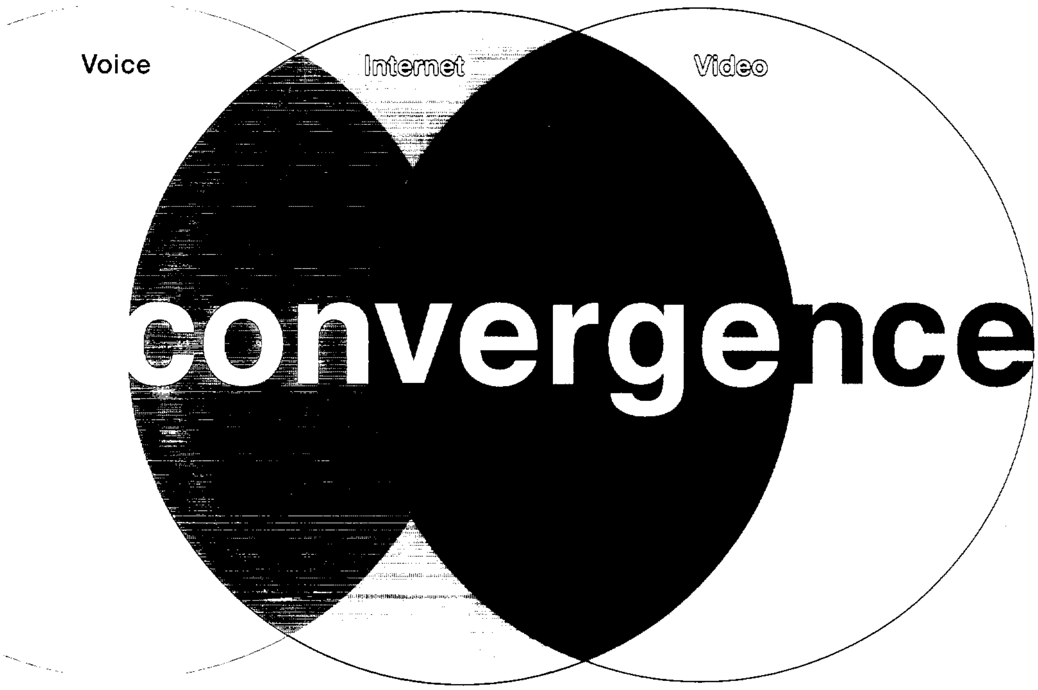
Sunrise Telecom Incorporated 2004 Annual Report



Tools for the Converging Broadband Network

P.E.
12/31/04

SUNRISE TELECOM
...a step ahead

2004 Performance Highlights

With 12% sales growth, a solid balance sheet, industry-leading gross margins, and consistent sector performance, Sunrise Telecom performed substantially better in 2004 than in the previous two years. We posted net sales of $61.7 million for 2004, up from $54.9 million for 2003. In 2004, income before taxes improved to $550,000 compared with a loss of $6.3 million in 2003; however, a one-time, non-cash, deferred tax valuation allowance charge of $7.4 million led to a net loss for 2004 of $7.7 million, compared with a net loss of $3.9 million in 2003. Thus, net loss per share for 2004 was ($0.15) compared with net loss per share of ($0.08) in 2003. Based on our 2004 performance, the business outlook for 2005, and the company's cash and short-term investments of $33.9 million at year-end, the Board of Directors declared an annual dividend of $2.5 million or $0.05 per share.

Our Products

In 2004, product, market and geographic diversification were key to our growth strategy. One of the main growth drivers in wireline access was increased demand for Ethernet modules on our Sunset MTT, which now features more than 30 configurations. As Regional Bell Operating Companies (RBOCs) equipped field technicians to respond to a migration towards Ethernet transmission for corporate LAN applications, we saw increased demand for our Gigabit Ethernet testing modules. Demand for DSL testing tools remained solid as well.

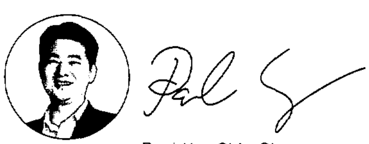
Both our fiber optics STT platform for metro networks and our optical testing modules on the MTT, which target access networks, performed well. We announced two major standardization wins for the STT and MTT that create significant potential for revenue generation. In broadband, growth in both our realWORX Performance Verification System for the central office and our handheld CM-series for upstream traffic analysis was driven by cable operators' significant deployments of Voice over IP (VoIP) services. Together, our products allow operators to conduct comprehensive up-stream and down-stream network testing prior to service deployment. We also experienced strong momentum in our protocol products with the 3G Master, our central office monitoring solution for next-generation mobile networks, and our protocol analyzer for VoIP networks. In the fourth quarter, we shipped a large order for the 3G Master to a Tier-One European carrier reflecting the success of our new European sales offices.

Convergence and the Triple Play

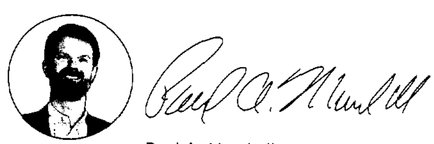
Virtually all leading telecom and cable companies are looking to capitalize on the triple-play opportunity—the bundling of voice, Internet and video services delivered via a single connection to the household. This convergence of services is dramatically changing the competitive landscape and fueling new growth opportunities for Sunrise Telecom. To address the greater bandwidth required by video to complete the triple-play services, our telco customers are accelerating their access network investment in higher speed DSL systems and in optical network expansion for Fiber To The x (FTTx), where x can be the home, the neighborhood, the curb, etc. This network build-out is placing higher bandwidth requirements on supporting metro networks, driving network upgrades and fueling new requirements for test equipment. Likewise, cable operators are aggressively investing in VoIP service capabilities to complete their triple play service offering, giving us substantial new sales opportunities. Our expertise in each of these areas and the modular nature of our products positions us as one of the most attractive suppliers—a one-stop shop for all needs.

Our Future

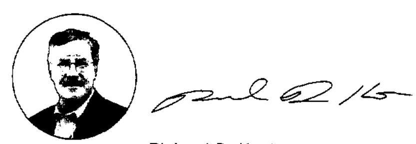
To generate growth and deliver value to our stockholders, we're focused on increasing our market share in test equipment for wireless network signaling and the evolving convergence applications of triple-play residential services, FTTx, VoIP and Gigabit Ethernet. Further, we're improving the cost effectiveness of our R&D to economically grow sales through the development of new revenue streams, and we're improving the quality of our sales channels for better effectiveness. We look forward to reporting our progress to you.



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

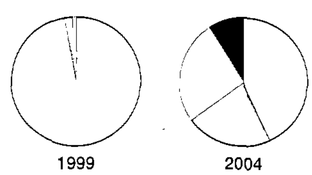


Paul A. Marshall
Chief Operating Officer and Director



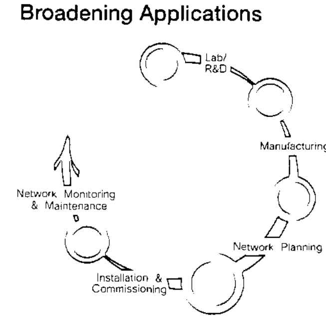
Richard D. Kent
Chief Financial Officer

Diversified Product Revenue



- Wireline Access
- Cable Broadband
- Fiber Optics
- Signaling

Broadening Applications



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, 2004

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from ________ to ________

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)	(IRS 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(b) of the Act:

None

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 30, 2004, the aggregate market value of the Common Stock of the Registrant held by non-affiliates was $51,590,048 based upon the last sale price for that date reported for such sale on the NASDAQ National Market.

As of March 1, 2005, there were 50,768,501 shares of the Registrant's Common Stock outstanding, par value $0.001.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the proxy statement for the 2005 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, 2004

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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 broadband, and internet networks. Our products offer broad functionality, leading edge technology, and compact size to test broadband services. These include wireline access services (including DSL), fiber optics, cable broadband networks, wireless 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. A portion of our products monitor in-service network cable and telecom networks to assist in improving network quality and to provide data to assist network operations. 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 Telecom," "SunSet,", "SunLite", "STT", "Sunset MTT", "Oculist", "NetTracker", "Ghepardo", "Lantrend", and "CaLan" 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 broadband, 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.

Wireline Access Technology. Wireline access technology includes such technologies as "Plain Old Telephone Service" ("POTS"), T-carrier, E-carrier, ISDN, and most recently digital subscriber line technology. Digital subscriber line technology, commonly known as DSL, today transmits data up to 50 times faster than a conventional dial-up modem over a POTS line using the existing copper telephone wires. Various implementations of DSL are being developed and deployed, including asymmetric DSL, known as ADSL, symmetric DSL, known 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 Broadband Networks. Cable broadband 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 connect their cable broadband 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 broadband 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 broadband applications. Today, fiber optic cables carry higher bandwidths by increasing the wavelength modulation speed from 2.5 Gbps or by carrying multiple wavelengths on a single fiber. Common wavelength multiplexing schemes include Coarse Wavelength Division Multiplexing (CWDM) and Dense Wavelength Division Multiplexing (DWDM).

Signaling. Telephone systems require a signaling mechanism to set up and tear down phone calls. These signals serve functions such as supervising or monitoring the status of a line or 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 System 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. This equipment may also collect data on network operation and forward the information to a system for developing statistics on network quality or other attributes of interest.

Because the competition is intense for subscribers for high-speed bandwidth access, the quality and reliability of network service has become critical to service providers. These service providers can ill afford the loss of customers, loss of revenue, 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, physical layer diagnostic equipment, and monitoring systems that enable service providers to pre-qualify facilities for services, verify newly installed services, monitor the performance of video and signaling networks, and diagnose problems relating to copper twisted pair, coaxial cable, and optical fibers. 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 and SunSet MTT 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 Modular Design.* We use handheld designs for most of our products that are to be used in the field. The compact, lightweight design of these products enhances the field technicians' ability to easily carry these devices with them to diagnose problems and verify line operation. The SunSet MTT, for example, offers over 30 different test modules, so that the field technician can equip him or herself with a broad variety of test capabilities to suit his or her particular needs.

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 delivering service to end-user 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

Our major products in each product category are as follows:

WIRELINE ACCESS PRODUCTS		
SunSet MTT	•	The Modular Test Toolkit is a full-featured handheld test set for access network service installation and maintenance. It features a variety of handheld SunSet chassis configurations with support for over 30 different test modules to fit applications ranging from DSL (Digital Subscriber Line), Ethernet, copper diagnostics, T1 (1.544 mbps) and E1 (2 mbps) transmission, analog Voice Frequency circuits, and transport. The SunSet MTT's modularity allows field technicians to use a single unit to test a broad variety of services found in today's access network. The unit identifies problems with the physical transmission media, verifies proper signal transmission, verifies proper performance of the service to the customer, and identifies other problems on a troubled circuit. In addition, the modular, evolving architecture protects a customer's investment in the test equipment. Recognizing the broad modularity of this product, most of our wire-line customers have switched over from more specialized products to this capable and economical product family.
SunSet T10	•	This handheld unit supports transmission testing for T1, with service verification and diagnostics for multiple data protocols, voice services, and signaling technologies.
SunSet ISDN, *SunLite BRI*	•	These products support analysis and service verification for the Integrated Services Digital Network, known as ISDN. ISDN is a digital network that offers more bandwidth than the traditional analog telephone network, but less bandwidth than DSL, T1, Ethernet, cable modems and other newer technologies.
SunLite E1	•	This pocket-sized unit supports transmission testing for E1.
SunSet E20	•	This handheld unit supports transmission testing for E1 and service verification for data, voice, mobile, and other signaling protocols.
CABLE BROADBAND PRODUCTS		
CM1000 and family of Install Profilers	•	These handheld units are used for cable modem installation and field testing. Different configurations support installation and test of current (VOD, Digital Television & High Speed Data) as well as next generation IP services such as Voice over IP networks (VoIP). The CM Series provides and supports an economic growth strategy by providing a simple upgrade path for evolving network installation and test needs.

3010H	•	This product is a rack-mounted headend analyzer and sweep generator that provides the capabilities required to keep today's cable networks operating reliably and delivering quality, distortion-free signals. It supports up to 10 field technicians using our 3010R, 3010B, 2010B or N1776A products for return path maintenance and, as a forward sweep transmitter, it supports an unlimited number of technicians for maintaining the forward path.
2010/3010B	•	This product is a rugged field Signal Level Meter (SLM) offering built-in comparison and analysis capability as well as the standard signal level measurements to ensure that cable services are functioning properly.
3010R	•	This product is a rugged field unit that includes both forward and return sweep plus SLM capabilities for maintaining the entire cable network. The 3010R can also function as a headend unit for troubleshooting intermittent problems in specific network segments for added flexibility.
N1776A Network Profiler	•	This product is a field portable instrument for preventive maintenance and troubleshooting cable networks. It combines the function of a spectrum analyzer, forward and return sweep system and digital QAM analyzer to address current and emerging test requirements in a single unit. Its user-friendly WinCE interface simplifies data management, increasing the productivity of field technicians.
AT2500RQv	•	This product is a lightweight, rugged, full-featured Spectrum Analyzer designed for CATV head-end and field portable applications. It combines high performance CATV, QAM, and video analysis in one instrument to verify and maintain analog TV signals as well as premium digital services.
AT2500HMQ	•	This product is a rack-mounted headend Spectrum Analyzer providing remote visibility into headend and plant performance. It performs remote headend testing of both analog and digital downstream and upstream signals from 1 MHz to 1.5 GHz. It can also monitor maximum, minimum and average ingress levels to be stored for historical reference and trend analysis.
realWORX	•	This product is a fully automated broadband performance verification system that monitors upstream and downstream signal quality on a continual basis from a headend or hub site. It verifies the quality of downstream QAM and Analog CATV channels and ensures that the Return Path Ingress levels are within acceptable limits. RealWORX integrates with the AT2500HMQ Spectrum Analyzers and the optional CM Series test units **for** remote real-time ingress levels.
FIBER OPTIC PRODUCTS		
Scalable Test Toolkit (STT)	•	This product is a portable, modular unit designed to test the core and metro optical networks of today and tomorrow. The STT supports SONET, SDH, C/DWDM (Coarse/Dense Wavelength Division Multiplexing), OTDR (Optical Time Domain Reflectometer), loss test set, and Ethernet/Gigabit Ethernet testing through a family of stackable test modules. The unit also features a Multi Services Analyzer (MSA) module which offers similar test functionality to our

	3GMaster and NeTracker products at much lower traffic capacity. The STT offers advanced analysis and diagnostic tools for exchange, central office and laboratory applications.
PMDE	• This product is an advanced, experimental simulation product for laboratory and research environments that introduces Polarization Mode Dispersion (PMD, a leading cause of signal degradation in high bit-rate optical networks) into optical components, instruments, and networks to test performance.
SunSet 10G	• This product is a compact handheld unit that supports transmission testing for metropolitan and core optical networks. It supports both SONET and SDH networks, including both electrical and optical signal testing in a small package for testing from 1.5 Mbps to 10 Gbps bit rates.
SunSet SDH	• This product is a handheld unit that supports international SDH and digital transmission types found throughout metropolitan and access networks worldwide. The SunSet SDH includes both electrical and optical signal testing and performs advanced service verification for various applications like ATM, mobile, ISDN, and voice.
SunSet OCx	• This product is a handheld unit that supports North American SONET and digital transmission types found throughout metropolitan and access networks worldwide. The SunSet OCx includes both electrical and optical signal testing and performs advanced service verification for various applications like ATM, mobile, ISDN, and voice.
SunSet MTT	• The Modular Test Toolkit (MTT) for the wireline access market also offers physical layer testing and characterization for fiber optic links through an OTDR, loss test set, power meter, and light source, as well as gigabit ethernet testing on fiber optic links.
SIGNALING TESTING PRODUCTS	
3GMaster	• This product is a central office unit to monitor Second and Third Generation Mobile networks. Applications include regular network maintenance, billing verification, network traffic statistics, quality of service testing, and troubleshooting complex problems like roaming and internetworking.
NeTracker	• This product is an advanced analyzer for testing the multiple protocols and data rates found in next-generation VoIP. Applications include service verification, protocol analysis, voice quality testing, and stress testing for the VoIP environment.
Ghepardo	• This product is a central office unit to monitor the major signaling protocols of the telecom network including SS7, Mobile, and data communication. Web-based user interface allows users to control the product 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,		
	2004	2003	2002
Wireline Access	43%	44%	42%
Cable Broadband	26%	26%	33%
Fiber Optics	22%	25%	21%
Signaling	9%	5%	4%

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. We generally sell through distributors internationally and sell direct in the United States. Our international sales offices may also sell directly. The following is a selected list of some of our largest customers in 2004:

Adelphia Communications Corporation
BellSouth Telecom, Inc.
British Telecom PLC
Cablevision Systems Corporation
Comcast Corporation
Cox Communications, Inc.
Korea Telecom Corp.
NTT
SBC Communications Inc.
Siemens AG
Telkom SA Ltd.
Time Warner Cable
Telecom Italia Mobile
United States Department of Defense
Verizon Communications Inc.

As of December 31, 2004, we had sold versions of our products to over 2,000 customers in over 60 countries. No individual end customer or distributor accounted for 10% or more of our net sales in 2004, SBC Communications Inc. accounted for 13% of our net sales in 2003, and no individual end customer or distributor accounted for 10% or more of our net sales in 2002. 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 a mix of our own sales offices and independent distributors, which are directed by our country managers and our regional directors of marketing and sales. In general, we sell our products to the distributor at a discount from the end user price, and the distributor or sales office then resells the products to the end user. International sales, including North American sales to Canada, were $30.2 million (49%) of total sales in 2004, $21.3 million (39%) of total net sales in 2003, and $16.1 million (30%) in 2002. 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 offices based in Anjou, Canada; Beijing, Xi'an, Guangzhou, Shenzhen and Hong Kong, China; Tokyo, Japan; Seoul, Korea; Modena, Italy; Paris, France; Mexico City, Mexico; and Stuttgart, Germany. 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 evaluate 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 acceptance of our products 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 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 our large customers typically ranges from six to twenty-four months.

We generally do not sell our products with rights of return. 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. Our normal terms are typically 30 days for North America and up to 60 days in other markets.

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

- Our sales groups bring new product ideas to our product marketing group;
- 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 sales engineers, 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; and
- 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 internally for corrective action.

SEASONALITY

Our sales have traditionally been seasonal in nature and tied to the buying patterns of our customers. The largest volume of quarterly sales has typically been during the last calendar quarter of the year. In 2004, sales during the fourth quarter rose to $20.1 million, or 33% of annual sales. Our 2003 and 2002 fourth quarter sales were $20.4 million (37% of annual sales) and $16.5 million (30% of annual sales) respectively. Prior to 2000, the largest volume of quarterly sales had usually been during the last calendar quarter of the year, however, in 2001 and 2000, there was a change in this fourth quarter seasonality as our customers had fewer remaining unused budget dollars available for use. Our 2005 fiscal year visibility is limited, and we expect that our quarterly operating results may fluctuate significantly and will be difficult to predict due to 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. See "Item 7.—Management's Discussion and Analysis of Financial Condition and Results of Operations—Risk Factors Affecting Future Operating Results—Quarterly Fluctuations."

BACKLOG

Our backlog of customer orders at December 31, 2004 was approximately $5.3 million compared to approximately $6.4 million at December 31, 2003. The timing of customer orders in 2003 was impacted by the introduction of new products. The resulting increase in year-end orders at December 31, 2003, and subsequent delivery in 2004, is the primary cause of the backlog decline for 2004 from 2003. 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 service verification test equipment. Our engineering personnel have expertise in a number of fields, including interfacing test equipment with digital loop carriers, voice and data switching technology, local loop equipment, and operations support systems. We spent approximately $16.2 million on research and development in 2004, $16.1 million in 2003, and $16.7 million in 2002. Research and development represents our largest direct employment expense. At December 31, 2004, we had a total of 132 employees engaged in research and development in San Jose, California; Norcross, Georgia; Anjou, Canada; Modena, Italy; Taipei, Taiwan; Beijing, China; 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 competitive dynamics as well as technological and regulatory changes affecting the converging telecommunications and cable broadband industries and seek to offer products and capabilities that solve our customers' operational challenges and improve their efficiency. In general, we spend from six 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, the American National Standards Institute, the Internet Engineering Task Force (IETF), and various industry interest groups. 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 AND SOURCES OF SUPPLY

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 either send them to local contract manufacturers to assemble into printed circuit boards or we assemble them ourselves at our Taipei, Taiwan facility. We perform substantially all remaining manufacturing operations. We maintain sourcing and manufacturing operations in San Jose, California; Anjou, Canada; Taipei, Taiwan; and Modena, Italy, with the Taipei facility being our largest manufacturing center. Our San Jose, Taipei, and Modena, Italy operations are ISO 9001 certified.

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 purchases of some products and components in advance to ensure an adequate supply, particularly for products that require lead times of up to nine months to manufacture. 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 $24.8 million of our net property and equipment is located in the United States and $2.4 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
Wireline Access	Acterna Corporation; Agilent Technologies, Inc.; Consultronics; Fluke Corporation; 3M Dynatel; Trend Communications;
Fiber Optics SONET/SDH	Acterna Corporation; Agilent Technologies, Inc.; Exfo Electro-Optical Engineering Inc.; NetTest; Trend Communications
Cable TV	Acterna Corporation; Agilent Technologies, Inc.; Trilithic, Inc.
Signaling	Agilent Technologies, Inc.; NetTest; Tektronix, Inc.

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.

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 nine issued U.S. patents relating to communications testers that expire between 2015 and 2023, 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 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.

EMPLOYEES

At December 31, 2004, we had a total of 480 full-time employees, consisting of 196 in the United States, 135 in Taiwan, 30 in Italy, 71 in Canada, 6 in Korea, 5 in Switzerland, 29 in China, 4 in Japan, and 4 in Germany. We also had 18 temporary employees at December 31, 2004. Of the total full-time employees, 132 were engaged in research and development, 120 were engaged in sales, marketing and customer support, 177 were engaged in operations, and 51 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 following table sets forth certain information regarding our executive officers as of March 30, 2005:

Name	Age	Position(s)
Paul Ker-Chin Chang	46	Chairman, Chief Executive Officer, and President
Paul A. Marshall	47	Chief Operating Officer, Vice President Marketing, and Director
Richard D. Kent	48	Chief Financial Officer
Jeong E. Joo	40	Chief Technology Officer
Kirk O. Williams	35	Vice President, General Counsel and Secretary

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, and as a director since October 1991. Mr. Marshall also served as Chief Financial Officer of Sunrise from March 1992 until December 1999 and Acting Chief Financial Officer from October 2002 until February 2005. 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.

Richard D. Kent joined Sunrise as Chief financial Officer in February 2005. Mr. Kent was Vice-President of Finance from February 2003 to January 2005 at Natural Selection Foods, LLC, a producer of organic fruits and vegetables. Prior to his employment with Natural Selection Foods, he was Managing Director from June 2002 to February 2003 at RAMP Partners, an accounting and financial management firm. Mr. Kent served as Chief Financial Officer, Chief Operating Officer and Corporate Secretary from January 1997 to January 2002 at Cidco Incorporated, a publicly-traded producer of telecommunications products and personal Internet communications products and services. Mr. Kent is a member of the American Institute of Certified Public Accountants.

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.

Kirk O. Williams joined Sunrise in December 2002 and served as General Counsel and Secretary from January 2003 to December 2004. Mr. Williams was appointed Vice President, General Counsel and Secretary in December 2004. Mr. Williams is the Company's chief legal, compliance, and ethics officer and is responsible for the Company's corporate governance initiatives and the protection of the Company's legal interests and operations worldwide. Prior to joining the Company, Mr. Williams served in positions of increasing responsibility at Exodus Communications, Inc. including most recently as Vice President, Legal and Corporate Affairs, Assistant General Counsel. Prior to joining Exodus, Mr. Williams practiced corporate and securities law with the law firm Gray Cary Ware & Freidenrich LLP in Palo Alto, California. Mr. Williams holds a J.D. from New York University School of Law and a dual B.A. in Economics and Political Science from Stanford University.

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 owned headquarters and manufacturing and research and development facility, which we built during 2001 on property that we acquired that year, occupies 91,700 square feet in San Jose, California. As of December 31, 2004, 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, Xi'an, Guangzhou, Shenzhen and Hong Kong, China; Seoul, Korea; Tokyo, Japan; and Stuttgart, Germany.

ITEM 3. LEGAL PROCEEDINGS

On March 31, 2004, Acterna, LLC ("Acterna") filed a lawsuit against us and Consultronics, Ltd. and Consultronics, Inc. (the latter two, collectively, "Consultronics") in the United States District Court for the District of Maryland. Acterna alleged that our SunSet xDSL and SunSet MTT products infringe its United States Patent Nos. 6,064,721 (the "721 patent"), 6,385,300 (the "'300 patent"), and 6,590,963 (the "963 patent") and that our STT product infringes its United States Patent No. 5,511,108 (the "108 patent"). Acterna also alleged that the Consultronics CoLT 450 product infringes its '721 patent. Acterna seeks injunctive relief, unspecified damages, and attorneys' fees and costs. In October 2004, we learned that Acterna and Consultronics had reached a settlement with respect to Acterna's claim against Consultronics and that the matter with respect to Consultronics had been dismissed with prejudice.

On April 23, 2004, we filed a lawsuit against Acterna in the United States District Court for the Northern District of California. The lawsuit alleged that Acterna's ANT-5 SDH Access Tester and ANT-20 Advanced Network Tester infringe our United States Patent No. 5,619,489 (the "489 patent"). We are seeking injunctive relief, unspecified damages, and attorneys' fees and costs.

On September 7, 2004, Acterna filed an answer in the United States District Court for the Northern District of California, seeking declaratory judgment that its ANT-5 SDH Access Tester and ANT-20 Advanced Network Tester do not infringe the '489 patent, that the '489 patent is invalid, and that the '489 patent is unenforceable. At the same time, Acterna also filed a counterclaim against us, alleging that certain products, namely the CM 1000, CM 500, CM 250, N1776A, AT 2000 and AT 2500, all of which are manufactured and sold by our subsidiaries, infringe its United States Patent No. 5,751,766 (the "766 patent"). Acterna seeks injunctive relief, unspecified damages and attorneys fees and costs.

We believe that the lawsuits against us are without merit, and we intend to defend ourselves vigorously against the allegations that Acterna is making against us. Specifically, we are defending ourselves against Acterna's allegations by seeking declaratory judgment that our products do not infringe any of the '721 patent, the '300 patent, the '963 patent, the '108 patent, or the '766 patent; that the '721 patent, the '300 patent, the '963 patent, the '108 patent, and the '766 patent are invalid; and that the '721 patent, the '300 patent, the '963 patent, the '108 patent, and the '766 patent are unenforceable. In addition, we are seeking declaratory judgment that our products do not infringe a sixth, recently issued Acterna patent, United States Patent No. 6,738,454 (the "454 patent"). The '454 patent is a continuation patent issued May 18, 2005 related to the '721 patent, the '300 patent, and the '963 patent. We are also seeking declaratory judgment that the '454 patent is invalid and unenforceable.

On January 5, 2005, Acterna asserted in the Maryland case that our products also infringe its '454 patent.

We are presently unable to estimate the likely costs of the litigation and/or any settlement of these legal proceedings with Acterna.

From time to time, we may be involved in litigation or other legal proceedings, including those noted above, relating to claims arising out of our day-to-day operations or otherwise. Litigation is inherently uncertain, and the Company could experience unfavorable rulings. Should we experience an unfavorable ruling, there exists the possibility of a material adverse impact on its financial condition, results of operations, or cash flows or on our business for the period in which the ruling occurs and/or future periods.

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

During the quarter ended December 31, 2004, there were no matters submitted to a vote of the security holders.

Part II.

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

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 sale prices for our common stock, as reported by the NASDAQ National Market.

2004	High	Low	2003	High	Low
First Quarter	\$4.74	\$3.35	First Quarter	\$2.59	\$1.70
Second Quarter	\$4.00	\$2.25	Second Quarter	\$2.70	\$1.75
Third Quarter	\$3.05	\$2.11	Third Quarter	\$3.45	\$1.81
Fourth Quarter	\$3.10	\$2.43	Fourth Quarter	\$5.02	\$2.61

As of December 31, 2004, we had approximately 76 stockholders of record of our common stock. We estimate that as of March 5, 2005, there were approximately 2,200 beneficial owners of our common stock.

In February 2005, our board of directors declared a cash dividend for 2005 in the aggregate amount of approximately \$2.5 million. We paid this dividend in March 2005. In February 2004 we declared and paid a cash dividend of approximately \$2.5 million. In July 2003, we declared and paid a cash dividend in the aggregate amount of approximately \$2.0 million. We did not declare or pay any cash dividend on our common stock in 2002 or 2001. Our board of directors will determine the amount of future dividends based on our future financial condition and results of operations.

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,				
	2004	2003	2002	2001	2000
	(in thousands, except per share data)				
Consolidated Statement of Operations Data:					
Net sales	$ 61,669	$ 54,949	$ 54,333	$ 79,059	$113,481
Cost of sales	18,367	19,304	18,605	26,246	33,915
Gross profit	43,302	35,645	35,728	52,813	79,566
Operating expenses:					
Research and development	16,150	16,087	16,741	17,753	16,634
Selling and marketing	17,632	16,964	16,768	20,329	22,694
General and administrative	9,869	9,814	11,446	13,692	9,981
Total operating expenses	43,651	42,865	44,955	51,774	49,309
Income (loss) from operations	(349)	(7,220)	(9,227)	1,039	30,257
Other income, net	899	875	895	2,482	2,100
Income (loss) before income taxes	550	(6,345)	(8,332)	3,521	32,357
Income tax expense (benefit)	8,245	(2,475)	(3,333)	704	11,972
Net income (loss)	$ (7,695)	$ (3,870)	$ (4,999)	$ 2,817	$ 20,385
Dividends	$ 2,507	$ 1,994	$ —	$ —	$ —
Earnings (loss) per share: (1)					
Basic	$ (0.15)	$ (0.08)	$ (0.10)	$ 0.06	$ 0.43
Diluted	$ (0.15)	$ (0.08)	$ (0.10)	$ 0.05	$ 0.41
Shares used in computing earnings (loss) per share: (1)					
Basic	50,426	49,750	49,854	50,195	47,374
Diluted	50,426	49,750	49,854	51,325	49,610

	December 31,				
	2004	2003	2002	2001	2000
	(in thousands)				
Consolidated Balance Sheet Data:					
Cash, cash equivalents and short-term investments	$ 33,871	$ 39,885	$ 36,440	$ 48,713	$ 56,298
Working capital	50,566	54,691	52,771	64,862	81,967
Total assets	109,492	116,607	118,921	126,621	125,556
Notes payable, less current portion	882	1,095	1,177	1,065	1,047
Total stockholders' equity	95,190	103,557	105,769	111,753	105,644

(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 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 broadband, and internet networks. Our products offer broad functionality, leading edge technology, and compact size to test broadband services. These include wireline access services (including DSL), fiber optics, cable broadband 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.

Companies in the telecommunications industry throughout the world have been experiencing decreased profitability resulting from many factors. The most significant of these factors are overbuilding of certain portions of the telecommunications infrastructure during the late 1990s and increased overlap between the previously separate businesses of wireless, local telephone services, and cable TV service, which has lead to increased competition. In addition, there has been substantial consolidation within the telecommunications industry during this time, particularly in the North American markets, which has led to delay and reduction of orders for test equipment. We have been affected by this downturn and consolidation, and after nine consecutive years of profitability, we were unprofitable during each of the years ended December 31, 2002, 2003 and 2004. We are encouraged to have earned a small profit before tax in 2004 after substantially weaker performance in 2002 and 2003. We compete in the challenging telecommunications equipment market by pursuing a strategy of offering products that address the needs of diverse telecommunications and cable service providers and by investing heavily in research and development to create high-quality products that address evolving telecommunications technologies in innovative ways. We also continuously work to minimize operating costs while executing this strategy.

We assess the overall performance of our business primarily through the use of financial metrics. Management considers several factors to be particularly important when assessing past business success and projecting future performance. The first such factor is the maintenance of high levels of working capital and low levels of debt. See "Liquidity and Capital Resources."

This first factor is enabled by the second factor: The generation of cash flows from our operating activities. Ultimately, the ability to consistently generate substantial positive cash flows is the primary indicator of our business's success and is an imperative for our business's survival. See "Liquidity and Capital Resources."

The third factor is profitability. In general, profitability indicates our success in generating present and future cash flows from our operating activities. The key components of our profitability are net sales, cost of sales, and operating expenses. See the discussion directly below and "Comparison of Years Ended December 31, 2004 and 2003" and "Comparison of the Years Ended December 31, 2003 and 2002."

Sources of Net Sales

We generate our cash flows primarily from selling telecommunications and broadband cable network testing equipment, and our future cash flows are largely dependent on our continuing ability to sell our products and collect cash for the sales from our customers. Our sales largely depend upon our ability to provide products that test most types of telecommunications network technologies, including those related to twisted-pair copper, cable broadband, and fiber optics networks. We are also developing products to test wireless networks. Within these technologies, we provide products that test the entire length of the network, from the point of installation in a building or residence through system back-offices and trunk lines, including the signaling processes that set up and tear down phone calls and transmit packets. We consider investment in research and development and selling and marketing activities to be critical to our ability to generate strong sales volume in the future. To that end, we continually offer new products to meet our customer's needs, including most notably in 2003 modules for our hand-held SunSet MTT product line, which tests a variety of types of network, and for our SunSet STT, which is primarily a fiber optics testing product, and the realWORX cable broadband testing product

We sell our products predominantly to large telecommunications service providers. These types of customers generally commit significant resources to the 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. 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.

Historically, a significant portion of our net sales have come from a small number of relatively large orders from a limited number of customers. One customer, SBC Communications Inc., comprised $7.2 million, or 13%, of our sales in 2003. No customers comprised more than 10% of our sales in 2004 and 2002. Overall, we anticipate that our operating results for a given period will be dependent on a small number of customers.

Currently, competition in the telecommunications equipment market is intense and is characterized by declining prices due to increased competition and new products and due to declining customer demand. Because of 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."

We have a small amount of sales denominated in Euros and the Canadian dollar and have, in prior years, used derivative financial instruments to hedge our foreign exchange risks. As of December 31, 2004, 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. 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: research and development, selling and marketing, and general and administrative. Our operating expenses include stock-based compensation expense and amortization of certain intangible assets. 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, communications 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 2004 and 2003, we recorded amortization of the deferred stock-based compensation expense of $0.3 and $1.8 million 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. The 1999 options were fully amortized by the end of 2003. During 2004 and 2003, we allocated amortization of the deferred stock-based compensation expense of $0.0 and $0.3 million to cost of sales, $0.1 and $0.6 million to research and development expense, $0.1 million and $0.5 million, respectively, to selling and marketing expense, and $0.1 million and $0.4 million, respectively, to general and administrative expense. At December 31, 2004, the deferred stock-based compensation expense related to the grant of pre-IPO options was fully amortized.

Also, during 2004, 2003, and 2002, we charged $2.7, $3.3 and $3.3 million to general and administrative expense for amortization of intangible assets obtained through various business acquisitions.

Acquisitions and Consolidation of Wireless Operations

On February 28, 2002, we acquired the CaLan Cable TV test business from Agilent Technologies for $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 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 $100,000 in cash. We recorded goodwill of $68,000, which we 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 $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, and as amended in February 2004, we entered into a non-compete agreement with certain former owners of Luciol that will result in payments to the former owners totaling approximately $116,000 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 $349,000 over four years, in addition to their regular salaries and subject to certain conditions, primarily related to their continued employment by Sunrise, which is being expensed over four years.

On February 28, 2003, we acquired substantially all of the assets of GIE GmbH ("GIE"), a German corporation located in Mannheim and specializing in wireless and RF measurement instrumentation, for $554,000 in cash and acquisition costs. We recorded acquired intangible assets of $89,000, of which $37,000 was assigned to in-process research and development assets that were written off at the date of the acquisition. The remaining $52,000 of acquired intangible assets is developed technology, which we wrote off during 2003. We did not record any goodwill on this acquisition. Concurrent with this acquisition, we entered into a non-compete agreement with certain former owners of GIE obligating us to make payments to the former owners totaling approximately $100,000 over four years, provided that they perform as agreed to under the agreements. We also entered into employment agreements with these same former owners obligating the Company to make bonus payments to the former owners totaling approximately $200,000 over four years, in addition to their regular salaries and subject to certain conditions, primarily related to their continued employment by us. As of March 2004, the three former owners of GIE were no longer employed by the Company. In December 2004, we entered into a settlement agreement with the former owners of GIE, agreeing to pay a total of $40,000 to settle any and all differences between the parties.

During the three month period ended September 30, 2003, we initiated a plan to move our wireless product research and development operations to our existing facility in Santa Rosa, California. Subsequently, we shut down the Santa Rosa facility and moved the engineers to our San Jose location where we continue our wireless research. We expect that this consolidation will allow us to make the best use of our engineering talent and to closely control our wireless operations. We have not identified additional material future costs to be incurred as a result of closing the Santa Rosa facility.

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."

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,		
	2004	2003	2002
Net sales	100.0%	100.0%	100.0%
Cost of sales	29.8	35.1	34.2
Gross profit	70.2	64.9	65.8
Operating expenses:			
Research and development	26.2	29.3	30.8
Selling and marketing	28.5	30.9	30.9
General and administrative	16.0	17.8	21.1
Total operating expenses	70.7	78.0	82.8
Loss from operations	(0.5)	(13.1)	(17.0)
Other income, net	1.5	1.6	1.7
Income (loss) before income taxes	1.0	(11.5)	(15.3)
Income tax expense (benefit)	13.4	(4.5)	(6.1)
Net income (loss)	(12.4)%	(7.0)%	(9.2)%

COMPARISON OF YEARS ENDED DECEMBER 31, 2004 AND 2003

Net Sales. Net sales increased 12%, to $61.7 million in 2004 from $54.9 million in 2003. During 2004, sales of our wireline access products increased by $2.5 million or 10%, sales of our fiber optics products increased by $0.3 million or 2%, sales of our broadband products increased by $1.3 million, or 9%, and sales of our signaling products increased by $2.9 million or 107% over sales in the prior year. These sales increases were generally due to increased demand for our products resulting from our continuing penetration of diverse geographic markets with product lines that we continue to enhance in terms of breadth, functionality, and performance.

During 2004, sales decreased $1.8 million or 5% in North America, increased $5.5 million or 70% in Europe/Africa/Middle East, and increased $3.0 million or 29% in Asia/Pacific compared to 2003. Sales were substantially unchanged in Latin America. The decrease in North American sales is primarily the result of decreased sales of cable broadband products. Our growth in Asia reflects the results of our ongoing development of distribution channels in these regions, and our growth in Europe continues to rebound from a particularly weak 2002. International sales, including North American sales in Canada, increased to $30.2 million, or 49% of net sales, in 2004, from $21.3 million, or 39% of net sales, in 2003.

Cost of Sales. Cost of sales decreased 5%, to $18.4 million in 2004 from $19.3 million in 2003. Cost of sales represented 30% and 35% of net sales in 2004 and 2003, respectively. This decrease in cost of sales was primarily the result of the lower cost of labor due to the transition of production activity to our Taiwan facility, a reduction in the overall cost of materials due to the sale of materials with an original cost of $0.6 million that had previously been fully reserved, and the impact of product mix. Although cost of sales has declined as a percentage of sales in 2004 and 2003, this percentage is susceptible to change from variations in our product mix, changes in the proportion of our sales going to international customers, and pricing pressures.

Research and Development. Research and development expenses remained substantially the same at $16.2 million in 2004 compared to $16.1 million in 2003. Research and development expenses represented 26% of net sales in 2004 and 29% of net sales in 2003. Research and development expenses tend to fluctuate from period to period, depending on requirements at the various stages of our product development cycles. Through our research and development activities, we are attempting to balance two conflicting strategic priorities. The first is to tightly control costs in response to sales volume that has significantly decreased from the levels of 2000 and 2001. The second is to continue to develop products that address customer needs in a rapidly changing and very competitive market so that we can increase share in new markets and grow the company's sales. In any given time period, research and development expenses may increase in absolute dollars and/or as a percentage of sales as we continue to invest in product development and expand our product lines. The company has recently opened a Chinese research facility, which will lower the average cost per man-hour of engineering during the next year.

Selling and Marketing. Selling and marketing expenses increased 4%, to $17.6 million in 2004 from $17.0 million in 2003. Selling and marketing expenses represented 29% of net sales in 2004 and 31% of net sales in 2003. During 2003 and 2004, we reached a level of selling and marketing effort that allowed us to actively promote our products to potential customers, but that simultaneously recognized the cost constraints that we face during a period of economic difficulty in the telecommunications industry. However, in the future, selling and marketing expense may increase in absolute dollars and/or as a percentage of sales as we continue to develop our selling and marketing capabilities. In particular, the consolidation of the North American sales channel and the establishment of sales offices in France and Mexico will increase sales expenses in the near term but are planned to result in increased sales, which will generate overall operating profit improvement if and when the increase occurs. In addition, the commission expenses included in selling and marketing can fluctuate both with changes in sales volume and with changes in the channels through which the sales flow. We use different distribution methods to supply our products to different geographical regions and different customers, and the commission rates we incur can vary among these channels.

General and Administrative. General and administrative expenses increased 1%, to $9.9 million in 2004 from $9.8 million in 2003. General and administrative expenses represented 16% of net sales in 2004 and 18% of net sales in 2003. We try to carefully control our general and administrative expenses. However, general and administrative expenses may increase in absolute dollars and/or percentage of sales if we experience growth in our business or higher litigation costs, expand our infrastructure, pursue additional acquisitions, or experience increased costs related to our collection of receivables. These costs could also rise if regulatory and/or public company compliance costs increase, including costs related to complying with the Sarbanes-Oxley Act of 2002 and its associated regulations, particularly Section 404 dealing with internal controls, or if unforeseen matters arise.

Other Income, Net. Other income, net primarily represents interest earned on cash and investment balances and gains and/or losses on assets, liabilities, and transactions denominated in foreign currencies. Other income, net remained unchanged at $0.9 million in 2004 and 2003.

Income Tax Expense (Benefit). Income tax expense (benefit) consists of federal, state, and foreign income taxes. During the three months ended March 31, 2004, we reevaluated our need for a valuation allowance in light of forecast industry conditions. As a result of this assessment, the consideration of cumulative losses in prior periods, uncertain industry conditions and the inability to predict future earnings we recorded a valuation allowance against our deferred tax assets in most jurisdictions aggregating $7.4 million.

COMPARISON OF YEARS ENDED DECEMBER 31, 2003 AND 2002

Net Sales. Net sales increased 1%, to $54.9 million in 2003 from $54.3 million in 2002. During 2003, sales of our wireline access products increased by $1.4 million or 6%, sales of our fiber optics products increased by $2.2 million or 20%, and sales of our signaling products increased by $0.5 million or 19% over sales in the prior year. These sales increases were generally due to an increased demand for our products resulting from our continuing penetration of diverse geographic markets with product lines that we continue to enhance in terms of breadth, functionality, and performance. In particular, the introduction of a number of new modules for our MTT and STT platforms drove sales in our wireline and fiber optics product lines. Our overall sales increase was offset by a $3.5 million or 19% decrease in sales of our cable broadband products. This decrease resulted primarily from a decline in sales to our North American cable broadband customers, who restricted capital expenditures during 2003 after a period of significant expansion of their networks through 2002, and increasing competition in the hand-held installation and field testing part of the business.

During 2003, sales decreased $3.9 million or 10% in North America, increased $1.7 million or 27% in Europe/Africa/Middle East, and increased $2.8 million or 35% in Asia/Pacific compared to 2002. Sales were essentially unchanged in Latin America. The decrease in North American sales is primarily the result of decreased sales of cable broadband products. Our growth in Asia reflects the results of our ongoing development of distribution channels in these regions, and our growth in Europe is a rebound from a particularly weak 2002. International sales, including North American sales in Canada, increased to $21.3 million, or 39% of net sales, in 2003, from $16.1 million, or 30% of net sales, in 2002.

Cost of Sales. Cost of sales increased 4%, to $19.3 million in 2003 from $18.6 million in 2002. This increase is primarily due to the shift in sales from North America to the international market, where our margins are lower. Cost of sales represented 35% and 34% of net sales in 2003 and 2002, respectively.

Research and Development. Research and development expenses decreased 4%, to $16.1 million in 2003 from $16.7 million in 2002. This decrease is primarily due to reduced parts and prototype and design service costs. Research and development expenses represented 29% of net sales in 2003 and 31% of net sales in 2002. Research and development expenses tend to fluctuate from period to period, depending on requirements at the various stages of our product development cycles.

Selling and Marketing. Selling and marketing expenses increased 1%, to $17.0 million in 2003 from $16.8 million in 2002. Selling and marketing expenses represented 31% of net sales in 2003 and 2002. During 2002 and 2003, we reached a level of selling and marketing effort that allowed us to actively promote our products to potential customers, but that simultaneously recognized the cost constraints that we face during a period of economic difficulty in the telecommunications industry.

General and Administrative. General and administrative expenses decreased 14%, to $9.8 million in 2003 from $11.4 million in 2002. The main reason for this decrease was a reduction in bad debt expenses related to uncollectible accounts receivable. Since 2001, we have experienced a trend of decreasing uncollectible accounts receivable. We believe that the reason for this trend is that many of our customers with questionable financial resources have gone out of business or have reduced the scope of their operations as a result of the telecommunications downturn and that those customers that continue to buy from us are those with the most financial resources to pay for their purchases. General and administrative expenses represented 18% of net sales in 2003 and 21% of net sales in 2002.

Other Income, Net. Other income, net primarily represents interest earned on cash and investment balances and gains and losses on assets, liabilities, and transactions denominated in foreign currencies. Other income, net remained unchanged at $0.9 million in 2003 and 2002.

Income Tax Expense (Benefit). Income tax expense (benefit) consists primarily of federal and state income taxes. We recorded an income tax benefit associated with our operating losses of $2.5 million in 2003 and $3.3 million in 2002. Our effective income tax rates were 39% in 2003 and 40% in 2002.

LIQUIDITY AND CAPITAL RESOURCES

Cash Requirements and Capital Resources

As of December 31, 2004 and 2003, we had working capital of $50.6 million and $54.7 million, respectively, and cash, cash equivalents and short-term investments of $33.9 million and $39.9 million, respectively. As explained in the notes to our December 31, 2004 consolidated financial statements, our $1.4 million investment in marketable securities at December 31, 2004 consisted entirely of equity securities of Top Union Electronics Corp., a Taiwan R.O.C. company. During the quarter ended June 30, 2003, these securities became listed on the GreTai Securities Market, Taiwan's over-the-counter exchange. We do not consider this to be a liquid investment, and accordingly classify it as a non-current asset.

During 2004 we used $1.5 million of cash in operating activities as accounts receivable and inventories increased in response to increasing sales. We generated positive cash flows from our operating activities from 1992 through 2003. We believe that current cash balances and future cash flows from operations will be sufficient to meet our anticipated cash needs for our operations, complete needed business projects, achieve our plans and objectives, meet financial commitments, meet working capital requirements, make capital expenditures, and fund other activities well beyond 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. However, no such activities are anticipated at this time and our present levels of debt and other future commitments are small compared to our present cash balances, so we presently anticipate that our most significant cash requirements during at least the next 12 months will be for our normal research and development, selling and marketing, and production activities.

Sources and Uses of Cash

In general, we have financed our operations and capital expenditures primarily using cash flows generated by our operating activities. We foresee relying on cash flows from our operating activities and existing cash resources to fund our business activities during at least the next 12 months, and we do not expect to rely on any significant financing activities during that time.

Cash used in operating activities was $1.5 million in 2004. Cash provided by operating activities was $5.8 million in 2003 and $0.7 million in 2002. Operating cash flows decreased during 2004 compared to 2003 primarily due to a significant increase in inventory levels and in accounts receivable. These items were partially offset by the increase in sales volumes and improved overall gross margins on sales. Operating cash flow increased during 2003 compared to 2002 primarily due to a significantly lower net loss once non-cash items are excluded, a lower employment retention bonus payment to the former vice president and general manager of our cable broadband operation, and the collection during 2003 of income taxes receivable. These items were partially offset by a reduction in deferred revenue. In general, our ability to continue to generate positive cash flows from operations will depend on our ability to generate and collect the cash from future sales, while maintaining a cost structure lower than those sales amounts. Therefore, sales volume is by far the most significant uncertainty in our ability to generate cash flow from operations.

Cash used in investing activities was $2.5 million in 2004 and $9.6 million in 2002. Cash provided by investing activities was $6.1 million in 2003. The $8.5 million increase in net cash used in investing activities during 2004 compared to 2003 is primarily due to an increase in capital expenditures and a decrease in proceeds received from the sale of short-term investments. The $15.7 million decrease in net cash used in investing activities during 2003 from 2002 is primarily due to a decrease in business acquisition related expenditures and due to a non-recurring event, a loan made to our Chief Executive Officer made in 2002 and repaid in 2003 and changes in our investment portfolio. As of December 31, 2004, we had no plans for large capital expenditures outside the usual course of those needed for our ongoing production, research and development, and selling and marketing activities.

Cash used in financing activities was $1.9 million in 2004, $1.7 million in 2003 and $3.7 million in 2002. The increase in cash used in financing activities during 2004 from 2003 is primarily due to an increase in restricted cash and an increase in dividends paid our stockholders. These increases were partially offset by an increase in notes payable, a reduction in payments on notes payable, and an increase in proceeds from common stock issued under our Employee Stock Purchase Plan. The decrease in cash used in financing activities during 2003 from 2002 is primarily due to the completion of a stock repurchase program during 2002. This decrease was partially offset by a $2.0 million dividend paid to our stockholders during 2003, while no dividend was paid during 2002.

Our outstanding debt at December 31, 2004 consisted primarily of a $1.0 million loan from the Italian government for research and development that is payable over a period of eight years through semi-annual payments ending in 2011 and three notes payable related to acquisitions totaling $0.1 million that are being paid in quarterly installments ending in 2006. We have not used off-balance sheet financing arrangements, issued or purchased derivative instruments linked to our stock, or used our stock as a form of liquidity. We do not believe that there are any known or reasonably likely changes in credit ratings or ratings outlook or an inability to achieve such changes which would have any significant impact on our operations. We are not subject to any debt covenants that we believe might have a material impact on our business.

Debt Instruments, Guarantees, and Related Covenants

We have low levels of debt, and our operating, financing, and investing activities are not subject to any significant constraints related to outstanding debt, guarantees, or other contingent obligations. We are not, and during at least the next 12 months are not reasonably likely to be, in breach of material covenants. We are not subject to any significant debt covenants that may limit our ability to borrow additional funds or issue equity securities.

CRITICAL ACCOUNTING POLICIES

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires us to make estimates, assumptions, and judgments that affect the amounts reported in our consolidated financial statements and the accompanying notes. We base our estimates on historical experience and various other assumptions that we believe to be reasonable. Although these estimates are based on our present best knowledge of the future impact on the Company of current events and actions, actual results may differ from these estimates, assumptions, and judgments.

We consider "critical" those accounting policies that require our most subjective or complex judgments, which often result from a need to make estimates about the effect of matters that are inherently uncertain, and that 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, valuation of goodwill and other intangible assets, accounting for the liability of product warranty, deferred income tax assets and liabilities, and revenue recognition.

Allowance for Doubtful Accounts Receivable

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 current 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 charge provisions for doubtful accounts receivable to general and administrative expenses on our statement of operations.

Valuation of Excess and Obsolete Inventory

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 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 charge provisions for excess and obsolete inventory to cost of sales on our statement of operations.

Valuation of Goodwill and Other Intangible Assets

We evaluate the valuation of goodwill in the manner prescribed by Statement of Financial Accounting Standards ("SFAS") No. 142, *Goodwill and Other Intangible Assets*. As required by SFAS No. 142, we test goodwill for impairment annually, during our fourth fiscal quarter. We would also test goodwill for impairment if certain events or changes in circumstances stipulated by SFAS No. 142 were to occur. SFAS No. 142 prescribes a two-phase process for the impairment testing of goodwill. The first screens for impairment by comparing the fair value of our reporting unit, which we consider to be the market capitalization of our entire telecommunications testing equipment business, to its carrying value. If the carrying value were to exceed the fair value, the second phase of the process would occur. In the second phase, we would recognize an impairment for the excess of the carrying value, if any, of our goodwill over its implied fair value. The implied fair value of our goodwill is the excess of our reporting unit's total fair value over the combined net fair values of its individual assets and liabilities. Based on the annual test for impairment performed during our fourth fiscal quarter, goodwill was determined not to be impaired, and no subsequent indicators of impairment have been noted.

We evaluate the valuation of intangible assets other than goodwill in the manner prescribed by SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*. As required by that standard, we monitor events and changes in circumstances that could indicate that the carrying amount of an intangible asset may not be recoverable. These events and circumstances include a significant change in how we use the asset, significant changes in legal factors or the business climate that could affect the asset's value, and current period operating or cash flow losses combined with a history of such losses or a forecast of continuing losses associated with the use of the asset. If such an event or change in circumstances were to occur, we would assess the recoverability of the intangible asset by determining whether its carrying value would be recovered through undiscounted expected future cash flows. If the carrying value of the asset were to exceed the undiscounted expected future cash flows, we would recognize an impairment for the excess of the carrying value over the asset's fair value.

Product Warranties

We offer a three-year warranty covering parts and labor on our wireline 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 broadband and signaling products are covered by a one-year warranty. We are also subject to laws and regulations in the various countries in which we sell regarding vendor obligations to ensure product performance. 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 and product performance laws and regulations by considering our historical experience with the costs of meeting such obligations. If the future costs of meeting these obligations differ from our historical experience, additional reserves for warranty obligations may be required. We charge provisions for future warranty costs to cost of sales in our statement of operations.

Deferred Income Tax Assets and Liabilities

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 bases 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 other 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.

During 2004, the Company recorded a valuation allowance against all of the Company's net deferred tax assets in most jurisdictions in the amount of $7,429,000. The Company evaluated all significant available positive and negative evidence, including the existence of cumulative net losses in recent periods, benefits that could be realized from available tax strategies, and forecasts of future taxable income, in determining the need for a valuation allowance on its deferred tax assets. Notwithstanding the Company's reporting of a pre-tax profit of $550,000 for 2004, however, the cumulative net losses in recent periods, represented sufficient negative evidence that was difficult for positive evidence to overcome under the evaluation guidance of SFAS No. 109. Accordingly, a valuation allowance was recorded. The Company intends to maintain this valuation allowance until sufficient positive evidence, such as the resumption of a consistent earnings pattern, exists to support its reversal in accordance with SFAS No. 109. The expense for recording the valuation allowance is a non-cash item, and the recording of this expense does not imply that the Company owes additional income taxes.

On October 22, 2004, the President signed the American Jobs Creation Act of 2004 (the "Jobs Act"). Among other provisions, the Jobs Act contains a deduction for income from qualified domestic production activities, phased in from 2005 through 2010, and a temporary incentive for U.S. corporations to repatriate accumulated income earned abroad. We are not intending to repatriate foreign earnings under the Jobs Act and we have not yet determined the impact of the deduction for domestic productions activities that will first be effective for our 2005 fiscal year. At this time, it is not anticipated that the deduction will have a material impact on our reported income or tax rate.

Revenue Recognition

We recognize revenue from a customer order when all of the following criteria are met: persuasive evidence of an arrangement exists; delivery has occurred; the price is fixed or determinable; and collectibility is reasonably assured. For product sales, we consider delivery to have occurred when title and risk of loss have been transferred to the customer, which is usually when the product has been received by a common carrier. For services, we consider delivery to have occurred once the service has been provided. We use objective evidence of fair value to allocate revenue to elements in multiple element arrangements and recognize revenue when the criteria for revenue recognition have been met for each element. In the absence of objective evidence of fair value of a delivered element, we allocate revenue to the fair value of the undelivered elements and the residual revenue to the delivered elements. The price charged when an element is sold separately generally determines fair value.

When the arrangement with the customer includes future obligations or customer acceptance, we recognize revenue when those obligations have been met or customer acceptance has been received. We defer revenue from services and support provided under our extended warranty programs, and recognize it over the warranty period. Deferred revenue represents amounts received from customers in advance of services and support to be provided and amounts received prior to customer acceptance. Provisions are recorded at the time of sale for estimated product returns, standard warranty obligations, and customer support.

Emerging Issues Task Force ("EITF") Issue 00-21, "Revenue Arrangements with Multiple Deliverables" addresses the accounting, by a vendor, for contractual arrangements in which multiple revenue-generating activities will be performed by the vendor. It is effective prospectively for all arrangements entered into in fiscal periods beginning after June 15, 2003.

EITF Issue 00-21 addresses when and how an arrangement involving multiple deliverables should be divided into separate units of accounting. Our multiple deliverables arrangements are those arrangements with customers in which our products are sold together as a "package." Because these off-the-shelf products are delivered at the same time and the four revenue recognition criteria are met at that time, the adoption of EITF 00-21 had no impact on our financial position and results of operations.

Stock-based compensation.

In December 2002, the FASB issued SFAS No. 148-Accounting for Stock-Based Compensation-Transition and Disclosure ("FAS 148"). This statement amends SFAS No. 123-Accounting for Stock-Based Compensation, providing alternative methods of voluntarily transitioning to the fair market value based method of accounting for stock based employee compensation. FAS 148 also requires disclosure of the method used to account for stock-based employee compensation and the effect of the method in both the annual and interim financial statements. The Company elected to continue to account for stock-based compensation plans using the intrinsic value-based method of accounting prescribed by APB No. 25, Accounting for Stock Issued to Employees ("APB No. 25"), and related interpretations. Under the provisions of APB No. 25, compensation expense is measured at the grant date for the difference between the fair value of the stock and the exercise price. In December 2004, the Financial Accounting Standards Board ("FASB") issued the revised Statement of Financial Accounting Standards ("FAS") No. 123, "Share-Based Payment" ("FAS 123R"), which addresses the accounting for share-based payment transactions in which the Company obtains employee services in exchange for (a) equity instruments of the Company or (b) liabilities that are based on the fair value of the Company's equity instruments or that may be settled by the issuance of such equity instruments. This statement eliminates the ability to account for employee share-based payment transactions using APB No. 25 and requires instead that such transactions be accounted for using the grant-date fair value based method. This statement will be effective as of the end of the first interim or annual reporting period that begins after June 15, 2005, the quarter ending September 30, 2005 for the Company.

OFF-BALANCE SHEET ARRANGEMENTS

As of December 31, 2004, we did not have any 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, 2004, 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	$1,105	$223	$337	$307	$238
Operating lease obligations	1,023	734	289	—	—
Total	$2,129	$945	$638	$307	$239

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 be volatile.**

In the past, we have experienced significant fluctuations in our quarterly results due to a number of factors. 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, including the following:

- 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 limitations on 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;
- the timing of our customers' budget processes; and
- economic downturns reducing demand for telecommunication and cable equipment and services.

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. Our stock price may decline and may be volatile, particularly if public market analysts and investors perceive the factors listed above may contribute to unfavorable changes in operating results. 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.

***Economic Downturn*—Our operating results and financial condition could continue to be harmed if the telecommunications and cable broadband industries remain over supplied.**

The current economic downturn has resulted in reduced purchasing and capital spending in the telecommunications and cable broadband industries, which have been in a downward cycle characterized by diminished product demand, excess manufacturing capacity, and the increasing erosion of average selling prices. The downturn has 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 hinder our ability to reach our goals of restoring long-term profitability and growth.

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

Over the past four years, our business generally has experienced lower revenues due to decreased or cancelled customer orders. 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 portions of our workforce, restricted hiring, reduced some employees' salaries, restricted pay increases, and reduced discretionary spending.

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, to manage and control our business, and to 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, which makes our future sales and overall business vulnerable to product obsolescence and technological change.**

Sales of our DSL and other wireline access products represented approximately 43% of our net sales during 2004 and 44% during 2003. 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. 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.

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

We cannot immediately adapt our production capacity and related cost structures to rapidly changing market conditions. When demand does not meet our expectations or manufacturing capacity exceeds our production requirements, 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.

***Risks of the Telecommunications Industry*—We face several risks related to 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 and Bell Atlantic, both of which were customers of ours, merged to create Verizon Communications Inc. 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.

***Cable Broadband Industry Health*—Many of the major companies in the cable broadband industry have debt and profitability problems, and face increasing competition from direct broadcast satellite and telecom service providers, which may negatively impact our cable equipment sales.**

The cable broadband 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 voice telephony Profits, however, have declined during the past few years within the industry. As a result, cable companies may reduce their capital expenditures and/or hiring, both of which could adversely impact our cable business more than we currently anticipate.

***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 represented approximately 26% of total net sales in 2004 and 36% in 2003. In general, our customers are not subject to long-term supply contracts with us and 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 to 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, 2004 includes an amount designated as "goodwill" that represents approximately 12% of total assets and 13% of total 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.

Our impairment test 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. 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 of 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.

Furthermore, our expenditures devoted to research and development may be considered high for our level of sales. If these efforts do not result in the development of products that generate strong sales for us or if we do not continue to reduce these expenditures, our profit levels will not return to their desired levels. If we reduce this spending, we may not be able to develop needed new products, which could negatively impact our sources of 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 deployments now typically ranges from six to twenty-four months. The deferral or loss of one or more significant sales could significantly affect our operating results, 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 during 1999 and 2000 followed by significant slowdowns in 2001 and 2002 that have placed, and may continue to place, a significant strain on our management and operations. Our revenues increased to $113.5 million in 2000 from $61.5 million in 1999, fell to $79.1 million in 2001 and then to $54.3 million in 2002. Revenues increased slightly to $54.9 million in 2003 and grew to $61.7 million in 2004. As a result of our historical growth and 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; and
- the challenge to manage expense reductions without impacting development strategies or our long-term goals.

We cannot ensure that we will be able to successfully manage growth or slowdowns successfully or 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. 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 because most of the companies we have acquired are 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 possible 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 effectively, efficiently, and successfully 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.

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 continued 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 two of our 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. 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 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 help ensure an adequate supply. 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, 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 49% of our net sales in 2004, 39% in 2003, and 30% in 2002, 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 and local 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;
- 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; 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, both high-growth emerging markets for communications equipment, have experienced instability in many of their economies and significant devaluations in local currencies.

24% of our sales in 2004, 22% of our sales in 2003, and 17% of our sales in 2002 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.

***Operations in Taiwan*—We rely on our subsidiary in Taiwan to manufacture a substantial portion of our products, and our reputation and results of operations could be adversely affected if this subsidiary does not perform as we expect.**

We produce a substantial portion of our products at our subsidiary in Taiwan and plan to concentrate more of our production there in the future. We depend on our subsidiary to produce a sufficient volume of our products in a timely fashion and at satisfactory quality levels. If we fail to manage our subsidiary so that it produces quality products on time and in sufficient quantities, our reputation and results of operations could suffer. In addition, we rely on our Taiwan subsidiary to place orders with suppliers for the components they need to manufacture our products. If they fail to place timely and sufficient orders with their suppliers, our results of operations could suffer.

The cost, quality, and availability of our Taiwan operation is essential to the successful production and sale of our products. Our increasing reliance on this foreign subsidiary for manufacturing exposes us to risks that are not under our immediate control and which could negatively impact our results of operations. For example, a recurrence of the Severe Acute Respiratory Syndrome (SARS) outbreak that occurred in Asia in recent years could result in a quarantine or closure of our manufacturing operation or its suppliers. In addition, transportation delays and interruptions, political and economic regulations, and natural disasters could also adversely impact our Taiwan operation and negatively impact our results of operations. See "Risk Factors Affecting Future Operating Results—Dependence on Sole and Single Source Suppliers and—Risks of International Operations" for a discussion of risks associated with concentrating production activities at one facility that is outside the United States.

***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, 2004, Paul Ker-Chin Chang, Paul A. Marshall, and Robert C. Pfeiffer beneficially owned approximately 25%, 23%, and 12%, respectively, of our outstanding shares of common stock. Consequently, these three individuals, control approximately 60% of our outstanding shares of common stock and to the extent they act together would be 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 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 defects and errors 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 are 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 a substantial diversion of management resources. We cannot ensure that we will be successful in those types of 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.

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 a 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 proceedings initiated against us.

***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 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 and maintain operations in several different countries. Changes in currency exchange rates affect the valuation in our financial statements of the assets and liabilities of these operations. We also have a small amount of sales denominated in Euros and the Canadian dollar, which are also affected by changes in currency exchange rates. To hedge these risks, we have, at certain times, used derivative financial instruments. As of December 31, 2004, we had no derivative financial instruments or other foreign exchange risk hedging devices. With or without hedges, our financial results could be affected by changes in foreign currency exchange rates, although foreign exchange risks have not been material to our financial position or results of operations to date.

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 United States governmental agencies, and in debt instruments of 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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Report of Independent Registered Public Accounting Firm

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, 2004 and 2003, and the related consolidated statements of operations, stockholders' equity and comprehensive loss, and cash flows for each of the years in the three-year period ended December 31, 2004. 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 the standards of the Public Company Accounting Oversight Board (United States). 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, 2004 and 2003, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2004, in conformity with U.S generally accepted accounting principles.

KPMG LLP

Mountain View, California
February 8, 2005

SUNRISE TELECOM INCORPORATED AND SUBSIDIARIES

Consolidated Balance Sheets

(in thousands, except share and per share data)

	December 31, 2004	December 31, 2003
ASSETS		
Current assets:		
Cash and cash equivalents	$ 17,758	$ 23,079
Short-term investments	16,113	16,806
Accounts receivable, net of allowance of $799 and $1,380, respectively	15,111	13,112
Inventories	13,265	7,286
Prepaid expenses and other assets	1,305	577
Deferred tax assets	303	5,604
Total current assets	63,855	66,464
Property and equipment, net	27,176	26,929
Restricted cash	305	106
Marketable securities	1,433	2,133
Goodwill, net	12,729	12,815
Intangible assets, net	3,249	5,869
Deferred tax assets	7	1,660
Other assets	738	631
Total assets	$109,492	$116,607
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Short-term borrowings and current portion of notes payable	$ 223	$ 382
Accounts payable	2,190	1,729
Other accrued expenses	8,788	8,979
Income taxes payable	1,496	23
Deferred tax liability	133	—
Deferred revenue	459	660
Total current liabilities	13,289	11,773
Notes payable, less current portion	882	1,095
Deferred revenue	129	178
Other liabilities	2	4
Total liabilities	14,302	13,050
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; 52,454,531 and 51,827,926 shares issued as of December 31, 2004 and 2003, respectively; 50,702,652 and 50,076,047 shares outstanding as of December 31, 2004 and 2003, respectively	51	50
Additional paid-in capital	69,993	69,099
Deferred stock-based compensation	—	(267)
Retained earnings	23,092	33,294
Accumulated other comprehensive income	2,054	1,381
Total stockholders' equity	95,190	103,557
Total liabilities and stockholders' equity	$109,492	$116,607

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,		
	2004	2003	2002
Net sales	$61,669	$54,949	$54,333
Cost of sales	18,367	19,304	18,605
Gross profit	43,302	35,645	35,728
Operating expenses:			
Research and development	16,150	16,087	16,741
Selling and marketing	17,632	16,964	16,768
General and administrative	9,869	9,814	11,446
Total operating expenses	43,651	42,865	44,955
Loss from operations	(349)	(7,220)	(9,227)
Other income, net	899	875	895
Income (loss) before income taxes	550	(6,345)	(8,332)
Income tax expense (benefit)	8,245	(2,475)	(3,333)
Net loss	$ (7,695)	$ (3,870)	$ (4,999)
Net loss per share:			
Basic and diluted	$ (0.15)	$ (0.08)	$ (0.10)
Shares used in computing loss per share:			
Basic and diluted	50,426	49,750	49,854

See accompanying notes to consolidated financial statements.

SUNRISE TELECOM INCORPORATED AND SUBSIDIARIES

Consolidated Statements of Stockholders' Equity and Comprehensive Loss

(in thousands)

	Common Stock Shares	Common Stock Amount	Additional Paid-in Capital	Deferred Stock-based Compensation	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity	Comprehensive Loss
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	—	—	—	—	—	(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	
Exercise of common stock options	374	1	278	—	—	—	279	
Common stock issued under Employee Stock Purchase Plan	224	—	437	—	—	—	437	
Deferred stock-based compensation	—	—	(57)	57	—	—	—	
Amortization of deferred stock-based compensation	—	—	—	1,800	—	—	1,800	
Reduction in tax benefit from stock option plans	—	—	(21)	—	—	—	(21)	
Cash dividend of $0.04 per share	—	—	—	—	(1,994)	—	(1,994)	
Change in unrealized gain on available-for-sale investments	—	—	—	—	—	701	701	$ 701
Cumulative translation adjustment	—	—	—	—	—	456	456	456
Net loss	—	—	—	—	(3,870)	—	(3,870)	(3,870)
Comprehensive loss								$(2,713)
Balances, December 31, 2003	50,076	50	69,099	(267)	33,294	1,381	103,557	
Exercise of common stock options	299	—	232	—	—	—	232	
Common stock issued under Employee Stock Purchase Plan	328	1	662	—	—	—	663	
Amortization of deferred stock-based compensation	—	—	—	267	—	—	267	
Cash dividend of $0.05 per share	—	—	—	—	(2,507)	—	(2,507)	
Change in unrealized gain on available-for-sale investments	—	—	—	—	—	(38)	(38)	$ (38)
Cumulative translation adjustment	—	—	—	—	—	711	711	711
Net loss	—	—	—	—	(7,695)	—	(7,695)	(7,695)
Comprehensive loss								$(7,022)
Balances, December 31, 2004	50,703	$ 51	$69,993	$ —	$23,092	$2,054	$ 95,190	

See accompanying notes to consolidated financial statements.

SUNRISE TELECOM INCORPORATED AND SUBSIDIARIES

Condensed Consolidated Statements of Cash Flows

(in thousands)

	Years Ended December 31,		
	2004	2003	2002
Cash flows from operating activities:			
Cash received from customers	$ 59,860	$ 54,241	$ 55,358
Cash paid to suppliers and employees	(62,612)	(52,031)	(56,607)
Income taxes refunded	596	2,256	875
Interest and other receipts, net	614	1,337	1,081
Net cash provided by (used in) operating activities	(1,542)	5,803	707
Cash flows from investing activities:			
Purchases of short-term investments	(20,000)	(46,650)	(38,917)
Purchase of long-term investment	—	—	(4)
Sales of short-term investments	20,693	54,720	36,526
Sales of marketable securities	794	28	4,881
Capital expenditures	(3,945)	(2,517)	(2,514)
Acquisitions of businesses, net of cash acquired	—	(554)	(8,552)
Loan to related party	—	—	(1,050)
Repayment of loan to related party	—	1,050	—
Net cash provided by (used in) investing activities	(2,458)	6,077	(9,630)
Cash flows from financing activities:			
Increase in restricted cash	(199)	—	(106)
Payments on short-term borrowings	—	—	(49)
Proceeds from notes payable	161	41	273
Payments on notes payable	(251)	(440)	(517)
Repurchase of common stock	—	—	(4,206)
Dividends paid	(2,507)	(1,994)	—
Net proceeds from issuance of common stock	663	437	727
Proceeds from exercise of stock options	232	279	166
Net cash used in financing activities	(1,901)	(1,677)	(3,712)
Effect of exchange rate changes on cash and cash equivalents	580	304	421
Net increase (decrease) in cash and cash equivalents	(5,321)	10,507	(12,214)
Cash and cash equivalents, beginning of year	23,079	12,572	24,786
Cash and cash equivalents, end of year	$ 17,758	$ 23,079	$ 12,572
Reconciliation of net loss to net cash provided by (used in) operating activities:			
Net loss	$ (7,695)	$ (3,870)	$ (4,999)
Adjustments to reconcile net loss to net cash provided by operating activities:			
Depreciation and amortization	7,510	7,853	7,164
Amortization of deferred stock-based compensation	267	1,800	1,861
Provision for (recoveries of) losses on trade accounts receivable	(250)	117	1,411
Loss on disposal of property and equipment	66	414	309
Purchased in-process research and development	—	37	—
Gain on sale of marketable securities	(353)	—	—
Deferred income taxes	7,303	(568)	(2,458)
Accounts receivable	(1,809)	(51)	(386)
Inventories	(7,158)	(8)	439
Prepaid expenses and other assets	(880)	(147)	(110)
Accounts payable and accrued expense	174	433	(1,864)
Income taxes receivable and payable	1,533	350	(1,286)
Deferred Revenue	(250)	(557)	626
Total adjustments	6,153	9,673	5,706
Net cash provided by (used in) operating activities	$ (1,542)	$ 5,803	$ 707
Supplemental disclosures			
Cash paid for interest	$ 20	$ 27	$ 24
Cash paid for income taxes	$ 143	$ 210	$ 642

See accompanying notes to consolidated financial statements.

SUNRISE TELECOM INCORPORATED AND SUBSIDIARIES

Notes to Consolidated Financial Statements

(1) Business and Significant Accounting Policies

(a) Business

Sunrise Telecom Incorporated (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 that enables service providers to pre-qualify facilities for services, verify newly installed services, and diagnose problems relating to telecommunications, cable broadband, 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 Montreal, Canada; Norcross, Georgia; Modena, Italy; Taipei, Taiwan; Geneva, Switzerland; Seoul, Korea; Tokyo, Japan; and Stuttgart, Germany. It also has a representative liaison offices in Beijing, XiAn, GoungZou, ShenZen and Hong Kong, China and a foreign sales corporation in Barbados.

(b) Basis of Presentation

The accompanying consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All significant intercompany transactions have been eliminated. Certain reclassifications to prior year financial statements have been made to conform to the current year presentation.

(c) Revenue Recognition

The Company recognizes revenue from a customer order when all of the following criteria are met: Persuasive evidence of an arrangement exists, delivery has occurred, the price is fixed or determinable, and collectibility is reasonably assured. For product sales, the Company considers delivery to have occurred when title and risk of loss have been transferred to the customer, which is usually at the time that the product has been picked up by a common carrier. For services, the Company considers delivery to have occurred once the service has been provided. The Company uses objective evidence of fair value to allocate revenue to elements in multiple element arrangements and recognize revenue when the criteria for revenue recognition have been met for each element. In the absence of objective evidence of fair value of a delivered element, the Company allocates revenue to the fair value of the undelivered elements and the residual revenue to the delivered elements. The price charged when an element is sold separately generally determines fair value.

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 extended 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 and amounts received 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 standard warranties of one to three years to its customers depending on the specific product and terms of the customer purchase agreement. The Company's standard 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 standard 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, development costs have been expensed as incurred, and no research and development costs have been capitalized.

(f) Fair Value of Financial Instruments

For financial instruments consisting of cash and cash equivalents, accounts payable and accrued expenses included in the Company's financial statements, the carrying amounts are reasonable estimates of fair value due to their short maturities. Estimated fair values for investment securities, which are separately disclosed elsewhere, are based on quoted market prices for the same or similar instruments. Based on borrowing rates currently available to the Company, the carrying value of the notes payable approximate fair value.

(g) 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, 2004 and 2003 consist primarily of cash on deposit with banks and money market funds. The Company determines the appropriate classification of debt and equity securities at the time of purchase. 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).

Short-term investments as of December 31, 2004 and 2003 consist primarily of market auction rate notes that reset every seven to ninety days, but have an underlying maturity that extends beyond ninety days. The fair value of the short-term investments approximates cost as of December 31, 2004 and 2003.

(h) 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 17).

(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 three to five years for machinery and equipment.

(k) Goodwill and Other Intangible Assets

The Company initially records acquired intangible assets at their fair values. The Company amortizes those acquired intangible assets with estimable useful lives over those 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 capitalizes the legal and other costs of registering for patents on technology developed by its own research and development activities. Legal and other costs of registering for patents were $14,000, $41,000, and $0 during 2004, 2003 and 2002 respectively. When the patent is issued on this technology or acquired patents pending, the Company amortizes the capitalized costs over the estimated useful life or legal life of the patent, whichever is shorter.

The Company assesses the recoverability of the carrying value of its goodwill and other intangible assets with indefinite useful lives annually, typically in the fourth quarter, or whenever events or changes in circumstances indicate that the carrying amount of the asset may not be fully recoverable. Recoverability of goodwill is determined at the reporting unit level, with the Company as a single reporting unit, using a two-step approach. First, the carrying amount of the entire reporting unit is compared to its fair value, as determined by the market value of the company's outstanding common stock. If the carrying value of the entire reporting unit exceeds its fair value, the second step is performed. In this step, an impairment loss is recognized for the excess, if any of the carrying amount of goodwill over its implied fair value. The implied fair value of the reporting unit's goodwill is the amount by which the fair value of the entire reporting unit exceeds the sum of the individual fair values of its assets, except goodwill, less the sum of the individual fair values of its liabilities. The fair values of individual assets and liabilities may be estimated as the amount at which they could be bought or sold in a current transaction between willing parties. If this information is not available, fair value is determined based on the best information available under the circumstances. This often involves the use of valuation techniques, such as the present value of expected future cash flows, discounted at a rate commensurate to the risk involved, or other acceptable valuation techniques.

(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 primarily of cash on deposit with banks and money market funds. 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 telephone operating companies, large cable television system operators, and other established telecommunication companies with relatively good credit histories located throughout the world. 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.

(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 potential common equivalent shares outstanding during the period. Potential common equivalent shares consist of common stock issuable upon exercise of stock options using the treasury stock method. During each year in the three year period ended December 31, 2004, certain potential common equivalent shares were excluded from the calculation of diluted EPS presented in the consolidated statement of operations because their effect would have been anti-dilutive.

Specifically, diluted EPS does not include the effect of 4,564,322, 4,802,256, and 4,426,690 anti-dilutive potential common shares for the years ended December 31, 2004, 2003 and 2002, respectively.

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

	Years Ended December 31,		
	2004	2003	2002
Basic EPS—weighted-average number of common shares outstanding	50,426	49,750	49,854
Effect of dilutive common equivalent shares:			
Stock options outstanding	—	—	—
Diluted EPS—weighted-average number of common shares and common equivalent shares outstanding	50,426	49,750	49,854

(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 has been 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 expense for 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,* as amended by SFAS No. 148 *Accounting for Stock-Based Compensation—Transition and Disclosure—an Amendment of FASB Statement No. 123,* the Company's net loss and 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,		
	2004	2003	2002
Net loss, as reported	$(7,695)	$(3,870)	$(4,999)
Add: Stock-based employee compensation expense included in reported net loss, net of related tax effects	267	1,098	1,117
Deduct: Total stock-based employee compensation expense determined under fair value based method for all awards, net of related tax effects	(2,390)	(2,295)	(2,185)
Pro forma net loss	$(9,818)	$(5,067)	$(6,067)
Loss per share, as reported:			
Basic and diluted	$ (0.15)	$ (0.08)	$ (0.10)
Loss per share, pro forma:			
Basic and diluted	$ (0.19)	$ (0.10)	$ (0.12)

For the purposes of computing pro forma net loss, 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,		
	2004	2003	2002
Dividend yield	1.5%	0.0%	0.0%
Expected term	5 years	5 years	4 years
Risk-free interest rate	3.46%	3.01%	2.97%
Volatility rate	0.6987	0.7515	0.7143

During 2003, the Company's board of directors declared the Company's first dividend since 1999. However, the board of directors did not approve the institution of an annual dividend until January 2004. The Company's decision not to incorporate a dividend yield into its valuation of stock options for the year ended December 31, 2003 was based on the best information available to management.

(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.

(s) Advertising Cost

The Company recognizes the cost of advertising as incurred. Such costs are included in selling and marketing expense and totaled approximately $243,000, $284,000, and $439,000 during the years ended December 31, 2004, 2003, and 2002, respectively.

(t) Recent Accounting Pronouncements

In March 2004, the Emerging Issues Task Force ("EITF") reached a consensus on Issue No. 03-1, *The Meaning of Other-Than-Temporary Impairment and Its Application to Certain Investments.* EITF 03-1 provides guidance regarding other-than-temporary impairment models for marketable debt and equity securities accounted for under SFAS No. 115, *Accounting for Certain Investments in Debt and Equity Securities* and non-marketable equity securities accounting for under the cost method. The EITF developed a three-step method to evaluate whether an impairment of an investment is other-than-temporary. On September 30, 2004, the Financial Accounting Standards Board ("FASB") approved the issuance of FASB Staff Position EITF 03-1-1, which delays the effective date of EITF 03-1 until additional guidance is issued for the application of its impairment recognition and measurement provisions. The Company does not expect that the adoption of EITF 03-1 will have a material effect on its consolidated financial position, results of operations, or cash flows.

In November 2004, the Financial Accounting Standards Board ("FASB") issued Statement of Financial Accounting Standards ("FAS") No. 151 *Inventory Costs—an amendment of ARB No. 43, Chapter 4,* which addresses the accounting for abnormal amounts of idle facility expense, freight, handling cost and wasted material (spoilage).

Paragraph 5 of ARB 43 Chapter 4, previously stated that, under certain circumstances, those items may be so abnormal as to require treatment as current-period charges. FAS 151 requires that those items be recognized as current-period charges regardless of whether they meet the criterion of "so abnormal". In addition, FAS 151 requires that allocation of fixed production overheads to costs of conversion be based on the normal capacity of the production facilities. The Company does not expect that the adoption of FAS 151 will have a material effect on the Company's financial position or results of operations.

In December 2004, the FASB issued FAS 153 *Exchanges of Nonmonetary Assets—an amendment of APB Opinion No. 29*, which amends Opinion 29 to eliminate the exception for nonmonetary exchanges of similar productive assets and replaces it with a general exception for exchanges of nonmonetary assets that do not have commercial substance. A nonmonetary exchange has commercial substance if the future cash flows of the entity are expected to change significantly as a result of the exchange. The Company does not expect that the adoption of FAS 153 will have a material effect on the Company's financial position or results of operations.

In December 2004, the FASB issued the revised FAS No. 123, *Share-Based Payment* ("FAS 123R"), which addresses the accounting for share-based payment transactions in which the Company obtains employee services in exchange for (a) equity instruments of the Company or (b) liabilities that are based on the fair value of the Company's equity instruments or that may be settled by the issuance of such equity instruments. This statement eliminates the ability to account for employee share-based payment transactions using APB No. 25 and requires instead that such transactions be accounted for using the grant-date fair value based method. This statement will be effective as of the beginning of the first interim or annual reporting period that begins after June 15, 2005 (quarter ending September 30, 2005 for the Company). The Company has not determined the effect the adoption of FAS 123R will have on the Company's financial position or results of operations.

(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 Ker-Chin Chang, is also the owner of Telecom Research Center ("TRC"). During 2004, 2003 and 2002 the Company purchased equipment used in its manufacturing process totaling $40,000, $65,000, and $34,000 respectively, from TRC.

The Company's had no accounts payable to TRC at both December 31, 2004 and 2003, respectively. The terms of the Company's transactions with TRC are similar to those with unrelated parties. The Company's business relationship has been reviewed and approved by the Company's Board of Directors and Audit Committee.

During February 2002, the Company's Board of Directors and Compensation Committee approved a loan to Paul Ker-Chin Chang, President and Chief Executive Officer, in the amount of $1,050,000. The terms of the loan required Mr. Chang to pay interest each month at an annual percentage rate of 4.0%. Mr. Chang was required to repay the principal amount no later than February 18, 2005, and the loan was secured by three million shares of the Company's common stock. During 2003, Mr. Chang repaid the entire loan principal balance and all accrued interest.

One of the Company's directors, Jennifer J. Walt, is a shareholder in the law firm of Littler Mendelson, P.C. During 2002, Littler Mendelson, P.C. provided services to the Company resulting in billings to the Company of $26,000. Littler Mendelson, P.C. did not provide any services to the Company during 2004 and 2003, and the Company had no accounts payable to Littler Mendelson, P.C. at December 31, 2004 and 2003.

(3) Financial Statement Details

Inventories

Inventories consisted of the following (in thousands):

	December 31,	
	2004	2003
Raw materials	$ 4,965	$2,429
Work in process	4,067	2,861
Finished goods	4,233	1,996
	$13,265	$7,286

Property and Equipment

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

	December 31,	
	2004	2003
Land	$ 8,821	$ 8,821
Building	9,805	9,727
Equipment	24,225	20,837
Furniture and fixtures	2,337	2,283
Leasehold improvements	598	434
	45,786	42,102
Less accumulated depreciation and amortization	18,610	15,173
	$27,176	$26,929

Other Accrued Expenses

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

	December 31,	
	2004	2003
Accrued compensation and other related benefits	$3,437	$3,875
Commissions payable	1,074	1,377
Sales tax payable	734	559
Accrued warranty (see note 7)	811	1,038
Other accrued expenses	2,732	2,130
	$8,788	$8,979

(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	(Recoveries)	Balance at End of Year
Allowance for doubtful accounts:					
2004	$1,380	$ 9	$331	$(259)	$ 799
2003	1,389	117	126	—	1,380
2002	675	1,411	697	—	1,389

(5) Marketable Securities

The Company determines the appropriate classification of debt and equity securities at the time of purchase and reevaluates this designation at each balance sheet date. Investments classified as available for sale are reported at market value, with 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, net in the consolidated statements of operations. Investment securities available for current operations are classified as current assets, and all other investment securities are classified as non-current assets.

Marketable securities at December 31, 2004 and December 31, 2003 consisted of common stock of Top Union Electronics Corp. ("Top Union"), a Taiwan R.O.C. corporation. The Company has classified this investment as an available-for-sale security, which is stated at fair value with the unrealized gain presented as a separate component of stockholders' equity. During the twelve months ended December 31, 2004, the Company sold 1,101,000 shares of Top Union stock, realizing gains of $504,000. During the twelve months ended December 31, 2004, the Company received stock dividends from Top Union of 593,092 shares valued at $366,000. At December 31, 2004, the Company held 2,957,480 shares of Top Union stock.

As of December 31, 2004, the Company revalued its Top Union shares to their fair value of $1,433,000. At December 31, 2004, the cumulative unrealized gain on this investment was $434,000.

(6) Goodwill and Other 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.

Notes to Consolidated Financial Statements—(Continued)

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

	As of December 31, 2004		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Amortized intangible assets:			
Developed technology	$11,253	$ (8,949)	$2,304
Non-compete	797	(629)	168
License	637	(446)	191
Patents	152	(36)	116
Other	95	(29)	66
	$12,934	$(10,089)	2,845
Unamortized intangible assets:			
Patents pending			345
Other			59
Total			404
Intangible assets, net			$3,249

	As of December 31, 2003		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Amortized intangible assets:			
Developed technology	$12,305	$(7,635)	$4,670
Non-compete	1,498	(1,082)	416
License	560	(291)	269
Patents	144	(28)	116
Other	112	(19)	93
	$14,619	$(9,055)	5,564
Unamortized intangible assets:			
Patents pending			263
Other			42
Total			305
Intangible assets, net			$5,869

Aggregate amortization expense for the years ended December 31, 2004, 2003 and 2002 was $2,699,000, $3,366,000, and $3,396,000 respectively.

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

Year ending December 31,	
2005	$1,712
2006	771
2007	188
2008	67
2009	67
Thereafter	40
	$2,845

The changes in the carrying amount of goodwill during the year ended December 31, 2004 were as follows (in thousands):

Balance as of January 1, 2004	$12,815
Adjustment to previously recorded purchase price	(236)
Effect of foreign currency translation	150
Balance as of December 31, 2004	$12,729

During 2004, the Company adjusted goodwill due to the resolution of an income tax uncertainty related to one of its business acquisitions.

The Company completed its impairment tests of goodwill during the quarters ended December 31, 2004 and 2003, as required under SFAS No. 142. The Company did not obtain an indication that goodwill was impaired from any of the tests. The Company bases its impairment testing on a market capitalization analysis and considers itself to be a single reporting unit for purposes of this test.

(7) 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 Accrued	Warranties Paid	Balance at End of Year
2004	$1,038	$272	$(499)	$ 811
2003	1,306	318	(586)	1,038
2002	1,398	892	(984)	1,306

(8) Other Assets

Other assets consisted of the following (in thousands):

	December 31, 2004	December 31, 2003
Insurance deposits	$325	$384
Other deposits	413	247
	$738	$631

(9) Short-term Borrowings and Notes Payable

As a result of various acquisitions completed during 2003, 2002, 2000, and 1999, the Company had three non-interest bearing notes payable at December 31, 2004. The aggregate outstanding balance on these notes was $85,000. In addition, in 2001, the Company obtained a loan from the Italian government, which bears interest at 2% a year. At December 31, 2004, the outstanding balance on this loan was $983,000, which is to be repaid by semi-annual principal payments over an eight-year period which began in July 2003. The Company also has three short-term notes and other borrowings, with an aggregate amount due of $37,000.

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

Year ending December 31,	
2005	$ 223
2006	188
2007	149
2008	152
2009	155
Thereafter	238
	$1,105

(10) Leases

The Company leases facilities under several operating net 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, 2004, are as follows (in thousands):

Year ending December 31,	
2005	$ 734
2006	221
2007	68
	$1,023

Rent expense for the years ended December 31, 2004, 2003, and 2002 was approximately $1,060,000, $909,000, and $1,030,000, respectively.

(11) Capital Stock

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 $4,206,000, and 217,000 shares of common stock for an aggregate amount of $835,000 under this program during 2002 and 2001, respectively. The total amount spent on the repurchase exceeded the amount authorized by $41,000 due to an administrative error. 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 any common stock during 2004 or 2003 and of common stock issued pursuant to the stock option plan during 2002.

Shares reserved for future issuance are as follows:

Employee Stock Purchase Plan	583,319
Stock Option Plan	10,201,884
	10,785,203

(12) 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, 2004, 1,750,000 shares of common stock are reserved for issuance under the Purchase Plan. 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, 2004, 1,166,681 shares had been issued under the Purchase Plan, leaving 583,319 shares reserved for future issuance. During 2004, 2003, and 2002, the Company issued 328,078, 220,239, and 315,030 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 7,350,000 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 12,600,000 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, 2004, the Company had granted options to purchase 9,040,346 shares of its common stock to its employees, directors, and consultants and returned 2,124,399 canceled options to the Stock Plan, leaving 5,684,053 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 its vesting. 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, 2004, there were no shares issued and subject to repurchase.

Notes to Consolidated Financial Statements—(Continued)

Option activity was as follows:

	Years Ended December 31,					
	2004		2003		2002	
	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	4,519,906	$3.54	4,216,918	$3.68	3,304,764	$3.80
Granted	583,332	$3.43	913,064	$2.02	1,727,954	$3.34
Exercised	(298,527)	$0.78	(374,378)	$0.74	(267,415)	$0.62
Canceled	(286,880)	$4.05	(235,698)	$4.62	(548,385)	$4.81
Options at end of period	4,517,831	$3.68	4,519,906	$3.54	4,216,918	$3.68
Weighted-average fair value of options granted during the period		$1.88		$1.98		$1.85

Information regarding stock options outstanding as of December 31, 2004 is summarized in the following table:

	Options Outstanding			Vested Options	
Range of Exercise Prices	Number Outstanding	Weighted-Average Remaining Contractual Life (years)	Weighted-Average Exercise Price	Number Vested	Weighted-Average Exercise Price
$0.60-1.50	526,792	3.68	$ 1.41	526,792	$ 1.41
1.58-1.80	424,986	7,52	$ 1.70	165,447	$ 1.67
1.91	589,928	8.08	$ 1.91	197,551	$ 1.91
1.96-2.57	607,064	7.01	$ 2.32	356,650	$ 2.19
2.60-3.91	120,009	8.34	$ 3.08	37,336	$ 2.97
3.98	836,920	7.06	$ 3.98	422,852	$ 3.98
4.09-4.75	322,500	8.70	$ 4.11	28,869	$ 4.22
4.94	652,940	6.03	$ 4.94	639,593	$ 4.94
5.40-15.00	407,192	5.60	$ 9.23	378,918	$ 9.21
20.38	29,500	5.80	$20.38	25,000	$20.38
	4,517,831			2,779,008	

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 $6,500,000 for the differences at the grant date between the exercise prices and the fair values. For options granted in 2004, 2003, and 2002, 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 2003, and 2002, deferred stock-based compensation was reduced by $91,000, and $319,000, respectively, due to forfeitures of unvested options. As of December 31, 2004 all deferred stock-compensation balances have been fully amortized.

See footnote 1 (p) for the pro forma net loss and loss per share amounts that would have been reported in 2004, 2003, and 2002 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.

(13) Acquisitions

On February 28, 2002, the Company acquired the CaLan Cable TV test business from Agilent Technologies for $7.2 million in cash and acquisition costs. The Company 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 the Company reviews for impairment annually.

On June 19, 2002, the Company acquired the ADSL Tester business from Integrated Telecom Express, Inc. ("ITeX") for $100,000 in cash. The Company recorded goodwill of $68,000, which the Company reviews for impairment annually.

On September 4, 2002, the Company acquired Luciol Instruments SA ("Luciol"), a Swiss corporation specializing in fiber optic measurement and instrumentation, for $1.2 million in cash and acquisition costs. The Company 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 the Company reviews for impairment annually.

GIE

On February 28, 2003, the Company acquired substantially all of the assets of GIE GmbH ("GIE"), a German corporation specializing in wireless and RF measurement instrumentation, for $554,000 in cash and acquisition costs. The purchase price was determined by negotiation between the Company and GIE's shareholders, taking into consideration future projections for GIE's business. The transaction was accounted for using the purchase method of accounting, and the results of GIE's operations and the fair values of the assets acquired have been included in the consolidated financial statements since the date of the acquisition. The purchase price for GIE was allocated to the assets acquired based on their fair values as of the date of the acquisition as follows (in thousands):

Current assets	$463
Equipment	2
Intangible assets	89
Net assets acquired	$554

Of the $89,000 of acquired intangible assets, $37,000 was assigned to in-process research and development assets that were written off at the date of the acquisition. The remaining $52,000 of acquired intangible assets is developed technology and was being amortized over its estimated remaining weighted average useful life at the date of acquisition of four years. No goodwill was recorded in this transaction. Concurrent with this acquisition, the Company entered into a non-compete agreement with certain former owners of GIE obligating it to make payments to the former owners totaling approximately $100,000 over four years, provided that they perform as stipulated under the agreements. The Company also entered into employment agreements with these same former owners obligating it to make bonus payments to the former owners totaling approximately $200,000 over four years, in addition to their regular salaries and subject to certain conditions, primarily related to their continued employment by the Company. As of March 2004, the three former owners of GIE were no longer employed by the Company.

As the Company's wireless product development process proceeded, the Company determined that it would not make significant use in its wireless product designs of the developed technology that it capitalized at the time of the GIE acquisition. Therefore, during the fourth quarter of 2003, it wrote off the remaining unamortized balance of $48,000 as

Notes to Consolidated Financial Statements—(Continued)

a charge against other income, net. Also, the Company determined during 2003 that its Mannheim, Germany office would not be needed for its wireless product development process and closed that office. As a result, the Company accrued $160,000 for the remaining future lease payments on the office, which it classified with other accrued expenses, and the Company wrote off fixed assets with a net book value of $88,000, which it record as a charge against other income, net. In December 2004, we entered into a settlement agreement with the former owners of GIE, agreeing to pay approximately $40,000 to settle any and all differences between the parties.

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, 2003, and 2002, assuming that Avantron, CaLan, ITeX, Luciol and GIE had been acquired at the beginning of the periods presented (in thousands, except per share data):

	Years Ended December 31,	
	2003	2002
Net sales	$54,968	$56,324
Net loss	$ (3,905)	$ (5,552)
Basic and diluted loss per share	$ (0.08)	$ (0.11)
Shares used in pro forma for basic and diluted per share computation	49,750	49,854

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.

(14) 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 $0, $0, and $12,000 in 2004, 2003, and 2002, respectively.

(15) Income Taxes

Income (loss) before taxes consisted of the following (in thousands):

	Years Ended December 31,		
	2004	2003	2002
U.S	$ (627)	$(3,483)	$(6,701)
Foreign	1,951	(2,862)	(1,631)
Total	$ 550	$(6,345)	$(8,332)

Notes to Consolidated Financial Statements—(Continued)

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

	Years Ended December 31, 2004	2003	2002
Current expense (benefit):			
Federal	$ —	$(2,390)	$ (845)
State	94	30	2
Foreign	1,064	101	(32)
	1,158	(2,259)	(875)
Deferred expense (benefit):			
Federal	5,526	(287)	(1,644)
State	1,823	71	(814)
Foreign	(262)	—	—
	7,087	(216)	(2,458)
	$8,245	$(2,475)	$(3,333)

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, 2004, 2003 and 2002, to pretax income, as a result of the following (in thousands):

	Years Ended December 31, 2004	2003	2002
Computed tax	$ 187	$(2,157)	$(2,833)
State taxes, net of federal income tax benefit	94	67	(535)
Research credit	—	(177)	(350)
Foreign sales corporation benefit	—	(552)	—
Nondeductible stock-based compensation	—	101	160
Nondeductible goodwill amortization	42	72	72
Nondeductible meals and entertainment	34	39	33
Tax provision to tax return adjustment	80	85	(104)
Valuation allowance	7,429	—	—
Foreign taxes	209	101	(32)
Other, net	170	(54)	256
	$8,245	$(2,475)	$(3,333)

During 2003, the Company amended its federal tax returns for the years ended December 31, 1999, 2000 and 2001 in order to claim additional foreign sales corporation benefits. As a result, during 2003 the Company received federal income tax refunds of $140,000, $317,000 and $95,000 for each of those years, respectively.

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, 2004	December 31, 2003
Deferred tax assets:		
Inventory reserves and additional costs capitalized	$ 1,027	$ 1,246
Accrued compensation and vacation	613	496
Allowance for doubtful accounts	316	550
Other accruals and reserves	691	827
Net operating losses and start-up costs	624	1,509
Tax credits	1,511	1,403
Accumulated amortization of intangible assets	4,727	4,487
Total deferred tax assets	9,509	10,518
Valuation allowance	(7,429)	—
Available deferred tax assets	2,080	10,518
Deferred tax liabilities:		
Property and equipment	(1,140)	(2,121)
Unrealized gain on marketable investment securities	(133)	(380)
State deferred assets, net of federal expense	(630)	(630)
Other	—	(123)
Total deferred tax liabilities	(1,903)	(3,254)
Net deferred tax assets	$ 177	$ 7,264

During 2004, the Company recorded a valuation allowance against all of the Company's net deferred tax assets in most jurisdictions in the amount of $7,429,000. The expense for recording the valuation allowance is a non-cash item, and the recording of this expense does not imply that the Company owes additional income taxes.

The Company determined the valuation allowance on deferred tax assets in accordance with the provisions of SFAS No. 109, *Accounting for Income Taxes*, which requires that the Company weigh both positive and negative evidence in order to ascertain whether it is more likely than not that deferred tax assets will be realized. 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 bases and for the future tax consequences attributable to operating losses and tax credit carryforwards. The ultimate realization of deferred tax assets is dependent on the generation of future taxable income during the periods in which the related temporary differences become deductible. The Company evaluated all significant available positive and negative evidence, including the existence of cumulative net losses in recent periods, benefits that could be realized from available tax strategies, and forecasts of future taxable income, in determining the need for a valuation allowance on its deferred tax assets. At December 31, 2004 the Company reported pre-tax profits of $550,000, however, that combined with cumulative net losses in recent periods, represented sufficient negative evidence that was difficult for positive evidence to overcome under the evaluation guidance of SFAS No. 109, and accordingly, a valuation allowance was recorded against all of the Company's net deferred tax assets in most jurisdictions. The Company intends to maintain this valuation allowance until sufficient positive evidence, such as the resumption of a consistent earnings pattern, exists to support its reversal in accordance with SFAS No. 109.

The Company incurred a net operating loss in calendar year 2003. The Company carried back a portion of its net operating loss and filed a claim for refund for federal tax purposes. After considering the portion of the net operating loss that it carried back, the Company has remaining net operating losses for federal and state income tax purposes of approximately $1,250,000 and $3,396,000, respectively, that it expects to carry forward to reduce future income subject to income taxes. The federal net operating loss will expire, if not used, in 2023 and the state net operating loss carry forwards will begin to expire in 2013.

As of December 31, 2004, unused research and development tax credits of approximately $527,000 and $883,000 are available to reduce future federal and California income taxes, respectively. The federal research credit carry forward will begin to expire in 2022, and the California credits will carry forward indefinitely.

Cumulative undistributed earnings of the international subsidiaries amounted to $1,204,000 as of December 31, 2004, all of which is intended to be permanently reinvested. The amount of deferred income tax liability that would result had such earnings been repatriated is estimated to be approximately $409,000 which would be absorbed by a corresponding reversal in valuation allowance.

(16) 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 comprises the design, manufacture, and sale of equipment for testing wireline access, cable broadband, fibre optics and signaling.

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

	Years Ended December 31,		
	2004	2003	2002
Net sales:			
North America (United States and Canada)	$33,288	$35,101	$39,002
Asia/Pacific	13,687	10,651	7,877
Europe/Africa/Middle East	13,378	7,852	6,168
Latin America	1,316	1,345	1,286
	$61,669	$54,949	$54,333

Notes to Consolidated Financial Statements—(Continued)

Long-lived assets, excluding financial instruments, deferred tax assets, and intangible assets, were located in the following geographic regions (in thousands):

	As of December 31,	
	2004	2003
United States	$22,906	$23,445
Canada	1,852	1,725
Taiwan and other Asia/Pacific	1,571	1,042
Europe/Africa/Middle East	847	717
	$27,176	$26,929

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

	Years Ended December 31,		
	2004	2002	2001
Net sales:			
Wireline access	$26,615	$24,381	$22,957
Cable broadband	15,638	14,369	17,840
Fiber optics	13,670	13,353	11,147
Signaling	5,746	2,846	2,389
	$61,669	$54,949	$54,333

(17) Commitments and Contingencies

Letters of Credit

At December 31, 2004, the Company had five standby letters of credit with a maximum potential future payment amount of $305,000. 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.

Legal Proceedings

On March 31, 2004, Acterna, LLC ("Acterna") filed a lawsuit against us and Consultronics, Ltd. and Consultronics, Inc. (the latter two, collectively, "Consultronics") in the United States District Court for the District of Maryland. Acterna alleged that our SunSet xDSL and SunSet MTT products infringe its United States Patent Nos. 6,064,721 (the "'721 patent"), 6,385,300 (the "'300 patent"), and 6,590,963 (the "'963 patent") and that our STT product infringes its United States Patent No. 5,511,108 (the "'108 patent"). Acterna also alleged that the Consultronics CoLT 450 product infringes its '721 patent. Acterna seeks injunctive relief, unspecified damages, and attorneys' fees and costs. In October 2004, we learned that Acterna and Consultronics had reached a settlement with respect to Acterna's claim against Consultronics and that the matter with respect to Consultronics had been dismissed with prejudice.

On April 23, 2004, we filed a lawsuit against Acterna in the United States District Court for the Northern District of California. The lawsuit alleged that Acterna's ANT-5 SDH Access Tester and ANT-20 Advanced Network Tester infringe our United States Patent No. 5,619,489 (the "'489 patent"). The Company seeks injunctive relief, unspecified damages, and attorneys' fees and costs.

On September 7, 2004, Acterna filed an answer in the United States District Court for the Northern District of California, seeking declaratory judgment that its ANT-5 SDH Access Tester and ANT-20 Advanced Network Tester do not infringe the '489 patent, that the '489 patent is invalid, and that the '489 patent is unenforceable. At the same time, Acterna also filed a counterclaim against us, alleging that certain products, namely the CM 1000, CM 500, CM 250, N1776A, AT 2000 and AT 2500, all of which are manufactured and sold by our subsidiaries, infringe its United States Patent No. 5,751,766 (the "'766 patent"). Acterna seeks injunctive relief, unspecified damages and attorneys fees and costs.

We believe that the lawsuits against us are without merit, and we intend to defend ourselves vigorously against the allegations that Acterna is making against us. Specifically, we are defending ourselves against Acterna's allegations by seeking declaratory judgment that our products do not infringe any of the '721 patent, the '300 patent, the '963 patent, the '108 patent, or the '766 patent; that the '721 patent, the '300 patent, the '963 patent, the '108 patent, and the '766 patent are invalid; and that the '721 patent, the '300 patent, the '963 patent, the '108 patent, and the '766 patent are unenforceable. In addition, we are seeking declaratory judgment that our products do not infringe a sixth, recently issued Acterna patent, United States Patent No. 6,738,454 (the "'454 patent"). The '454 patent is a continuation patent issued May 18, 2005 related to the '721 patent, the '300 patent, and the '963 patent. We are also seeking declaratory judgment that the '454 patent is invalid and unenforceable.

On January 5, 2005, Acterna asserted in the Maryland case that our products also infringe its '454 patent.

We are presently unable to estimate the likely costs of the litigation and/or any settlement of these legal proceedings with Acterna.

From time to time, we may be involved in litigation or other legal proceedings, including those noted above, relating to claims arising out of our day-to-day operations or otherwise. Litigation is inherently uncertain, and the Company could experience unfavorable rulings. Should we experience an unfavorable ruling, there exists the possibility of a material adverse impact on our financial condition, results of operations, or cash flows or on our business for the period in which the ruling occurs and/or future periods.

(18) Subsequent Events (unaudited)

On February 8, 2005, the Company's Board of Directors declared a $2.5 million dividend, which was paid on March 4, 2005 to shareholders of record as of February 22, 2005.

(19) Quarterly Financial Data (unaudited)

	Mar. 31, 2004	June 30, 2004	Sept. 30, 2004	Dec. 31, 2004	Mar. 31, 2003	June 30, 2003	Sept. 30, 2003	Dec. 31, 2003
	(in thousands, except per share data)							
Net sales	$13,801	$15,004	$12,725	$20,139	$11,858	$10,309	$12,338	$20,444
Gross profit	$ 9,866	$11,148	$ 8,720	$13,568	$ 7,355	$ 6,294	$ 7,887	$14,109
Income (loss) from operations	$ 180	$ 576	$ (2,042)	$ 937	$ (3,494)	$ (4,522)	$ (2,026)	$ 2,822
Net income (loss)	$ (7,286)	$ 813	$ (2,155)	$ 933	$ (2,035)	$ (2,533)	$ (1,276)	$ 1,974
Earnings (loss) per share:								
Basic	$ (0.15)	$ 0.02	$ (0.04)	$ 0.02	$ (0.04)	$ (0.05)	$ (0.03)	$ 0.04
Diluted	$ (0.15)	$ 0.02	$ (0.04)	$ 0.02	$ (0.04)	$ (0.05)	$ (0.03)	$ 0.04
Shares used in per share computation:								
Basic	50,164	50,426	50,504	50,606	49,507	49,666	49,819	49,999
Diluted	50,164	51,265	50,504	51,312	49,507	49,666	49,819	50,913

During the closing of the three month period ended June 30, 2004, the Company detected an immaterial misstatement in its previously reported results for the three months ended March 31, 2004, consisting of a $315,000 overstatement of cost of sales and a related $109,000 understatement of income tax expense. The results of operations for the three months ended March 31, 2004 presented above are adjusted to correct these misstatements.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

(a) Evaluation of Disclosure Controls and Procedures

The Securities and Exchange Commission defines the term "disclosure controls and procedures" to mean a company's controls and other procedures that are designed to ensure that information required to be disclosed in the reports that it files or submits under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized, and reported within the time periods specified on the Commission's rules and forms. Our Chief Executive Officer and our Chief Financial Officer have concluded, based on the evaluation of the effectiveness of our disclosure controls and procedures by our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, as of the end of the period covered by this report, that our disclosure controls and procedures were effective for this purpose.

(b) Changes in Internal Control Over Financial Reporting

During the last fiscal quarter of 2004 there were no changes in internal control over financial reporting that have materially affected, or are reasonably likely to materially affect our internal control over financial reporting.

A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. These inherent limitations include, but are not limited to, the realities that judgments in decision-making can be faulty and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the control. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time a control system may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

ITEM 9B. OTHER INFORMATION

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 Exchange Act is incorporated by reference from information provided under the headings "ELECTION OF DIRECTORS" and "Stock Ownership—Section 16(a) Beneficial Ownership Reporting Compliance," contained in our Proxy Statement to be filed with the SEC and delivered to our stockholders in connection with our 2005 Annual Meeting of Stockholders. 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—Compensation of the Named Executive Officers" contained in our Proxy Statement to be filed with the SEC and delivered to our stockholders in connection with our 2005 Annual Meeting of Stockholders.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this Item is incorporated by reference from the information provided under the headings "STOCK OWNERSHIP—Beneficial Ownership of Certain Stockholders, Directors and Executive Officers" and "COMPENSATION OF DIRECTORS AND THE NAMED EXECUTIVE OFFICERS—Equity Compensation Plan Information." contained in our Proxy Statement to be filed with the SEC and delivered to our stockholders in connection with our 2005 Annual Meeting of Stockholders.

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 to be filed with the SEC and delivered to our stockholders in connection with our 2005 Annual Meeting of Stockholders.

ITEM 14. PRINCIPLE ACCOUNTANT FEES AND SERVICES

The information required by this Item is incorporated by reference from the information provided under the heading "INDEPENDENT AUDITORS" contained in our Proxy Statement to be filed with the SEC and delivered to our stockholders in connection with our 2005 Annual Meeting of Stockholders.

Part IV.

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

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

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

Report on Independent Registered Public Accounting Firm

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, 2004, 2003, and 2002:

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:

(a) Exhibit Index.

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	Form of Nonstatutory Stock Option Agreement (Incorporated by reference from Exhibit 99.3 to Registrant's Registration Statement No. 333-43270.) †
10.7	Form of Incentive Stock Option Agreement (Incorporated by reference from Exhibit 99.4 to Registrant's Registration Statement No. 333-43270.) †
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 Independent Registered Public Accounting Firm.
31.1	Certification of Principal Executive Officer Pursuant to Section 302.
31.2	Certification of Principal Financial Officer Pursuant to Section 302.
32.1	Certification of Principal Executive Officer and Principal Financial Officer Pursuant to 18 U.S.C. Section 1350.

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

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 31, 2005.

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 31, 2005
/s/ PAUL A. MARSHALL **Paul A. Marshall**	Chief Operating Officer, (Director)	March 31, 2005
/s/ RICHARD D. KENT **Richard D. Kent**	Chief Financial Officer (Principal Financial Officer)	March 31, 2005
/s/ ROBERT C. PFEIFFER **Robert C. Pfeiffer**	Director	March 31, 2005
/s/ PATRICK PENG-KOON ANG **Patrick Peng-Koon Ang**	Director	March 31, 2005
/s/ HENRY P. HUFF **Henry P. Huff**	Director	March 31, 2005
/s/ JENNIFER J. WALT **Jennifer J. Walt**	Director	March 31, 2005

Exhibit Index

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

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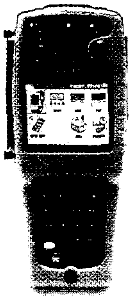
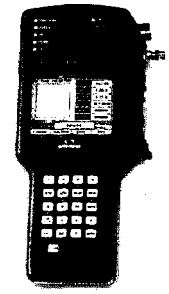


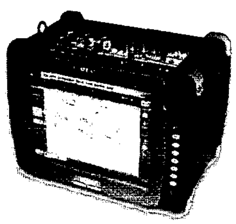
Sunset MTT /Wireline Access

The Sunset MTT offers the telecom industry's broadest selection of test modules for the access network in a single modular platform, making it suitable for service applications ranging from telco residential triple-play service delivery to business Ethernet special services provisioning. The MTT simplifies technicians' training, reduces acquisition costs, and lightens the load. The MTT supports over 30 different test modules to fit technology applications ranging from copper diagnostics, T1 and E1 transmission, gigabit Ethernet, optical loss testing, Voice over IP (VoIP), ADSL, and VDSL.

CM1000 /Cable Broadband

The CM family offers handheld units for cable modem installation and field testing, and helps service providers deliver triple-play services to the home.



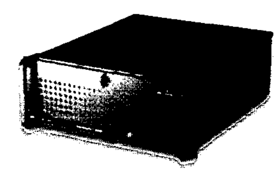


Scalable Test Toolkit (STT) /Fiber Optics

The STT is a portable, modular unit designed to test the core and metro optical networks of today and tomorrow. The STT supports SONET, SDH, C/DWDM (Coarse/Dense Wavelength Division Multiplexing), OTDR, loss test set, signaling analysis, and Ethernet/Gigabit Ethernet testing through a family of stackable test modules. The STT offers advanced analysis and diagnostic tools for exchange, central office and laboratory applications.

3G Master /Signaling Protocol

The 3G Master is a central office unit to monitor Second and Third Generation Mobile networks. The 3G Master applications include regular network maintenance, billing verification, network traffic statistics, quality of service testing, and troubleshooting complex problems such as roaming and internetworking.



About Sunrise Telecom

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 supported through 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 manufacture representatives, distributors, and a direct sales force throughout six continents. Sunrise Telecom stock is traded on the NASDAQ National Market under the symbol SRTI.

Selected Customers

Adelphia

BellSouth Telecom, Inc.

British Telecom

Cablevision

Comcast Cable

Cox Communications, Inc.

Korea Telecom

NTT

Reliance

SBC Communications Inc.

Siemens

Telecom India

Telkom SA, Ltd.

Time Warner Cable

Telecom Italia Mobile

United States Department of Defense

Verizon Communications Inc.

SUNRISE TELECOM

302 Enzo Drive San Jose, California 95138 USA www.sunrisetelecom.com 1.408.363.8000

Worldwide Locations

○ Corporate Locations ○ Distributors and Manufacturers' Representatives