrise Telecom Incorporated and subsidiaries (the "Company") was incorporated as Sunrise Telecom, Inc. in California in October 1991. In July 2000, the Company reincorporated in Delaware and changed its name to Sunrise Telecom Incorporated. The Company develops, manufactures, and markets service verification equipment to pre-qualify, verify, and diagnose telecommunications, cable TV, and Internet networks. The Company sells its products on six continents through a worldwide network of manufacturers, sales representatives, distributors, and direct sales people. The Company has wholly-owned subsidiaries in Norcross, Georgia; Taipei, Taiwan; Modena, Italy; Tokyo, Japan; Seoul, Korea; Anjou, Canada; and Geneva, Switzerland. It also has a representative liaison office in Beijing, China and a foreign sales corporation in Barbados.

(b) Principles of Consolidation

The accompanying consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All significant intercompany transactions have been eliminated.

(c) Revenue Recognition

The Company recognizes revenue when earned. Revenue from product sales is recognized upon shipment, assuming collectibility of the resulting receivable is probable. When the arrangement with the customer includes future obligations or obtaining customer acceptance, the Company recognizes revenue when those obligations have been met or customer acceptance has been received. The Company defers revenue from services and support provided under its warranty programs and recognizes it on a straight-line basis over the warranty period. Deferred revenue represents amounts received from customers in advance of services and support to be provided or prior to customer acceptance. Provisions are recorded at the time of sale for estimated product returns, standard warranty obligations, and customer support.

(d) Warranty Cost

The Company offers warranties of one to three years to its customers depending on the specific product and terms of the customer purchase agreement. The Company's typical warranties require it to repair or replace defective products during the warranty period at no cost to the customer. At the time that product revenue is recognized, the Company records a liability for estimated costs under its warranties. The costs are estimated based on historical experience. The Company periodically assesses the adequacy of its recorded liability for product warranties and adjusts the amount as necessary.

(e) Research and Development

Costs incurred in the research and development of new products and enhancements to existing products are expensed as incurred until the product has been completed and tested and is ready for commercial manufacturing. To date, hardware and software development projects have been completed concurrently with the establishment of commercial manufacturing and technological feasibility in the form of a working model. Accordingly, no development costs have been capitalized.

(f) Cash Equivalents and Marketable Securities

The Company considers all highly liquid investments with a maturity of 90 days or less when acquired to be cash equivalents. Cash equivalents as of December 31, 2002 and 2001 consist primarily of cash on deposit with banks, money market funds, auction rate securities, and marketable debt securities. The Company determines the appropriate classification of debt and equity securities at the time of purchase and reevaluates this designation as of each balance sheet date. Investments classified as available for sale are reported at market value, with the unrealized gains and losses, net of tax, reported as a separate component of other comprehensive income (loss) in stockholders' equity. Realized gains and losses on sales of investments and declines in value determined to be other than temporary are included in other income (expense).

(g) Restricted cash

Restricted cash is cash held in certificates of deposit by a financial institution that collateralize standby letters of credit issued by the financial institution on the Company's behalf (see Note 16).

(h) Fair Value of Financial Instruments

For certain financial instruments, including cash and cash equivalents, accounts receivable, accounts payable, notes payable, and accrued expenses, recorded amounts approximate fair value due to the relatively short maturity period.

(i) Inventories

Inventories are stated at the lower of cost or market. Cost is determined using the weighted-average method.

(j) Property and Equipment

Property and equipment are carried at cost. Depreciation and amortization is computed using the straight-line method over the shorter of the estimated useful life of the asset or the lease term. Useful lives range from three to thirty-nine years for buildings and improvements and up to five years for machinery and equipment.

(k) Intangible Assets

The Company initially records intangible assets at their fair values. The Company amortizes intangible assets with estimable useful lives over these estimated lives in proportion to the economic benefits consumed. The Company has determined that straight-line amortization over two to ten years reasonably approximates the consumption of these economic benefits. The Company tests intangible assets with indefinite useful lives for impairment on an annual basis.

(l) Long-Lived Assets

Long-lived assets, including property and equipment and identifiable intangible assets, are evaluated for impairment whenever events or changes in circumstances indicate that such assets may be impaired, or that the estimated useful lives are no longer appropriate. In accordance with Statement of Financial Accounting Standards ("SFAS") No. 144, *Accounting for the Impairment and Disposal of Long-lived Assets,* the impairment evaluation is performed based on asset groups, which represent the lowest level for which identifiable cash flows are largely

independent of the cash flows of other groups of assets and liabilities. The Company reviews its long-lived assets for impairment based on estimated future undiscounted cash flows attributable to the assets. In the event that such cash flows are not expected to be sufficient to recover the recorded value of the assets, the assets are written down to their estimated fair values using discounted estimates of future cash flows.

(m) Income Taxes

The Company accounts for income taxes using the asset and liability method. Under this method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and for operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using the enacted tax laws expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax laws is recognized in the results of operations in the period that includes the enactment date.

(n) Business and Concentrations of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash equivalents and accounts receivable. The Company's cash equivalents consist of cash on deposit with banks, money market funds, auction rate securities, and marketable debt securities. The Company believes no significant concentrations of credit exist with respect to these financial instruments.

Concentrations of credit risk with respect to trade receivables are limited as the majority of the Company's sales are derived from large cable television system operators, telephone operating companies, other established telecommunication companies located throughout the world, with relatively good credit histories. The Company performs ongoing credit evaluations of its customers. Based on management's evaluation of potential credit losses, the Company believes its allowances for doubtful accounts is adequate. The Company had no single customer that accounted for more than 10% of its net sales for the years ended December 31, 2002 and 2001. During the year ended December 31, 2000, the Company had one customer that accounted for 17% of its net sales and another that accounted for 16%.

The Company's customers are concentrated in the telecommunications and cable TV industries. Accordingly, the Company's future success depends on the buying patterns of these customers and the continued demand by these customers for the Company's products. Additionally, the market is characterized by rapidly changing technology, evolving industry standards, changes in end user requirements, and frequent new product introductions and enhancements. Furthermore, the telecommunications and cable industries have experienced and are expected to continue to experience consolidation. The Company's continued success will depend upon its ability to enhance existing products and to develop and introduce, on a timely basis, new products and features that keep pace with technological developments and emerging industry standards. Furthermore, as a result of its international sales, the Company's operations are subject to risks of doing business abroad, including but not limited to, fluctuations in the value of currency, longer payment cycles, and greater difficulty in collecting accounts receivable.

(o) Earnings (loss) per Share

Basic earnings (loss) per share ("EPS") is computed using the weighted-average number of common shares outstanding during the period. Diluted EPS is computed using the weighted-average number of common and dilutive

common equivalent shares outstanding during the period. Dilutive common equivalent shares consist of common stock issued in the Pro.Tel acquisition and common stock issuable upon exercise of stock options using the treasury stock method. In the year ended December 31, 2002, dilutive common equivalent shares were excluded from the calculation of diluted loss per share presented in the consolidated statement of operations because their effect would have been anti-dilutive. Specifically, diluted net loss per share does not include the effect of 4,426,690, 3,624,548, and 2,949,039 anti-dilutive potential common shares for the years ended December 31, 2002, 2001 and 2000, respectively.

The following is a reconciliation of the shares used in the computation of basic and diluted EPS (in thousands):

	Years Ended December 31,		
	2002	2001	2000
Basic EPS—weighted-average number of common shares outstanding	49,854	50,195	47,374
Effect of dilutive common equivalent shares:			
Stock options outstanding	—	1,130	2,111
Stock issued in acquisition subject to put arrangement	—	—	125
Diluted EPS—weighted-average number of common shares and common equivalent shares outstanding	49,854	51,325	49,610

(p) Stock-Based Compensation

The Company accounts for employee stock-based compensation using the intrinsic-value method, in accordance with Accounting Principles Board ("APB") Opinion No. 25, *Accounting for Stock-Issued to Employees*. Accordingly, deferred compensation cost is recorded on the date of grant to the extent that the fair value of the underlying share of common stock exceeds the exercise price for a stock option or the purchase price for a share of common stock. During 1999, the Company recorded deferred stock-based compensation cost for stock options issued to employees at exercise prices that were subsequently determined to have been below the fair value of the stock on the date of grant. In addition, the Company recorded deferred stock-based compensation cost for stock options granted to employees of Pro.Tel in the first quarter of 2000. The deferred compensation cost associated with both of these stock option grants is amortized as a charge against operating results on a straight-line basis over the four year vesting period of the options. The Company has allocated the amortization of deferred stock-based compensation to the departments in which the related employees' services are charged.

If compensation expense for the Company's stock-based compensation plans had been determined in a manner consistent with the fair value approach described in SFAS No. 123, *Accounting for Stock-Based Compensation,* the Company's net income (loss) and earnings (loss) per share, as reported, would have been reduced to the pro forma amounts indicated below (in thousands, except per share data):

	Years ended December 31,		
	2002	2001	2000
Net income (loss), as reported	$(4,999)	$ 2,817	$20,385
Add: Stock-based employee compensation expense included in reported net income, net of related tax effects	1,117	1,700	1,229
Deduct: Total stock-based employee compensation expense determined under fair value based method for all awards, net of related tax effects	(2,185)	(2,655)	(1,164)
Pro forma net income (loss)	$(6,067)	$ 1,862	$20,450
Earnings (loss) per share:			
Basic—as reported	$ (0.10)	$ 0.06	$ 0.43
Basic—pro forma	$ (0.12)	$ 0.04	$ 0.43
Diluted—as reported	$ (0.10)	$ 0.05	$ 0.41
Diluted—pro forma	$ (0.12)	$ 0.04	$ 0.41

The provisions of SFAS No. 123 are effective for options granted beginning January 1, 1996. Options vest over several years and new options are generally granted each year. Because of these factors, the pro forma effect shown above may not be representative of the pro forma effect of SFAS No. 123 in future years.

For the purposes of computing pro forma net income, the fair value of each option grant is estimated on the date of grant using the Black-Scholes option pricing model. The assumptions used to value the option grant are as follows:

	Years Ended December 31,		
	2002	2001	2000
Dividend yield	None	None	None
Expected term	4 years	4 years	4 years
Risk-free interest rate	2.97%	5.06%	4.90%
Volatility rate	0.7143	1.0638	0.602

(q) Use of Estimates

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires the Company to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. The Company revises estimates as additional information becomes available.

(r) Foreign Currency Translation

The functional currency for the Company's foreign subsidiary located in Taiwan is the U.S. dollar. Accordingly, the Company remeasures the monetary assets and liabilities of this foreign subsidiary to the U.S. dollar at year-end exchange rates and remeasures the nonmonetary assets and liabilities to the U.S. dollar at historical rates. Income and expense amounts related to monetary assets and liabilities are remeasured to the U.S. dollar at the weighted average exchange rates in effect during the year, and income and expense accounts related to nonmonetary assets and liabilities are remeasured to the U.S. dollar at historical exchange rates. Remeasurement gains and losses are recognized in income in the year of occurrence.

The functional currencies for the Company's other foreign subsidiaries are the local currencies. Accordingly, the Company applies the period end exchange rate to translate the subsidiary's assets and liabilities and the weighted average exchange rate for the period to translate the subsidiary's revenues, expenses, gains, and losses into U.S. dollars. Translation adjustments are included as a separate component of accumulated other comprehensive income (loss) within stockholders' equity.

In December 2000, the Company recorded a $381,000 gain on a forward contract used to hedge the purchase price of the then-pending acquisition of Avantron, the Company's Canadian subsidiary.

(s) Advertising Expense

The Company recognizes the cost of advertising as incurred. Such costs are included in selling and marketing expense and totaled approximately $439,000, $1,258,000, and $1,866,000 during the years ended December 31, 2002, 2001, and 2000, respectively.

(t) Recent Accounting Pronouncements

In April 2002, the FASB issued SFAS No. 145, *Rescission of FASB Statements No. 4, 44, and 64, Amendment of FASB Statement No. 13, and Technical Corrections,* which the Company adopted effective July 1, 2002. Statement 145 rescinds Statement 4, *Reporting Gains and Losses from Extinguishment of Debt—an amendment of APB Opinion No. 30,* which required all gains and losses from extinguishment of debt to be aggregated and, if material, classified as an extraordinary item, net of related income tax effect. As a result, the criteria set forth by APB Opinion 30 will now be used to classify those gains and losses. Statement 64 amended Statement 4, and is no longer necessary because Statement 4 has been rescinded. Statement 44 was issued to establish accounting requirements for the effects of transition to the provisions of the Motor Carrier Act of 1980. Statement 145 also amends Statement 13 to require that certain lease modifications that have economic effects similar to sale-leaseback transactions be accounted for in the same manner as sale-leaseback transactions. This Statement also makes non-substantive technical corrections to existing pronouncements. SFAS No. 145 is effective for fiscal years beginning after May 15, 2002 with earlier adoption encouraged. The Company does not expect the provisions of SFAS No. 145 to have a material effect on the Company's financial position or results of operations.

In July 2002, the FASB issued SFAS No. 146, *Accounting for Costs Associated with Exit or Disposal Activities.* SFAS No. 146 addresses financial accounting and reporting for costs associated with exit or disposal activities and nullifies Emerging Issues Task Force (EITF) Issue No. 94-3, *Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring).* This statement requires recognition of a liability for a cost associated with an exit or disposal activity when the liability is incurred, as opposed to when the entity commits to an exit plan. This statement also establishes that fair value is objective for initial

measurement of the liability. The provisions of this statement are effective for exit or disposal activities that are initiated after December 31, 2002. The Company does not expect the provisions of SFAS No. 146 to have a material effect on the Company's financial position or results of operations.

In November 2002, the FASB issued Interpretation No. 45, *Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others (FIN 45).* FIN 45 requires a guarantor to (i) include disclosure of certain obligations and (ii) if applicable, at the inception of the guarantee, recognize a liability for the fair value of other certain obligations undertaken in issuing a guarantee. The disclosure provisions of the Interpretation are effective for financial statements of interim or annual reports that end after December 15, 2002. The adoption of FIN 45 had no impact on the Company's disclosures as of December 31, 2002. The recognition and measurement provisions of FIN 45 are effective for guarantees issued or modified after December 29, 2002. The Company does not expect Interpretation No. 45 to have a material effect on the Company's financial position or results of operations.

In December 2002, the FASB issued SFAS No. 148, *Accounting for Stock-Based Compensation—Transition and Disclosure—an Amendment of FASB Statement No. 123.* SFAS No. 148 amends FASB Statement No. 123, Accounting for Stock-Based Compensation, to provide alternative methods of transition for an entity that chooses to change to the fair-value-based method of accounting for stock-based employee compensation. It also amends the disclosure provisions of that statement to require prominent disclosure about the effects that accounting for stock-based employee compensation using the fair-value-based method would have on reported net income and earnings per share and to require prominent disclosure about the entity's accounting policy decisions with respect to stock-based employee compensation. Certain of the disclosure requirements are required for all companies, regardless of whether the fair value method or intrinsic value method is used to account for stock-based employee compensation arrangements. The Company accounts for its employee incentive stock option plans using the intrinsic value method in accordance with the recognition and measurement principles of Accounting Principles Board Opinion No. 25, *Accounting for Stock Issued to Employees,* as permitted by SFAS No. 123. The amendments to SFAS No. 123 are effective for financial statements for fiscal years ended after December 15, 2002 and for interim periods beginning after December 15, 2002. The adoption of the disclosure requirements of SFAS No. 148 did not have a material effect on the Company's financial position or results of operations.

In January 2003, the FASB issued Interpretation No. 46, *Consolidation of Variable Interest Entities (FIN 46).* This interpretation of Accounting Research Bulletin No. 51, *Consolidated Financial Statements,* addresses consolidation by business enterprises of variable interest entities. Under current practice, enterprises generally have been included in the consolidated financial statements of another enterprise because the one enterprise controls the others through voting interests. FIN 46 defines the concept of "variable interests" and requires existing unconsolidated variable interest entities to be consolidated into the financial statements of their primary beneficiaries if the variable interest entities do not effectively disperse risks among the parties involved. This interpretation applies immediately to variable interest entities created after January 31, 2003. It applies in the first fiscal year or interim period beginning after June 15, 2003, to variable interest entities in which an enterprise holds a variable interest that it acquired before February 1, 2003. If it is reasonably possible that an enterprise will consolidate or disclose information about a variable interest entity when FIN 46 becomes effective, the enterprise must disclose information about those entities in all financial statements issued after January 31, 2003. The interpretation may be applied prospectively with a cumulative-effect adjustment as of the date on which it is first applied or by restating previously issued financial statements for one or more years, with a cumulative-effect adjustment as of the beginning of the first year restated. The Company does not expect the adoption of FIN 46 to have a material effect on its consolidated financial statements.

(u) Reclassifications

Certain amounts in the prior years' consolidated financial statements have been reclassified to conform to the current year's presentation.

(2) Related Party Transactions

The Company's CEO, Paul Chang, is also the owner of Telecom Research Center ("TRC"). During 2002, 2001, and 2000, the Company purchased equipment used in its manufacturing process totaling $34,000, $59,000, and $143,000, respectively, from TRC. The Company's accounts payable to TRC were $14,000 and $2,115 at December 31, 2002 and 2001, respectively. The terms of the Company's transactions with TRC are similar to those with unrelated parties.

On February 19, 2002, the Company's Board of Directors and Compensation Committee gave approval for a loan to Paul Chang in the amount of $1,051,000. The loan requires Mr. Chang to pay interest each month at an annual percentage rate of 4.0%. Interest income received for the year 2002 was $36,125. Mr. Chang must repay the principle amount no later than February 18, 2005. The loan is secured by three million shares of the Company's common stock. As of December 31, 2002, the principal amount of $1,051,000 was outstanding.

One of the Company's directors, Jennifer Walt, is a partner in the law firm of Littler Mendelson, P.C. During 2002, 2001, and 2000, Littler Mendelson, P.C. provided services to the Company totaling $26,000, $14,000, and $8,000, respectively. The Company had no accounts payable to Littler Mendelson, P.C. at December 31, 2002 and had $4,012 payable at December 31, 2001.

(3) Financial Statement Details

Inventories

Inventories consisted of the following (in thousands):

	December 31,	
	2002	2001
Raw materials	$4,098	$4,089
Work in process	1,801	1,603
Finished goods	2,244	2,344
	$8,143	$8,036

Property and Equipment

Property and equipment consisted of the following (in thousands):

	December 31,	
	2002	2001
Land	$ 8,821	$ 8,821
Building	9,670	9,243
Equipment	18,076	15,811
Furniture and fixtures	2,212	2,137
Leasehold improvements	513	618
	39,292	36,630
Less accumulated depreciation and amortization	11,166	7,780
	$28,126	$28,850

Other Accrued Expenses

Other accrued expenses consisted of the following (in thousands):

	December 31,	
	2002	2001
Accrued compensation and other related benefits	$3,444	$5,399
Commissions payable	1,759	1,334
Sales tax payable	350	356
Accrued warranty	1,306	1,398
Other accrued expenses	1,437	1,280
	$8,296	$9,767

(4) Valuation and Qualifying Accounts

A summary of valuation and qualifying accounts is as follows (in thousands):

	Balance at Beginning of Year	Charged to Costs and Expenses	Deductions	Balance at End of Year
Allowance for doubtful accounts:				
2002	$675	$1,411	$ 697	$1,389
2001	982	844	1,151	675
2000	252	852	122	982

(5) Goodwill and Other Acquired Intangible Assets

On January 1, 2002, the Company adopted SFAS No. 142, *Goodwill and Other Intangible Assets*. In accordance with SFAS No. 142, the Company no longer amortizes goodwill from business acquisitions. Had the Company applied SFAS No. 142 during 2001 and 2000, actual net loss and loss per share for the year ended December 31, 2002 and pro forma net income and earnings per share for the years ended December 31, 2001 and December 31, 2000 would be as follows (in thousands, except per share data):

	Years Ended December 31,		
	2002	2001	2000
Net income (loss), as reported	$(4,999)	$2,817	$20,385
Add back: Goodwill amortization expense, net of tax	—	2,126	716
Adjusted net income (loss)	$(4,999)	$4,943	$21,101
Earnings (loss) per share, as reported:			
Basic	$ (0.10)	$ 0.06	$ 0.43
Diluted	$ (0.10)	$ 0.05	$ 0.41
Adjusted earnings (loss) per share:			
Basic	$ (0.10)	$ 0.10	$ 0.45
Diluted	$ (0.10)	$ 0.10	$ 0.43

Acquired intangible assets consisted of the following (in thousands):

	As of December 31, 2002		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Amortized intangible assets			
Developed technology	$12,295	$(5,174)	$7,121
Non-compete	2,002	(1,271)	731
Customer list	890	(688)	202
License	360	(120)	240
Patents	140	(17)	123
Other	70	(11)	59
	$15,757	$(7,281)	8,476
Unamortized intangible assets			
Patents			219
Other			59
Total			278
Intangible assets, net			$8,754

	As of December 31, 2001		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Amortized intangible assets			
Developed technology	$ 9,020	$(2,833)	$6,187
Non-compete	1,838	(840)	998
Customer list	890	(283)	607
Patents	10	(6)	4
Other	64	(7)	57
Total	$11,822	$(3,969)	7,853
Unamortized intangible assets			
Patents			224
Other			67
Total			291
Intangible assets, net			$8,144

Aggregate amortization expense for the years ended December 31, 2002 and 2001 was $3,396,000 and $5,098,000, respectively.

Estimated future aggregate annual amortization expense for intangible assets is as follows (in thousands):

Year ending December 31,	
2003	$3,251
2004	2,678
2005	1,653
2006	719
2007	150
Thereafter	25
	$8,476

The changes in the carrying amount of goodwill for the year ended December 31, 2002 were as follows (in thousands):

Balance as of January 1, 2002	$ 8,661
Goodwill acquired	3,898
Effect of foreign currency translation	97
Balance as of December 31, 2002	$12,656

The Company completed its transitional impairment test of goodwill as of January 1, 2002 during the quarter ended June 30, 2002 and its annual impairment test of goodwill during the quarter ended December 31, 2002, as required under SFAS No. 142. The Company did not obtain an indication that goodwill was impaired from either test. The impairment testing was based on a market capitalization analysis.

(6) Liability for Product Warranties

Changes in the Company's liability for product warranties during the years ended December 31 are as follows (in thousands):

	Balance at Beginning of Year	Warranties Issued	Warranties Settled	Balance at End of Year
2002	$1,398	$ 892	$(984)	$1,306
2001	1,459	701	(762)	1,398
2000	733	1,204	(478)	1,459

(7) Other Assets

Other assets as of December 31, 2002 consisted primarily of the Company's investment in Top Union, a Taiwan R.O.C. corporation, in the amount of $1,066,000.

Top Union is a subcontract manufacturer used by the Company for the manufacture of certain products. As of December 31, 2002, the Company's ownership interest in Top Union was approximately 9.92%. The Company accounts for this investment using the cost method of accounting, and evaluates impairment based on a comparison between the carrying value of the investment, and its fair value based on the valuation associated with third-party external rounds of financing. To date, the Company has not recognized any impairment charges for this investment.

At December 31, 2001, other assets consisted primarily of the Company's investment in Top Union.

(8) Notes Payable and Line of Credit

As a result of various acquisitions completed during 2002, 2000, and 1999, the Company had thirteen non-interest bearing notes payable at December 31, 2002. The aggregate outstanding balance on these notes was $699,000. In addition, in 2001, the Company obtained a loan from the Italian government, which bears interest at 2% a year. At December 31, 2002, the outstanding balance on this loan was $888,000, which is to be repaid by semi-annual principal payments over an eight-year period starting in July 2004.

Annual amounts to be repaid under all of these notes are as follows (in thousands):

Year ending December 31,	
2003	$ 410
2004	239
2005	154
2006	157
2007	108
Thereafter	519
	$1,587

At December 31, 2001, the Company also had short-term borrowings from various Italian financial institutions, which bear interest at variable rates, ranging from 6.675% to 9.6875% at December 31, 2001, based on the ABI prime

rate. At December 31, 2001, $56,000 had been drawn down under these facilities. Generally, these foreign credit lines do not require commitment fees or compensating balances and are cancelable at the option of the Company or the financial institutions. At December 31, 2002, there were no balances outstanding from these short-term borrowings.

The Company's revolving line of credit with a financial institution expired on September 15, 2002, and the Company did not renew it.

(9) Leases

The Company leases facilities under several operating lease agreements which also require the Company to pay property taxes and normal maintenance. Future minimum lease payments, under these agreements, as of December 31, 2002, are as follows (in thousands):

Year ending December 31,	
2003	$ 717
2004	419
2005	318
2006	108
2007	36
Thereafter	—
	$1,598

Rent expense for the years ended December 31, 2002, 2001, and 2000 was approximately $1,030,000, $1,321,000, and $931,000, respectively.

(10) Capital Stock

In April 2000, the Company's Board of Directors authorized a three-for-one stock split of the Company's common stock. All share amounts in the accompanying consolidated financial statements have been retroactively adjusted to reflect the stock split.

In 2001, the Company's Board of Directors authorized the repurchase of up to $5.0 million of the Company's common stock on the open market. The Company repurchased 1,530,000 shares of common stock for an aggregate amount of $4.2 million, and 217,000 shares of common stock for an aggregate amount of $0.8 million under this program during 2002 and 2001, respectively. In addition, during 2001, the Company repurchased 9,000 shares of unvested common stock for an aggregate amount of $18,000 from former employees, as permitted by its stock option plan. There were no repurchases of common stock issued pursuant to the stock option plan during 2002.

(11) Stock Compensation Plans

2000 Employee Stock Purchase Plan

In April 2000, the Company's Board of Directors approved the adoption of the 2000 Employee Stock Purchase Plan (the "Purchase Plan"). The Purchase Plan became effective upon the Company's initial public offering. As of December 31, 2002, the total number of shares reserved for issuance under the Purchase Plan equals

1,150,000 shares of common stock. The Purchase Plan permits eligible employees to purchase common stock through payroll deductions of up to 15% of the employee's total base compensation, excluding bonuses, commissions, and overtime and not to exceed $25,000 in any plan year, at a price equal to 85% of the lower of the fair market value of the common stock on the first day of the offering period or on the last day of the purchase period. Through December 31, 2002, 618,364 shares had been issued under the Purchase Plan, leaving 531,636 shares reserved for future issuance. During 2002, 2001, and 2000, the Company issued 315,030, 264,075, and 39,257 shares, respectively, under the Purchase Plan.

Stock Option Plan

In April 2000, the Company's Board of Directors approved the adoption of the 2000 Stock Plan (the "Stock Plan"). The Stock Plan became effective upon the Company's initial public offering. The total number of shares reserved for issuance under the Stock Plan equals 5,950,000 shares of common stock plus 5,250,000 that remained reserved for issuance under the 1993 stock option plan as of the date the stock plan became effective, for a total of 11,200,000 shares. All outstanding options under the 1993 stock option plan will be administered under the 2000 Stock Plan but will continue to be governed by their existing terms. As of December 31, 2002, the Company had granted options to purchase 5,924,988 shares of its common stock to its employees, directors and consultants, leaving 5,275,012 shares available for future grants.

Options may be granted as incentive stock options or nonstatutory stock options at the fair market value of such shares on the date of grant as determined by the Board of Directors. Options granted subsequent to 1996 vest over a 4-year period, and expire at the end of 10 years from the date of grant, or sooner, upon termination of employment or if terminated by the Board of Directors.

The options granted under the 1993 stock option plan include a provision whereby the option holder may elect at any time to exercise the option prior to the full vesting of the option. Unvested shares so purchased are subject to a repurchase right by the Company at the original purchase price. Such right lapses at a rate equivalent to the vesting period of the original option. As of December 31, 2002, 2001, and 2000 shares issued and subject to repurchase were 19,500, 56,250, and 144,525, respectively.

Option activity was as follows:

	Years Ended December 31,					
	2002		2001		2000	
	Number of Options	Weighted-Average Price Per Share	Number of Options	Weighted-Average Price Per Share	Number of Options	Weighted-Average Price Per Share
Outstanding at beginning of period	3,304,764	$3.80	2,921,360	$3.28	2,453,100	$ 1.46
Granted at market value	1,727,954	3.34	1,109,708	5.09	627,437	11.66
Granted at less than market value	—	—	—	—	650,001	—
Exercised	(267,415)	0.62	(445,951)	0.89	(671,150)	1.19
Canceled	(548,385)	4.81	(280,353)	8.14	(138,028)	3.83
Options at end of period	4,216,918	3.68	3,304,764	3.80	2,921,360	3.28
Weighted-average fair value of options granted during the period with exercise prices at market value		$1.85		$3.75		$ 5.89
Weighted-average fair value of options granted during the period with exercise prices less than market value at date of grant		$ —		$ —		$10.00

Information regarding stock options outstanding as of December 31, 2002 is summarized in the table below.

		Options Outstanding		Vested Options	
Range of Exercise Prices	Shares Outstanding	Weighted-Average Remaining Contractual Life (years)	Weighted-Average Exercise Price	Vested shares	Weighted-Average Exercise Price
$0.00	321,671	7.16	$ 0.00	319,540	$ 0.00
0.60	86,600	3.28	0.60	161,250	0.60
1.10-1.50	682,449	5.60	1.42	816,750	1.38
1.76-2.17	757,445	8.92	1.96	289,575	2.17
2.45-3.98	1,051,784	9.11	3.88	—	0.00
4.09-4.94	831,067	8.19	4.88	377,751	4.94
5.40-8.54	113,749	8.48	6.02	52,664	6.39
10.00-11.00	329,952	7.29	10.20	165,322	10.19
15.00	5,001	7.53	15.00	5,001	15.00
20.38	37,200	7.80	20.38	20,146	20.38
	4,216,918			2,207,999	

The Company uses the intrinsic-value based method to account for its stock-based compensation plans. With respect to options granted in 2000, the Company recorded deferred stock-based compensation of $6,500,010 for the difference at the grant date between the exercise price and the fair value. For options granted in 2002 and 2001, the Company has not recorded any deferred compensation cost since the exercise price of each option equaled the fair value of the underlying common stock on the grant date. During 2002 and 2001, deferred stock-based compensation was reduced by $319,000 and $182,000, respectively, due to forfeitures of unvested options.

The remaining unamortized deferred stock-based compensation amount for all options granted through December 31, 2002 is expected to be amortized as charges against operating results as follows for the years ending December 31, 2003, $1,857,000, and 2004, $267,000. These charges may be reduced as a result of future forfeitures of options to which the unamortized deferred stock-based compensation balance pertains.

See footnote 1(p) for the pro forma net income (loss) and earnings (loss) per share amounts that would have been reported in 2002, 2001, and 2000 had compensation for the Company's stock-based compensation plans been determined in a manner consistent with the fair value approach described in SFAS No. 148.

(12) Acquisitions

Pro.Tel

On February 22, 2000, the Company acquired all the outstanding shares of Pro.Tel. S.r.l. ("Pro.Tel") and subsidiaries, an Italian manufacturer of distributed network signal analysis equipment. The Company paid $4,219,000 in cash and acquisition costs and 500,001 shares of the Company's stock valued at $5,000,000. The Company also entered into non-compete agreements totaling $500,000, which are payable over four years.

The transaction was accounted for using the purchase method of accounting. The results of Pro.Tel's operations and the estimated fair values of the assets acquired and liabilities assumed have been included in the Company's financial statements since the date of the acquisition. The purchase price for Pro.Tel was allocated to the assets acquired and liabilities assumed based on their fair values on the date of the acquisition as follows (in thousands):

Current assets		$1,068
Property and equipment		177
Intangible assets:		
Subject to amortization:		
Developed technology	$4,365	
Other	16	
Total intangible assets subject to amortization	4,381	
Not subject to amortization:		
Goodwill	4,562	
Total intangible assets		8,943
Other long-term assets		29
Current liabilities		(998)
Net assets acquired		$9,219

The developed technology is amortized over an estimated useful life of five years. Amortization expense is as follows (in thousands):

Aggregate amortization expense:	
For the year ended December 31, 2002	$873
Estimated remaining amortization expense:	
For the year ended December 31, 2003	$873
For the year ended December 31, 2004	$873
For the year ended December 31, 2005	$146

The Company expects that the $4,562,000 of goodwill recognized in this transaction will be fully deductible for tax purposes.

Avantron

On January 8, 2001, the Company acquired all of the outstanding shares of Avantron Technologies, Inc. ("Avantron"), a Canadian company that specializes in the design and manufacture of Cable TV / modem spectrum analyzers and performance monitoring systems. The Company paid $11,931,000 in cash, acquisition costs, and short-term notes payable.

The transaction was accounted for using the purchase method of accounting. The results of Avantron's operations and the estimated fair values of the assets acquired and liabilities assumed have been included in the Company's financial statements since the date of the acquisition. The purchase price for Avantron was allocated to the assets acquired and liabilities assumed based on their fair values on the date of the acquisition as follows (in thousands):

Current assets		$ 2,285
Equipment		477
Intangible assets:		
Subject to amortization:		
Developed technology	$3,591	
Not subject to amortization:		
Goodwill	6,637	
Patents pending	152	
Total intangible assets not subject to amortization	6,789	
Total intangible assets		10,380
Current liabilities		(1,211)
Net assets acquired		$11,931

The developed technology is amortized over an estimated life of five years. Amortization expense is as follows (in thousands):

Aggregate amortization expense:	
For the year ended December 31, 2002	$718
Estimated remaining amortization expense:	
For the year ended December 31, 2003	$718
For the year ended December 31, 2004	$718
For the year ended December 31, 2005	$718

The Company expects that the $6,637,000 of goodwill recognized in this transaction will be fully deductible for tax purposes.

Calan

On February 28, 2002, the Company acquired the entire CaLan Cable TV test business ("CaLan") from Agilent Technologies, Inc. for $7,222,000 in cash and acquisition costs. The purchase price was determined on the basis of negotiations between the Company and Agilent Technologies, Inc., taking into consideration future projections for the CaLan business. The results of CaLan's operations and the fair values of the assets acquired and liabilities assumed have been included in the consolidated financial statements since the date of the acquisition. The purchase price for CaLan was allocated to the assets acquired and liabilities assumed based on their fair values on the date of the acquisition as follows (in thousands):

Current assets		$1,188
Equipment		135
Intangible assets:		
Subject to amortization:		
Developed technology	$3,186	
Technology license	360	
Total intangible assets subject to amortization	3,546	
Not subject to amortization:		
Goodwill	2,554	
Total intangible assets		6,100
Current liabilities		(201)
Net assets acquired		$7,222

The total weighted-average amortization period for the intangible assets is four years. The developed technology is amortized over an estimated useful life of five years, and the technology license is amortized over its remaining useful life at the date of acquisition of two-and-a-half years. Amortization expense is as follows (in thousands):

Aggregate amortization expense:	
For the year ended December 31, 2002	$651
Estimated amortization expense:	
For the year ended December 31, 2003	$781
For the year ended December 31, 2004	$733
For the year ended December 31, 2005	$637
For the year ended December 31, 2006	$637
For the year ended December 31, 2007	$106

The Company expects that the $2,554,000 of goodwill recognized in this transaction will be fully deductible for tax purposes.

ITeX

On June 19, 2002, the Company acquired the ADSL Tester business from Integrated Telecom Express, Inc. ("ITeX") for approximately $100,000 in cash. The purchase price was determined on the basis of negotiations between the Company and ITeX, taking into consideration future projections for the ADSL Tester business and the current liquidation of ITeX recently announced. The results of operations of the ADSL Tester business and the fair values of the assets acquired and liabilities assumed have been included in the consolidated financial statements since the date of the acquisition. The purchase price for ITeX was allocated to the assets acquired and liabilities assumed based on their fair values as of the date of the acquisition as follows (in thousands):

Current assets	$ 83
Equipment	5
Goodwill	68
Current liabilities	(56)
Net assets acquired	$100

The Company expects that the $68,000 of goodwill recognized in this transaction will be fully deductible for tax purposes.

Luciol

On September 4, 2002, the Company acquired Luciol Instruments SA ("Luciol"), a Swiss corporation specializing in fiber optic measurement and instrumentation, for $1,224,000 in cash and acquisition costs. The purchase price was determined on the basis of negotiations between the Company and Luciol. The results of Luciol's operations and the fair values of the assets acquired and liabilities assumed have been included in the consolidated financial statements since the date of the acquisition. The purchase price for Luciol was allocated to the assets acquired and liabilities assumed based on their fair values as of the date of the acquisition as follows (in thousands):

Current assets		$ 100
Equipment		22
Intangible assets:		
Subject to amortization:		
Developed technology	$ 84	
Not subject to amortization:		
Patents pending	30	
Goodwill	1,275	
Total intangible assets not subject to amortization	1,305	
Total intangible assets		1,389
Liabilities		(287)
Net assets acquired		$1,224

The developed technology is amortized over a weighted average life of five years, and the patent, when issued, will be amortized over ten years. Amortization expense is as follows (in thousands):

Aggregate amortization expense:	
For the year ended December 31, 2002	$ 6
Estimated future amortization expense:	
For the year ended December 31, 2003	$17
For the year ended December 31, 2004	$17
For the year ended December 31, 2005	$17
For the year ended December 31, 2006	$17
For the year ended December 31, 2007	$10

The Company expects that the $1,275,000 of goodwill recognized in this transaction will be fully deductible for tax purposes.

Pro Forma Results of Operations (unaudited)

The following summary is prepared on a pro forma basis and reflects the condensed consolidated results of operations for the years ended December 31, 2002, 2001, and 2000, assuming that Avantron, CaLan, ITeX, and Luciol had been acquired at the beginning of the periods presented (in thousands, except per share data):

	Years Ended December 31,		
	2002	2001	2000
Net sales	$55,741	$88,045	$128,308
Net income (loss)	$ (5,475)	$ 3,932	$ 17,317
Basic earnings (loss) per share	$ (0.11)	$ 0.08	$ 0.37
Diluted earnings (loss) per share	$ (0.11)	$ 0.08	$ 0.35
Shares used in pro forma for basic per share computation	49,854	50,195	47,374
Shares used in pro forma for diluted per share computation	49,854	51,325	49,610

These pro forma results are not necessarily indicative of what would have occurred if the acquisitions had been in effect for the periods presented. In addition, they are not intended to be a projection of future results and do not reflect the synergies, if any, that might be achieved from combined operations.

(13) 401(k) Plan

In 1996, the Company adopted a 401(k) Plan (the Plan). Participation in the Plan is available to all full-time employees. Each participant may elect to contribute up to 15% of his or her annual salary, but not to exceed the statutory limit as prescribed by the Internal Revenue Code. The Company may make discretionary contributions to the Plan, which vest annually over a seven-year period. The Plan does not provide participants with an option to invest in the Company's stock. The Company's contributions to the Plan were $12,000, $1,104,000, and $639,000 in 2002, 2001, and 2000, respectively.

(14) Income Taxes

The provision for income taxes consisted of the following (in thousands):

	2002	2001	2000
Current expense (benefit):			
Federal	$ (877)	$ 334	$13,218
State	2	2	1,937
	(875)	336	15,155
Deferred expense (benefit):			
Federal	(1,644)	783	(2,692)
State	(814)	(415)	(491)
	(2,458)	368	(3,183)
	$(3,333)	$ 704	$11,972

Income tax expense (benefit) differed from the amounts computed by applying the U.S. federal income tax rate (34% for the years ended December 31, 2002 and 2001, and 35% for the year ended December 31, 2000) to pretax income, as a result of the following (in thousands):

	2002	2001	2000
Computed tax	$(2,833)	$1,197	$11,325
State taxes, net of federal income tax benefit	(535)	(272)	940
Research credit	(350)	(685)	(691)
Foreign sales corporation benefit	—	(112)	(288)
Tax-exempt interest	—	(132)	(126)
Nondeductible compensation	160	170	199
Nondeductible goodwill amortization	72	145	143
Nondeductible meals and entertainment	33	44	38
Tax rate change	(104)	184	—
Other, net	224	165	432
	$(3,333)	$ 704	$11,972

The types of temporary differences that give rise to significant portions of the Company's deferred tax assets and liabilities are set out below (in thousands):

	December 31,	
	2002	2001
Deferred tax assets:		
Inventory reserves and additional costs capitalized	$ 1,566	$ 805
Accrued compensation and vacation	467	977
Allowance for doubtful accounts	554	269
Other accruals and reserves	1,131	978
Net operating losses and start-up costs	344	23
Tax credits	1,226	441
Amortization of intangible assets	3,496	2,469
Total gross deferred tax assets	8,784	5,962
Deferred tax liabilities:		
Property and equipment	(1,000)	(929)
Unrealized exchange gains	(56)	(39)
Federal tax cost of net state deferred assets	(651)	(375)
Total deferred tax liabilities	(1,707)	(1,343)
Net deferred tax assets	$ 7,077	$ 4,619

In assessing the realizability of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will be realized. The ultimate realization of deferred tax assets is dependent upon taxable income during the periods in which those temporary differences become deductible. Based on the level of historical taxable income and projections for future taxable income over the periods during which the deferred tax assets are deductible, management believes it is more likely than not that the Company will realize the benefits of such deferred assets.

The Company incurred a net operating loss in calendar year 2002. The Company intends to carry back its net operating loss and claim a refund for federal tax purposes. The Company has net operating loss carryforwards for state income tax purposes of approximately $2,209,000 available to reduce future income subject to income taxes. The state net operating loss carry forwards expire if not used by 2013.

As of December 31, 2002, unused research and development tax credits of approximately $350,000 and $860,000 are available to reduce future federal and California income taxes, respectively. The federal research credit carry forward expires in 2022, and the California credits will carry forward indefinitely.

(15) Segment Information

SFAS No. 131, *Disclosure About Segments of an Enterprise and Related Information,* establishes standards for the manner in which public companies report information about operating segments, products, services, geographic areas, and major customers in annual and interim financial statements. The method of determining what information to report is based on the way that management organizes the operating segments within the enterprise for making operating decisions and assessing financial performance.

The Company considers its Chief Executive Officer ("CEO") to be its chief operating decision-maker. The CEO reviews financial information presented on a consolidated basis accompanied by disaggregated information about revenue by geographic region for purposes of making operating decisions and assessing financial performance. The consolidated financial information reviewed by the CEO is the same as the information presented in the accompanying consolidated statements of operations. In addition, as the Company's assets are primarily located in its corporate offices in the United States and not allocated to any specific segment, the Company does not produce reports for, or measure the performance of, its segments based on any asset-based metrics. Therefore, the Company operates in a single operating segment, which includes the design, manufacture, and sale of digital test equipment for telecommunications, transmission, cable, and signaling applications.

Revenue information regarding operations in the different geographic regions is as follows (in thousands):

	Years Ended December 31,		
	2002	2001	2000
Net sales:			
North America (United States and Canada)	$39,002	$52,612	$ 88,469
Asia/Pacific	7,877	11,547	10,144
Europe/Africa/Middle East	6,168	11,189	10,407
Latin America	1,286	3,711	4,461
	$54,333	$79,059	$113,481

Revenue information by product category is as follows (in thousands):

	Years Ended December 31,		
	2002	2001	2000
Wire Line Access	$22,957	$48,648	$ 90,317
Cable TV	17,840	11,213	4,273
Fiber Optics	11,147	15,094	14,236
Signaling	2,389	4,104	4,655
	$54,333	$79,059	$113,481

(16) Commitments

At December 31, 2002, the Company had five standby letters of credit with a maximum potential future payment amount of $106,000. These standby letters of credit secure an equal number of performance bonds, for an equal monetary amount, that were issued by financial institutions to our customers.

(17) Subsequent Events

On February 28, 2003, the Company acquired substantially all of the assets of GIE GmbH ("GIE"), a German corporation located in Mannheim, specializing in wireless and RF measurement instrumentation for a total of approximately $520,000 in cash and acquisition costs. The Company also entered into non-compete agreements totaling $100,000 with the shareholders of GIE, which are payable over four years.

Notes to Consolidated Financial Statements—(Continued)

(18) Quarterly Financial Data (unaudited)

	Quarters Ended							
	Mar. 31, 2002	June 30, 2002	Sept. 30, 2002	Dec. 31, 2002	Mar. 31, 2001	June 30, 2001	Sept. 30, 2001	Dec. 31, 2001
	(in thousands, except per share data)							
Net sales	$ 8,649	$14,730	$14,493	$16,461	$22,453	$21,078	$17,952	$17,576
Gross profit	5,645	9,942	10,024	10,749	15,449	13,849	12,000	12,252
Income (loss) from operations	(5,166)	(2,068)	(1,760)	(109)	1,464	(262)	(343)	93
Net income (loss)	(3,972)	(738)	(283)	(6)	1,529	425	90	773
Earnings (loss) per share:								
Basic	$ (0.08)	$ (0.01)	$ (0.01)	$ 0.00	$ 0.03	$ 0.01	$ 0.00	$ 0.02
Diluted	$ (0.08)	$ (0.01)	$ (0.01)	$ 0.00	$ 0.03	$ 0.01	$ 0.00	$ 0.02
Shares used in per share computation:								
Basic	50,325	50,023	49,622	49,459	49,868	50,147	50,351	50,406
Diluted	50,325	50,023	49,622	49,459	51,277	51,582	51,319	51,115

During the closing of the quarter ended December 31, 2002, the Company identified goodwill of $1.9 million that had been incorrectly classified as acquired developed technology and patents on January 1, 2002 when the Company adopted SFAS No. 142, *Goodwill and Other Intangible Assets*. The Company corrected this balance sheet classification and reversed the associated amortization expense and the related income tax benefits that were reported in its consolidated statements of operations for the quarters ended March 31, 2002, June 30, 2002, and September 30, 2002. As a result of these adjustments, the losses from operations and net losses reported above decreased from the previously reported amounts of $(5.3) million and $(4.0) million, respectively, for the quarter ended March 31, 2002, $(2.2) million and $(0.8) million, respectively, for the quarter ended June 30, 2002, and $(1.9) million and $(0.3) million, respectively, for the quarter ended September 30, 2002. This adjustment caused basic and diluted loss per share to decrease from $(0.02) and $(0.02), respectively, previously reported for the quarter ended June 30, 2002 to $(0.01) and $(0.01), respectively, as shown above. The adjustments did not result in changes to basic and diluted loss per share for the quarters ended March 31, 2002 and September 30, 2002.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

Part III.

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

The information required by this Item with respect to the directors and compliance with Section 16(a) of the Securities and Exchange Act is incorporated by reference from information provided under the headings "Election of Directors" and "Section 16(a) Beneficial Ownership Reporting Compliance," respectively, contained in our Proxy Statement to be filed with the Securities and Exchange Commission relating to our Annual Meeting of Stockholders to be held on May 7, 2003. The information required by this Item with respect to our executive officers is contained in Item 1 of Part I of this Annual Report under the heading "Executive Officers."

ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item is incorporated by reference from the information provided under the heading "Compensation of Directors and the Named Executive Officers" contained in our Proxy Statement.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The information required by this Item is incorporated by reference from the information provided under the headings "Equity Compensation Plan Information" and "Beneficial Ownership of Certain Stockholders, Directors and Executive Officers" contained in our Proxy Statement.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The information required by this Item is incorporated by reference from the information provided under the heading "CERTAIN TRANSACTIONS" contained in our Proxy Statement.

Part IV.

ITEM 14. CONTROLS AND PROCEDURES

Our Chief Executive Officer and our Acting Chief Financial Officer have reviewed, within 90 days of this filing, the disclosure controls and procedures (as defined in the Securities Exchange Act of 1934 Rules 13a-14(c) and 15d-14(c)) that ensure that information relating to the Company required to be disclosed by us in the reports that we file or submit under the Exchange Act, is recorded, processed, summarized, and reported in a timely and proper manner. Based upon this review, we believe that there are adequate controls and procedures in place to ensure that information relating to the company that is required to be disclosed by us in the reports that we file or submit under the Exchange Act is properly disclosed as required by the Exchange Act and related regulations. There have been no significant changes in internal controls or other factors that could significantly affect these controls since the evaluation was performed.

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES, AND REPORTS ON FORM 8-K

(a) The following documents are filed as part of this report:

(1) Our Consolidated Financial Statements are included in Part II, Item 8:

Independent Auditors' Report

Consolidated Balance Sheets

Consolidated Statements of Operations

Consolidated Statements of Shareholders' Equity and Comprehensive Income (Loss)

Consolidated Statements of Cash Flows

Notes to Consolidated Financial Statements

(2) Supplementary Consolidated Financial Statement Schedule as of and for the years ended December 31, 2002, 2001 and 2000:

None.

All other schedules are omitted because of the absence of conditions under which they are required or because the required information is included in the consolidated financial statements or notes thereto.

(3) Exhibits:

See attached Exhibit Index.

(b) Reports on Form 8-K

There were no reports on Form 8-K filed during the last quarter of the year ended December 31, 2002.

Signatures

Pursuant to the requirements of the Securities Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of San Jose, State of California on March 14, 2003.

SUNRISE TELECOM INCORPORATED

By: /s/ PAUL KER-CHIN CHANG
Paul Ker-Chin Chang
President and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1934, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated:

Signature	Title	Date
/s/ PAUL KER-CHIN CHANG **Paul Ker-Chin Chang**	President and Chief Executive Officer (Principal Executive Officer), Director	March 14, 2003
/s/ PAUL A. MARSHALL **Paul A. Marshall**	Acting Chief Financial Officer (Principal Financial Officer), Director	March 14, 2003
/s/ SCOTT E. GREEN **Scott E. Green**	Corporate Controller (Principal Accounting Officer)	March 14, 2003
/s/ ROBERT C. PFEIFFER **Robert C. Pfeiffer**	Director	March 14, 2003
/s/ PATRICK PENG-KOON ANG **Patrick Peng-Koon Ang**	Director	March 14, 2003
/s/ HENRY P. HUFF **Henry P. Huff**	Director	March 14, 2003
/s/ JENNIFER J. WALT **Jennifer J. Walt**	Director	March 14, 2003

Certifications

I, Paul Ker-Chin Chang, certify that:

1. I have reviewed this annual report on Form 10-K of Sunrise Telecom Incorporated;

2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;

3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and we have:

   a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;

   b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and

   c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

   a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and

   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and

6. The registrant's other certifying officer and I have indicated in this annual report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: March 14, 2003

/s/ PAUL KER-CHIN CHANG

Paul Ker-Chin Chang
President and Chief Executive Officer
(Principal Executive Officer)

I, Paul A. Marshall, certify that:

1. I have reviewed this annual report on Form 10-K of Sunrise Telecom Incorporated;

2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;

3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and we have:

   a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;

   b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and

   c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

   a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and

   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and

6. The registrant's other certifying officer and I have indicated in this annual report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: March 14, 2003

/s/ PAUL A. MARSHALL

Paul A. Marshall
Acting Chief Financial Officer
(Principal Financial Officer)

Exhibit Index

Set forth below is a list of exhibits that are being filed or incorporated by reference into this Form 10-K:

Exhibit Number	Description
2.1	Asset Purchase Agreement dated January 23, 2002 among between Agilent Technologies, Inc. and Sunrise Telecom Incorporated and Amendment #1 to Asset Purchase Agreement dated February 28, 2002 (Incorporated by reference from Exhibit 2.1 to Sunrise's Report on Form 10-K dated March 15, 2002).
2.2	Amendment #2 dated April 30, 2002 to the Asset Purchase Agreement dated January 23, 2002 among between Agilent Technologies, Inc. and Sunrise Telecom Incorporated (Incorporated by reference from Exhibit 2.2 to Sunrise's Report on Form 10-Q dated May 10, 2002).
3.1	Amended and Restated Certificate of Incorporation (Incorporated by reference from Exhibit 3.1 to Sunrise's Report on Form 10-K dated March 16, 2001).
3.2	Amended and Restated Bylaws (Incorporated by reference from Exhibit 3.2 to Sunrise's Report on Form 10-K dated March 16, 2001).
4.1	Specimen Stock Certificate (Incorporated by reference from Exhibit 4.1 to Registration Statement No. 333-32070).
10.1	Purchase and Sale Agreement and Escrow Instructions dated November 5, 1999 between Sunrise and Enzo Drive, LLC (Incorporated by reference from Exhibit 10.2 to Registration Statement No. 333-32070).
10.2	Share Purchase Agreement dated January 8, 2001 among each of the shareholders of Avantron Technologies Inc. and Sunrise Telecom Avantron Division Corp., a Nova Scotia unlimited liability company and wholly-owned subsidiary of Sunrise (Incorporated by reference from Exhibit 2.1 to Sunrise's Report on Form 8-K dated February 1, 2001).
10.3	Form of Indemnification Agreement between Sunrise and each of its Officers and Directors (Incorporated by reference from Exhibit 10.6 to Registration Statement No. 333-32070). †
10.4	2000 Stock Option Plan (Incorporated by reference from Exhibit 10.7 to Registration Statement No. 333-32070). †
10.5	2000 Employee Stock Purchase Plan (Incorporated by reference from Exhibit 10.8 to Registration Statement No. 333-32070). †
10.6	2002 Executive Officer Bonus Plan (Incorporated by reference from Exhibit 10.10 to Sunrise's Report on Form 10-K dated March 15, 2002).* †
10.7	Employee Agreement dated January 8, 2001 between Avantron Technologies, Inc. and Raffaele Gerbasi and Amendment #1 dated March 12, 2002 (Incorporated by reference from Exhibit 10.11 to Sunrise's Report on Form 10-K dated March 15, 2002). †
10.8	Secured Promissory Note and Security Agreement between Sunrise Telecom Incorporated and Paul Ker-Chin Chang dated February 19, 2002 (Incorporated by reference from Exhibit 10.12 to Sunrise's Report on Form 10-Q dated May 10, 2002).
21.1	List of Subsidiaries.
23.1	Consent of KPMG LLP.
99.1	Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350.
99.2	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350.

* Confidential treatment has been granted for certain portions of this document pursuant to an application for confidential treatment filed to the Securities and Exchange Commission. Such portions have been redacted and marked with an asterisk. The non-redacted version of this document has been furnished to the Securities and Exchange Commission.

† Indicates management contract or compensatory plan, contract or arrangement.

END OF REPORT ON FORM 10-K

CORPORATE DIRECTORY

Directors

Paul Ker-Chin Chang
Chief Executive Officer, President, and Chairman of the Board

Paul A. Marshall
Chief Operating Officer, Acting Chief Financial Officer, Vice President of Marketing and Director

Patrick Peng-Koon Ang
Director

Henry P. Huff
Director

Robert C. Pfeiffer
Director

Jennifer J. Watt
Director

Officers

Paul Ker-Chin Chang
Chief Executive Officer, President, and Chairman of the Board

Paul A. Marshall
Chief Operating Officer, Acting Chief Financial Officer, Vice President of Marketing and Director

Jeong E. Joo
Chief Technology Officer

Charlie Yong Huang
Vice President of Engineering

Raffaele Gerbasi
Vice President and General Manager of Cable Broadband Group

Raymond L. Chong
Vice President of Product Marketing

Dennis K. Koo
Vice President of the Quality Group

Kirk O. Williams
General Counsel and Secretary

Administrative Management

Scott E. Green
Corporate Controller

Timothy S. Takeda
Director of Tax and Treasury

Corporate Headquarters

Sunrise Telecom Incorporated
302 Enzo Drive
San Jose, CA 95138
(408) 363-8000
www.sunrisetelecom.com

Annual Meeting

The Annual Meeting of the Stockholders of Sunrise Telecom Incorporated will be held at 11:00 A.M., May 7, 2003 at Sunrise Telecom Corporate Headquarters, 302 Enzo Drive, San Jose, CA 95138.

Form 10-K

The Company files an annual report with the Securities and Exchange Commission on Form 10-K, pursuant to the Securities and Exchange Act of 1934. Stockholders may obtain a copy of this report without cost by writing to Investor Relations, 302 Enzo Drive, San Jose, CA 95138.

Transfer Agent

Computershare Trust Co., Inc.
350 Indiana Street
Suite 800
Golden, CO 80401
(303) 262-0600

Legal Counsel

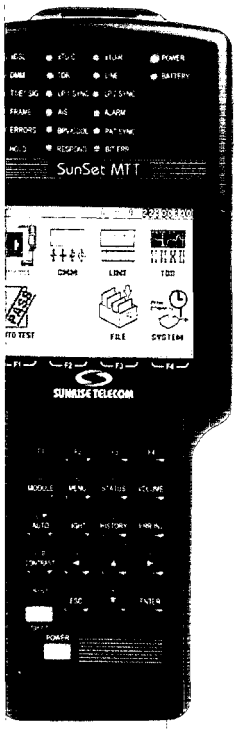
Orrick, Herrington & Sutcliffe LLP
400 Sansome Street
San Francisco, CA 94111
(415) 392-1122

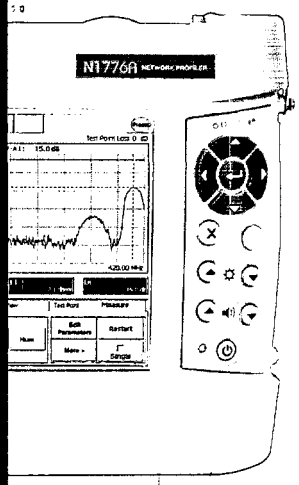
Independent Accountants

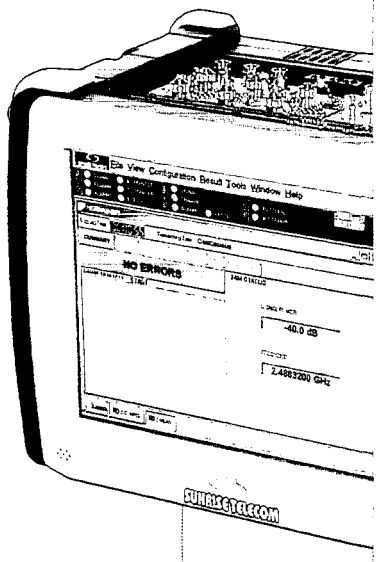
KPMG LLP
500 East Middlefield Road
Mountain View, CA 94043
(650) 404-5000

Common Stock

Sunrise Telecom Incorporated's common stock is traded on the NASDAQ exchange under the symbol "SRTI".







SunSet 10G A year and a half after its introduction, the SunSet 10G still remains the smallest and lightest 10 Gbps optical test set on the market.

SunSet MTT With over 25 test modules and more to come, the SunSet MTT offers the industry's broadest selection of test options for the access network – from DSL, to Gigabit Ethernet, and T1.

1776 Network Profiler New products like the 1776 helped us achieve our goal of being the number two supplier of test solutions to the cable market.

Scalable Test Toolkit We've introduced new concepts in platform design and DWDM test methods with the STT. Our next generation test platform meets the growing demand for metro DWDM applications.

About Sunrise Sunrise Telecom manufactures and markets service verification equipment to pre-qualify, verify, and diagnose telecommunications, cable TV, and Internet networks. Our products offer broad functionality, leading-edge technology, and compact size to test a variety of new broadband services—from wireline access, including DSL, fiber optics, cable TV and signaling networks. Our products are designed to maximize technicians' effectiveness in the field and to provide realistic network simulations that enable equipment manufacturers to test their products. We were founded in 1991 and are based in San Jose, California. We distribute our products through a network of sales representatives, distributors, and a direct sales force throughout six continents.

Sunrise Telecom stock is traded on Nasdaq under the symbol SRTI.

Select Customers in 2002

AOL Time Warner, Inc.
AT&T Corporation
Bell Canada Enterprises, Inc.
BellSouth Corporation
Cablevision Systems Corporation
Chunghwa Telecom Co., Ltd.
Comcast Corporation
Cox Communications, Inc.
Korea Telecom
Lucent Technologies
SBC Communications, Inc.
Sprint Corporation
Telefonica S.A.
Telefonos de Mexico, S.A.
Telkom Malaysia
Telkom SA, Ltd.
Verizon Communications, Inc.
Vodafone Group plc

SUNRISE TELECOM INCORPORATED

302 Enzo Drive . San Jose, CA 95138 . www.sunrisetelecom.com . Telephone: 1.408.363.8000

SUNRISE TELECOM

...a step ahead