
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Amendment No. 3 to FORM 10

GENERAL FORM FOR REGISTRATION OF SECURITIES
UNDER SECTION 12(B) OR (G) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission file number

MICROPHASE CORPORATION

(Exact Name of Registrant as specified in its charter)

Connecticut
(State of Incorporation)

06-0710848
(IRS Employer ID No.)

100 Trap Falls Road Extension
Shelton, CT 06484
(Address of principal executive offices)

587 Connecticut Ave. Norwalk, CT 06854
(Previous address of principal executive offices)

(203) 866-8000
(Registrant's telephone number, including area code)

Securities to be Registered Under Section 12(b) of the Act: **None**

Securities to be Registered Under Section 12(g) of the Act:

Common Stock, No Par Value Per Share
(Title of each class to be so registered)

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting Company. See definitions of "large accelerated filer," "accelerated filer," and "smaller reporting Company" in Rule 12b-2 of the Exchange Act:

Large accelerated filer ☐
Non-accelerated filer ☐

Accelerated filer ☐
Smaller reporting Company ☒

commercial wireless infrastructure including cell tower, tower-mount, and pole-mount macro-, mini-, and micro-cell base stations; wireless backhaul and enterprise networks comprising point to point and multipoint microwave towers and links; defense & aerospace including radar systems, telemetry transmitters for missile systems, electronic warfare (EW) systems, tactical radio communications systems for ground, sea, and airborne applications; satellite communications; land mobile radio systems for public safety and homeland security communications networks; broadcast systems including digital TV transmitters; electronic test and measurement instruments including high precision RF and microwave signal generators and analyzers; medical instrumentation including MRI and laser systems and RF surgical probe systems; microwave wireless multimedia devices; GPS receivers; automotive sensor; tollway transponders; security scanners; and household appliances including microwave ovens, cordless phones, set-top boxes, cable and Wi-Fi modems.

We have a long history of supplying high power, high frequency, RF and microwave products, including filters, log video amplifiers, detectors and integrated assemblies, to prime contractors that in turn supply government military customers. These prime contractors include, but are not limited to, Lockheed Martin, BAE, Raytheon and Saab. Our products have been used in numerous programs dating back to 1956, when Microphase introduced its first diplexer to Lockheed Martin. Continuing its technology leadership, Microphase designed a seven channel multiplexer, now housed in the Smithsonian Institute of Technology, which was onboard the first US piloted space flight, the Mercury Freedom 7 Capsule, on May 5, 1961. Other notable programs in which the Company's products were used include the Atlas Missile, Vanguard Missile, Polaris Missile System (recipient of citation from Bureau of Naval Weapons), SHRIKE Missile, ARM Missile, the Patriot Missile System, THAAD (Terminal High Altitude Area Defense), the Samos, Tiro, and Currier Space Probes, the B1 Bomber, the F111, EA6B, F14, F16, F18, Gripen fighter, and the F35 joint strike fighter planes, and more recently drone programs including the Predator, the Reaper and the Shadow.

As the need for more secure communications increases, the need for higher powered and higher frequency devices is needed for applications in military, public safety/homeland security, medical, autonomous auto, commercial communications and other fields.

The Company recently signed an agreement to develop, implement, manufacture, market and sell a new line of test probe products for the RF/Microwave Test and Measurement ("T&M") industry developed by Dynamac, Inc.. Pursuant to this agreement the Company is obligated to pay to Dynamac \$350,000 for a one time perpetual licensing fee, of which \$50,000 has already been paid and the terms of the remaining \$300,000 are being re-negotiated between the parties. These T&M products and solutions are designed for daily use by thousands of electronic and wireless engineers around the world and could reduce test and measurement time from days and weeks to minutes. The Company expects a diverse customer base which target end users in the areas of research, product design and development, component/device design and development, semiconductor chip and integrated circuit design and development, production testing, incoming inspection and quality control.

Competition

We operate in highly competitive markets that are sensitive to technological advances. Many of our competitors in each of our markets are larger than we are and maintain higher levels of expenditures for research and development. In each of our markets, we concentrate on the opportunities that our management believes are compatible with our resources, overall technological capabilities and objectives. Principal competitive factors in these markets are product quality and reliability; technological capabilities; service; past performance; ability to develop and implement complex, integrated solutions; ability to meet delivery schedules; the effectiveness of third-party sales channels in international markets; and cost-effectiveness.

In the RF Communications segment, principal competitors for our filter components products include K & L Microwave, a Dover Company; R S Microwave, a privately held company headquartered in Butler, NJ; Lorch Microwave, a member of the Smith Group, a global technology company listed on the London Stock Exchange; and Delta Diversified Products, a private company based in Arizona.

In the Video amplifier segment, principal competitors for our Detector Log Video Amplifier Sensor products include American Microwave Corporation, a privately held company headquartered in Frederick, MD; Akon Inc., a privately held company based in San Jose, CA; Planar Monolithics Industries ("PMI"), a privately held company based in Frederick, MD; L-3 Narda-Miteq, a subsidiary of L-3 Communications Inc., a

ITEM 14. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.

There have been no changes in or disagreements with accountants on accounting or financial disclosure matters.

ITEM 15. FINANCIAL STATEMENTS AND EXHIBITS.

Exhibit Number	Description
3.1	Amended and Restated Certificate of Incorporation, incorporated by reference to the Company's Amendment No. 1 to Form 10, filed with the SEC on April 30, 2015
3.2	Bylaws, incorporated by reference to the Company's Amendment No. 1 to Form 10, filed with the SEC on April 30, 2015
10.1	Loan and Security Agreement dated as of February 3, 2012, by and between Microphase Corporation and Gerber Finance, Inc., as amended, incorporated by reference to the Company's Amendment No. 1 to Form 10, filed with the SEC on April 30, 2015
10.2	Strategic Partnership between Microphase Corporation and Dynamac, Inc.*
10.3	Assumption of Mortgage Debt entered into as of January 22, 2015, incorporated by reference to the Company's Amendment No. 1 to Form 10, filed with the SEC on April 30, 2015
10.4	Employment Agreement by and between the Company and Necdet Ergul, incorporated by reference to the Company's Amendment No. 1 to Form 10, filed with the SEC on April 30, 2015
10.5	Employment Agreement by and between the Company and James Ashman, incorporated by reference to the Company's Amendment No. 1 to Form 10, filed with the SEC on April 30, 2015
10.6	Employment Agreement by and between the Company and Michael Ghadaksaz , incorporated by reference to the Company's Amendment No. 1 to Form 10, filed with the SEC on April 30, 2015
10.7	Employment Agreement by and between the Company and Ron Durando, incorporated by reference to the Company's Amendment No. 1 to Form 10, filed with the SEC on April 30, 2015
10.8	Consulting Agreement by and between the Company and Brian Kelly, incorporated by reference to the Company's Amendment No. 1 to Form 10, filed with the SEC on April 30, 2015
10.9a	Third Amendment to Condo Agreement, incorporated by reference to the Company's Amendment No. 1 to Form 10, filed with the SEC on April 30, 2015
10.9b	Second Amendment to Condo Agreement, incorporated by reference to the Company's Amendment No. 1 to Form 10, filed with the SEC on April 30, 2015
10.10	Lease for 100 Trap Falls Lease Extension, incorporated by reference to the Company's Amendment No. 1 to Form 10, filed with the SEC on April 30, 2015
10.11	Amplitech Amendment Agreement, incorporated by reference to the Company's Amendment No. 1 to Form 10, filed with the SEC on April 30, 2015
10.12	Fully Executed Agreement with Dynamac, incorporated by reference to the Company's Amendment No. 1 to Form 10, filed with the SEC on April 30, 2015
23.1	Consent of independent registered public accounting firm*

* filed herewith.

SIGNATURES

In accordance with Section 12 of the Securities Exchange Act of 1934, the registrant caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: June 24, 2015

MICROPHASE CORPORATION

By: /s/ NECDET F. ERGUL

Name: Necdet F. Ergul

Title: Chief Executive Officer, Chairman of
the Board of Directors

By: /s/ JAMES ASHMAN

Name: James Ashman

Title: Chief Financial Officer, Director

By: /s/ MICHEAL GADAKHASZ

Name: Micheal Gadakhasz

Title: Director

By: /s/ JEFFREY PETERSON

Name: Jeffrey Peterson

Title: Director

By: /s/ PAUL H. DeCOSTER

Name: Paul H. DeCoster

Title: Director