

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

Form S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

FREQUENCY ELECTRONICS, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

11-1986657
(I.R.S. Employer
Identification No.)

**55 Charles Lindbergh Blvd.
Mitchel Field, New York 11553
(516) 794-4500**
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Steven L. Bernstein
Chief Financial Officer, Secretary and Treasurer
Frequency Electronics, Inc.
55 Charles Lindbergh Blvd.
Mitchel Field, New York 11553
(516) 794-4500
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Please send copies of all notices, orders and communications to:

**Lawton B. Way
W. Lake Taylor, Jr.
McGuireWoods LLP
Gateway Plaza
800 East Canal Street
Richmond, Virginia 23219
(804) 775-1000**

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this Registration Statement as determined by market conditions.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box: ☐

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. ☒

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. ☐

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. ☐

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

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☒
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided for pursuant to Section 7(a)(2)(B) of Securities Act. ☐

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. Neither we nor the selling stockholders may sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities, and it is not soliciting an offer to buy these securities, in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED JULY 17, 2026

PROSPECTUS



FREQUENCY ELECTRONICS, INC.

**Up to \$100,000,000 of Common Stock, Preferred Stock
and/or Warrants Offered by the Company**

and

Up to 1,000,000 Shares of Common Stock Offered by Selling Stockholders

Frequency Electronics, Inc. may offer and sell, together or separately, up to \$100,000,000 in aggregate offering price of our common stock, preferred stock or warrants to purchase common stock or preferred stock, or a combination thereof from time to time in one or more offerings. In addition, selling stockholders may offer and sell up to 1,000,000 shares of our common stock, in the aggregate, from time to time in one or more offerings. In this prospectus, we refer to our common stock, preferred stock and warrants that we may offer and sell, together with the shares of our common stock that the selling stockholders may offer and sell, collectively as the “securities.”

The securities offered pursuant to this prospectus may be sold at prevailing market prices or at prices different than prevailing market prices. We or the selling stockholders may offer and sell these securities to or through one or more underwriters, dealers or agents, or directly to purchasers, on a delayed or continuous basis. This prospectus describes some of the general terms that apply to the securities. For general information about the distribution of securities offered, see “Plan of Distribution” in this prospectus. Each time our securities are offered under this prospectus, we will provide a prospectus supplement containing more specific information about the particular offering. We also may authorize one or more free writing prospectuses to be provided to you in connection with the offering.

The prospectus supplement for each offering will describe the plan of distribution for that offering. The prospectus supplement also will set forth the price to the public of the securities and the net proceeds that we expect to receive from the sale of any securities we are offering. We will not receive any proceeds from the sale of shares of our common stock by the selling stockholders. The prospectus supplement and any free writing prospectus may also add, update or change information contained or incorporated in this prospectus. You should carefully read this prospectus and any accompanying prospectus supplement, together with the documents we incorporate by reference, before you invest in our securities.

We or the selling stockholders may sell our securities through one or more underwriters, dealers or agents that we select. If underwriters, dealers or agents are used to sell securities, we will name them and describe their compensation in the applicable prospectus supplement.

Our common stock is listed on The Nasdaq Global Market under the ticker symbol “FEIM.” On July 16, 2026, the last reported sale price for our common stock on The Nasdaq Global Market was \$56.13 per share. Each prospectus supplement will indicate whether the securities offered thereby will be listed on any securities exchange.

Investing in our securities involves substantial risks. You should carefully read and consider “Risk Factors” on page 5 before investing in our securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is _____, 2026.

TABLE OF CONTENTS

<u>ABOUT THIS PROSPECTUS</u>	1
<u>INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE</u>	2
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	3
<u>CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS</u>	3
<u>OUR COMPANY</u>	4
<u>RISK FACTORS</u>	5
<u>USE OF PROCEEDS</u>	5
<u>DESCRIPTION OF SECURITIES</u>	5
<u>DESCRIPTION OF CAPITAL STOCK</u>	6
<u>DESCRIPTION OF WARRANTS</u>	9
<u>SELLING STOCKHOLDERS</u>	10
<u>PLAN OF DISTRIBUTION</u>	11
<u>LEGAL MATTERS</u>	12
<u>EXPERTS</u>	12

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission (the “Commission”) using a “shelf” registration process. Under this shelf registration process, we may offer and sell up to \$100,000,000 of any combination of the securities described in this prospectus from time to time in one or more offerings, and the selling stockholders referred to in this prospectus and identified in supplements to this prospectus may also sell up to 1,000,000 shares of our common stock from time to time in one or more offerings. This prospectus only provides you with a general description of the securities we or the selling stockholders may offer. Each time securities are offered, we will provide a prospectus supplement. We may also authorize one or more free writing prospectuses to be provided to you in connection with the offering. The prospectus supplement and/or free writing prospectus will contain specific information about the terms and manner of that offering. The prospectus supplement and free writing prospectus may also add, update or change information contained in this prospectus. Any such information that is inconsistent with this prospectus will supersede the information in this prospectus. You should read both this prospectus and any accompanying prospectus supplement or free writing prospectus together with the additional information described below under the heading “Incorporation of Certain Documents by Reference.”

We have filed or incorporated by reference exhibits to the registration statement of which this prospectus forms a part. This prospectus contains summaries of certain provisions contained in some of the exhibits to our registration statement, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the full text of these documents. You may obtain copies of these documents at no cost by writing to or telephoning us at the address and telephone number given under the heading “Where You Can Find More Information” below.

Neither we, nor the selling stockholders, nor any underwriters, dealers or agents have authorized any other person to provide you with different or additional information other than that contained in, or incorporated by reference into, this prospectus or any applicable prospectus supplement or free writing prospectus. Neither we, nor the selling stockholders, nor any underwriters, dealers or agents take any responsibility, and can make no assurance as to the reliability of, any other information that others may give you. This prospectus may be used only where it is legal to sell these securities. This prospectus is not an offer to sell, or a solicitation of an offer to buy, in any state where the offer or sale is prohibited. The information in this prospectus, any prospectus supplement, free writing prospectus or any document incorporated herein or therein by reference is accurate as of the date contained on the cover of such documents. Neither the delivery of this prospectus or any prospectus supplement or free writing prospectus, nor any sale made under this prospectus or any prospectus supplement or free writing prospectus will, under any circumstances, imply that the information in this prospectus or any prospectus supplement or free writing prospectus is correct as of any date after the date of this prospectus or any such prospectus supplement or free writing prospectus. Our business, financial condition, results of operations and prospects may have changed since that date.

As used herein, “Frequency Electronics,” the “Company,” “we,” “us,” and “our” refer to Frequency Electronics, Inc. and its subsidiaries.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The Commission allows us to “incorporate by reference” into this prospectus the information we have filed with the Commission. This means that we can disclose important information by referring you to those documents. Our Commission file number is 001-08061. All documents that we file with the Commission pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), on or after the date of this prospectus and prior to the termination of the offering of any securities covered by this prospectus and any accompanying prospectus supplement will be deemed to be incorporated by reference into this prospectus and to be a part hereof from the date of filing of such documents. We are not, however, incorporating by reference any documents or portions thereof, whether specifically listed below or filed in the future, that are not deemed “filed” with the Commission under its rules and regulations, including information furnished pursuant to Item 2.02 or 7.01 of Form 8-K unless specified otherwise. Any statement contained in a document incorporated or deemed to be incorporated by reference in this prospectus shall be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained herein or in any other subsequently filed document, which also is or is deemed to be incorporated by reference herein, modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

We incorporate by reference the following documents that we have already filed with the Commission, and any documents that we file with the Commission in the future, under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, until the termination of the offering of any securities covered by this prospectus and the accompanying prospectus supplement:

- our Annual Report on [Form 10-K](#) for the year ended April 30, 2026;
- our Current Report on [Form 8-K](#) filed with the Commission on June 12, 2026; and
- the description of our common stock contained in [Exhibit 4.2](#) to our Annual Report on [Form 10-K](#) for the year ended April 30, 2021, including any subsequent amendment or any report subsequently filed for the purpose of updating such description.

Copies of all documents incorporated by reference in this prospectus will be provided without charge to each person to whom a copy of this prospectus is delivered (other than the exhibits to such documents which are not specifically incorporated by reference herein), upon written or oral request. Requests should be directed to Frequency Electronics, Inc., 55 Charles Lindbergh Blvd., Mitchel Field, New York 11553, Attention: Secretary, or telephone number: (516) 794-4500. You also may obtain copies of these filings, at no cost, by accessing our website at www.frequencyelectronics.com. The information contained on, or otherwise accessible through, our website is not incorporated into, and does not constitute a part of this prospectus, any accompanying prospectus supplement or any other report or document we file with or furnish to the Commission.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and other periodic reports, proxy statements and other information with the Commission. Our filings with the Commission are available to the public without charge at the Commission's website: www.sec.gov. This information is also available on our website at www.frequencyelectronics.com. Except as set forth in the "Incorporation of Certain Documents by Reference" section of this prospectus or any accompanying prospectus supplement, the information contained on, or otherwise accessible through, these websites is not incorporated into, and does not constitute a part of this prospectus or any accompanying prospectus supplement or any other report or document that we file with or furnish to the Commission.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements made in this prospectus, any accompanying prospectus supplement and the documents we incorporate by reference that are not statements of historical or current facts are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 (set forth in Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Exchange Act). Also, documents we subsequently file with the Commission and incorporate by reference will contain forward-looking statements. Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from historical results or from any future results expressed or implied by such forward-looking statements. In many cases, you can identify forward-looking statements by terms such as "believes," "belief," "expects," "may," "will," "estimates," "intends," "anticipates," or "plans" or the negative of these terms or other comparable terminology.

Forward-looking statements are based upon management's beliefs, assumptions and current expectations concerning future events and trends, using information currently available, and are necessarily subject to uncertainties, many of which are outside our control. Although we believe that the expectations reflected in the forward-looking statements are reasonable, forward-looking statements are not, and should not be relied upon as a guarantee of future performance or results, nor will they necessarily prove to be accurate indications of the times at or by which any such performance or results will be achieved. A number of important factors could cause actual results to differ materially from those expressed in or implied by the forward-looking statements. These factors include, but are not limited to, the risks associated with reliance on key customers, including the U.S. government, the Company's use of estimates when accounting for contracts, actions by significant customers or competitors, competitive factors, new products and technological changes, continued acceptance of the Company's products in the marketplace, dependence upon third-party vendors, product prices and raw material costs, the Company's ability to attract and retain key employees, general domestic and international economic conditions, health epidemics and pandemics, external disruptions to the Company's facilities or supply chain, the Company's operations in a highly regulated industry, the outcome of any litigation and arbitration proceedings, cybersecurity attacks, noncompliance with any of the covenants in the Company's senior secured revolving credit facility, volatility in the Company's stock price, including due to the relatively low trading volume of its common stock, and failure to maintain an effective system of internal controls over financial reporting and the other factors discussed in the reports we file with or furnish to the Commission from time to time, including the risks and important factors set forth in additional detail in Item 1A. "Risk Factors" in our Annual Report on Form 10-K for the year ended April 30, 2026.

Readers are cautioned not to place undue reliance on these forward-looking statements. The forward-looking statements included herein are made only as of the date of this prospectus and we undertake no obligation to publicly update or revise any forward-looking statement made by us or on our behalf, whether as a result of new information, future developments, subsequent events or circumstances or otherwise, except as required by law. All subsequent written or oral forward-looking statements attributable to us or individuals acting on our behalf are expressly qualified in their entirety by the cautionary statements referenced above.

OUR COMPANY

Frequency Electronics, Inc. is a world leader in precision time and frequency generation technology, which is incorporated into commercial and U.S. Government satellites, Command, Control, Communication, Computer, Intelligence, Surveillance and Reconnaissance (“C4ISR”), and Electronic Warfare (“EW”) systems. Its technology is used for a wide range of space and non-space applications. Frequency Electronics was founded in 1961 as a research and development firm generating proprietary precision time and frequency technology primarily under contracts for end-use by the U.S. Government. In the mid-1990’s, the Company evolved into a designer, developer and manufacturer of state-of-the-art products for both commercial and government end-use. The Company’s present mission is to be the world leader in providing precision time and low phase noise frequency generation systems, from 1 Hz to 46 GHz for space and other challenging environments. The Company’s technology is the key element in enhancing the functionality and performance of many electronic systems.

Frequency Electronics has its principal executive office at 55 Charles Lindbergh Blvd., Mitchel Field, New York 11553. Its telephone number is 516-794-4500, and its website is www.frequencyelectronics.com. The information contained on, or otherwise accessible through, our website is not incorporated into, and does not constitute a part of this prospectus, any accompanying prospectus supplement or any other report or document we file with or furnish to the Commission.

RISK FACTORS

Investing in our securities involves substantial risks. Before purchasing our securities, you should carefully consider the risk factors discussed herein and in our Annual Report on Form 10-K for the year ended April 30, 2026, which are incorporated by reference into this prospectus, as such may be updated and supplemented by our subsequent Commission filings, as well as the risks, uncertainties and additional information set forth in (i) future Commission filings that are deemed incorporated by reference herein and (ii) the applicable prospectus supplement. Each of the risks described could result in a material decrease in the value of our securities and your investment in them. Risks related to any specific securities we or the selling stockholders offer will be described in the applicable prospectus supplement relating to those securities.

USE OF PROCEEDS

Unless we state otherwise in the applicable prospectus supplement, we expect to use the net proceeds from our sale of offered securities for working capital and general corporate purposes.

Any specific allocation of the net proceeds of an offering by us of securities will be determined at the time of such offering and will be described in the accompanying prospectus supplement. In the event that any net proceeds are not immediately applied, we may temporarily hold them as cash, deposit them in banks, or invest them in cash equivalents or securities that our investment policies permit us to invest in from time to time. We will not receive any proceeds from the sale of shares of our common stock by the selling stockholders.

DESCRIPTION OF SECURITIES

This prospectus contains summary descriptions of the securities that we or the selling stockholders may offer from time to time. As further described in this prospectus, these summary descriptions are not meant to be complete descriptions of each security. The particular terms of any security will be described in the accompanying prospectus supplement. The accompanying prospectus supplement may add, update or change the terms and conditions of the securities as described in this prospectus.

DESCRIPTION OF CAPITAL STOCK

The following description of our capital stock is based upon our certificate of incorporation (“Certificate of Incorporation”), our Amended and Restated By-Laws (“By-Laws”) and applicable provisions of Delaware law, in each case, as currently in effect as of the date of this prospectus. The following description is only a summary of the material provisions of our capital stock set forth in our Certificate of Incorporation and our By-Laws and does not purport to be complete, and is subject to and qualified in its entirety by reference to such documents, the information regarding our capital stock incorporated by reference herein from our Commission filings and the applicable provisions of the Delaware General Corporation Law. Copies of our Certificate of Incorporation and our By-Laws have been filed as exhibits to the registration statement of which this prospectus forms a part. See “Where You Can Find More Information.”

The particular terms of any series of preferred stock we offer will be described in the related prospectus supplement. You should read that description, together with the more detailed provisions of our Certificate of Incorporation and the certificate of designations relating to the particular series of preferred stock. The certificate of designations relating to each particular series of preferred stock will be filed as an exhibit to a document incorporated by reference into the registration statement of which this prospectus forms a part.

General

Under the Certificate of Incorporation, our authorized capital stock consists of 20,000,000 shares of common stock, \$1.00 par value per share, and 600,000 shares of preferred stock, \$1.00 par value per share.

All outstanding shares of common stock are duly authorized, validly issued, fully-paid and non-assessable.

Common Stock

Voting Rights

Each holder of common stock is entitled to one vote for each share of common stock held on all matters submitted to a vote of stockholders, except as otherwise expressly provided in the Certificate of Incorporation or required by applicable law. The Certificate of Incorporation does not provide for cumulative voting for the election of directors.

Dividend Rights

Holders of common stock are entitled to receive dividends as may be declared from time to time by our board of directors out of funds legally available therefor and in the sole discretion of our board of directors, except as otherwise provided by law or the Certificate of Incorporation.

Liquidation Rights

Pursuant to Delaware law, in the event of the liquidation, dissolution, or winding-up of the Company, the remaining assets legally available for distribution to stockholders shall be distributed ratably among the holders of common stock.

Other Rights

Holders of our common stock have no preemptive rights and no right to convert their common stock into any other securities. Our common stock is not subject to any redemption or sinking fund provisions.

Preferred Stock

Our board of directors may issue shares of preferred stock from time to time in series or otherwise without further stockholder action. Our board of directors has the authority to make designations regarding any preferred stock it issues, including preferences, voting powers and relative, participating, optional or other special rights and qualifications, limitations or restrictions of such preferred stock.

Anti-Takeover Provisions

Certain provisions of the Certificate of Incorporation and the By-Laws and Delaware law could have an anti-takeover effect and could delay, discourage or prevent a tender offer or takeover attempt that a stockholder might consider to be in its best interests, including attempts that might otherwise result in a premium being paid over the market price of our common stock.

Certificate of Incorporation and Bylaw Provisions

The Certificate of Incorporation and the By-Laws contain provisions that could have the effect of delaying or preventing changes in control or changes in our management without the consent of our board of directors, including, among other things:

- no cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates;
- the right of our board of directors to elect a director to fill a vacancy in our board of directors, which prevents stockholders from being able to fill vacancies on our board of directors;
- the requirement that a special meeting of stockholders may be called only by our chairperson of the board of directors, our president or our board of directors;
- the ability of our board of directors, by majority vote, to amend the By-Laws, which may allow our board of directors to take additional actions to prevent a hostile acquisition and inhibit the ability of an acquirer to amend the By-Laws to facilitate a hostile acquisition;
- advance notice procedures with which stockholders must comply to nominate candidates to our board of directors or to propose matters to be acted upon at a stockholders' meeting, which may preclude stockholders from bringing matters before a meeting of stockholders or from making nominations for directors at a meeting of stockholders if the proper procedures are not followed; and
- the requirement that a business combination with any party that beneficially owns 5% or more of the capital stock then entitled to vote on the election of directors be approved by the affirmative vote of (i) not less than 75% of the outstanding shares of capital stock entitled to vote on the election of directors and (ii) not less than a majority of all outstanding shares of capital stock, in each case, excluding all capital stock owned by the acquiring party and subject to certain exceptions and qualifications provided in the Certificate of Incorporation.

Delaware Law

We are subject to Section 203 of the Delaware General Corporation Law (“DGCL”), which prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years after the date that such stockholder became an interested stockholder, with the following exceptions:

- before such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon the closing of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction began, excluding for purposes of determining the voting stock outstanding (but not the outstanding voting stock owned by the interested stockholder) those shares owned by (i) persons who are directors and also officers and (ii) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or after such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of the stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

In general, Section 203 defines business combination to include the following:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge, or other disposition of 10% or more of the assets of the corporation involving the interested stockholder;
- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock or any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loss, advances, guarantees, pledges, or other financial benefits by or through the corporation.

In general, Section 203 defines an “interested stockholder” as an entity or person who, together with the person’s affiliates and associates, beneficially owns, or within three years prior to the time of determination of interested stockholder status did own, 15% or more of the outstanding voting stock of the corporation.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Equiniti Trust Company, LLC.

Listing

Our common stock is listed on the Nasdaq Global Market under the symbol “FEIM”.

DESCRIPTION OF WARRANTS

This section describes some of the general terms and provisions applicable to warrants we may issue from time to time. We will describe the specific terms of any warrants and the applicable warrant agreements in the applicable prospectus supplement. The following description and any description of the warrants in the applicable prospectus supplement may not be complete and is subject to and qualified in its entirety by reference to the terms and provisions of the applicable warrant agreements. Copies of the form of agreement for each warrant and the warrant certificate, if any, which we refer to collectively as “warrant agreements,” and reflecting the provisions to be included in such agreements that will be entered into with respect to a particular offering of each type of warrant, will be filed with the Commission and incorporated by reference as exhibits to the registration statement of which this prospectus is a part.

We may issue, either separately or together with other securities, warrants for the purchase of any, including any combination of, common stock or preferred stock that we may sell. Warrants may be issued independently, or together with common stock or preferred stock offered by any prospectus supplement and may be attached to or separate from any such offered securities. Any warrants will be issued under warrant agreements to be entered into between us and a bank or trust company, as warrant agent, all to be set forth in the applicable prospectus supplement relating to any or all warrants with respect to which this prospectus is being delivered.

The following description sets forth certain general terms and provisions of the warrants to which any prospectus supplement may relate. The particular terms of such warrants and the extent, if any, to which the general provisions may apply to the warrants so offered will be described in the applicable prospectus supplement. To the extent that any particular terms of the warrants, warrant agreements or warrant certificates described in a prospectus supplement differ from any of the terms described in this section, then the terms described in this section will be deemed to have been superseded by that prospectus supplement. We encourage you to read the applicable warrant agreement for additional information before you purchase any of our warrants.

General

The prospectus supplement will describe the terms of the warrants, as well as the related warrant agreement and warrant certificates, including the following, where applicable:

- the securities that may be purchased upon exercise of the warrants;
- the number of securities purchasable upon exercise of each warrant;
- the initial price at which such number of securities may be purchased upon such exercise (and if such price may be wholly or partly payable in cash or wholly or partly payable with other types of consideration);
- the designation and terms of the securities, if other than common stock, purchasable upon exercise of the warrants and of any securities, if other than common stock, with which the warrants are issued;
- the procedures and conditions relating to the exercise of the warrants;
- the date, if any, on and after which the warrants, and any securities with which the warrants are issued, will be separately transferable;
- the offering price, if any, of the warrants;
- the date on which the right to exercise the warrants will commence and the date on which that right will expire;
- if applicable, a discussion of the material United States federal income tax considerations applicable to the exercise of the warrants;
- whether the warrants represented by the warrant certificates will be issued in registered or bearer form and, if registered, where they may be transferred and registered;
- whether the warrants will be listed on any securities exchange;
- call provisions, if any, of the warrants;
- anti-dilution provisions, if any, of the warrants;
- the name of the warrant agent; and
- any other material terms of the warrants.

No Rights of Security Holder Prior to Exercise

Before the exercise of their warrants and their registration as holders of the underlying securities, holders of warrants will not have any of the rights of registered holders of the underlying securities purchasable upon the exercise of the warrants, and will not be entitled to, among other things, vote or receive dividend or interest payments or similar distributions on the securities purchasable upon exercise.

SELLING STOCKHOLDERS

In addition to covering offerings by our Company, this prospectus also relates to the potential sale by certain of our stockholders, who we refer to in this prospectus as the “selling stockholders,” of up to 1,000,000 shares of our common stock that were issued and outstanding prior to the original date of filing of the registration statement of which this prospectus forms a part. The selling stockholders acquired the shares included in this prospectus in open market transactions not involving the Company from 2012 to 2024. The selling stockholders may also include donees, transferees or other successors in interest to stockholders who originally acquired their shares of our common stock pursuant to those transactions.

Information about the selling stockholders, where applicable, including their identities, the number of shares of our common stock owned by each selling stockholder prior to the offering, the number of shares of our common stock to be offered by each selling stockholder and the number of shares of our common stock to be owned by each selling stockholder after completion of the offering, will be set forth in an applicable prospectus supplement. The applicable prospectus supplement will also disclose whether any of the selling stockholders has held any position or office with, has been employed by, or otherwise has had a material relationship with, us during the three years prior to the date of the applicable prospectus supplement.

While the registration statement of which this prospectus forms a part registers the sale of their shares of our common stock, the selling stockholders may alternatively sell or transfer all or a portion of their shares pursuant to any available exemption from the registration requirements of the Securities Act.

We will not receive any proceeds from the sale of shares of our common stock by selling stockholders.

PLAN OF DISTRIBUTION

We or the selling stockholders may use this prospectus and any accompanying prospectus supplement to sell our securities from time to time in one or more transactions as follows:

- directly to one or more purchasers;
- to or through underwriters;
- to or through dealers, who may act as agents or principals, including a block trade (which may involve crosses) in which a broker or dealer so engaged will attempt to sell as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- through agents;
- ordinary brokerage transactions and transactions in which the broker solicits purchasers;
- in “at-the-market” offerings within the meaning of Rule 415(a)(4) under the Securities Act, to or through a market maker or into an existing trading market, on an exchange or otherwise;
- through any combination of these methods of sale; or
- through any other method permitted by applicable law and described in a prospectus supplement.

Each prospectus supplement relating to an offering of securities will set forth the specific plan of distribution and state the terms of the offering, including:

- the method of distribution of the securities offered therein;
- the names of any underwriters, dealers, or agents;
- information about the selling stockholders, where applicable, including their identities, the number of shares of our common stock owned by each selling stockholder prior to the offering, the number of shares of our common stock to be offered by each selling stockholder and the number of shares of our common stock to be owned by each selling stockholder after completion of the offering;
- the public offering or purchase price of the offered securities and the net proceeds that we or the selling stockholders will receive from the sale;
- any underwriting discounts, commissions or other items constituting underwriters’ compensation;
- any discounts, commissions, or fees allowed, re-allowed or paid to dealers or agents; and
- any securities exchange on which the offered securities may be listed.

Any public offering price and any discounts, commissions, fees or concessions allowed or re-allowed or paid to underwriters, dealers, or agents may be changed from time to time.

Distribution Through Underwriters

We or the selling stockholders may offer and sell our securities from time to time to one or more underwriters who would purchase the securities as principal for resale to the public, either on a firm commitment or best efforts basis. If underwriters are used in the sale of our securities, we will execute an underwriting agreement with them at the time of the sale and will name them in the applicable prospectus supplement. In connection with these sales, the underwriters may be deemed to have received compensation from us or the selling stockholders in the form of underwriting discounts and commissions. The underwriters also may receive commissions from purchasers of securities for whom they may act as agent. Unless we specify otherwise in the applicable prospectus supplement, the underwriters will not be obligated to purchase the securities unless the conditions set forth in the underwriting agreement are satisfied, and if the underwriters purchase any of the securities, they generally will be required to purchase all of the offered securities. The underwriters may acquire the securities for their own account and may resell the securities from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or varying prices determined at the time of sale. The underwriters may sell the offered securities to or through dealers, and those dealers may receive discounts, concessions, or commissions from the underwriters as well as from the purchasers for whom they may act as agent.

Distribution Through Dealers

We or the selling stockholders may offer and sell securities from time to time to one or more dealers who would purchase the securities as principal. The dealers then may resell the offered securities to the public at fixed or varying prices to be determined by those dealers at the time of resale. We will set forth the names of any dealers and the terms of the transaction in the applicable prospectus supplement.

Distribution Through Agents

We or the selling stockholders may offer and sell our securities on a continuous basis through agents that become parties to an underwriting or distribution agreement. We will name any agent involved in the offer and sale, and describe any commissions payable by us or the selling stockholders in the applicable prospectus supplement. Unless we specify otherwise in the applicable prospectus supplement, the agent will be acting on a best efforts basis during the appointment period. The agent may make sales in privately negotiated transactions and by any other method permitted by law, including sales deemed to be an “at-the-market” offering as defined in Rule 415 promulgated under the Securities Act, including sales made directly on The Nasdaq Global Market, or sales made to or through a market maker other than on an exchange.

Direct Sales

We or the selling stockholders may sell directly to, and solicit offers from, institutional investors or others who may be deemed to be underwriters, as defined in the Securities Act, for any resale of the securities. We will describe the terms of any sales of this kind in the applicable prospectus supplement.

General Information

Any underwriters, dealers or agents participating in an offering of securities may be deemed to be underwriters, and any discounts and commissions received by them and any profit realized by them on resale of the offered securities, may be deemed to be underwriting discounts and commissions under the Securities Act.

We or the selling stockholders may offer to sell securities either at a fixed price or at prices that may vary, at market prices prevailing at the time of sale, at prices related to prevailing market prices, or at negotiated prices. Securities may be sold in connection with a remarketing after their purchase by one or more firms acting as principal for their own accounts or as our agent. In addition, we may issue the securities as a dividend or distribution to our existing security holders.

In connection with an underwritten offering of the securities, the underwriters may engage in over-allotment, stabilizing transactions and syndicate covering transactions in accordance with Regulation M under the Exchange Act. Over-allotment involves sales in excess of the offering size, which creates a short position for the underwriters. The underwriters may enter bids for, and purchase, securities in the open market in order to stabilize the price of the securities. Syndicate covering transactions involve purchases of the securities in the open market after the distribution has been completed in order to cover short positions. In addition, the underwriting syndicate may reclaim selling concessions allowed to an underwriter or a dealer for distributing the securities in the offering if the syndicate repurchases previously distributed securities in transactions to cover syndicate short positions, in stabilization transactions, or otherwise. These activities may cause the price of the securities to be higher than it would otherwise be. Those activities, if commenced, may be discontinued at any time.

Ordinarily, each issue of securities offered by us will be a new issue, and there will be no established trading market for any security other than our common stock, which is listed on The Nasdaq Global Market under the symbol “FEIM,” prior to its original issue date. We may not list any particular series of securities on a securities exchange or quotation system. Any underwriters to whom or agents through whom the offered securities are sold for offering and sale may make a market in the offered securities. However, any underwriters or agents that make a market will not be obligated to do so and may stop doing so at any time without notice. We cannot assure you that there will be a liquid trading market for the offered securities.

We or the selling stockholders may authorize underwriters, dealers or agents to solicit offers by certain purchasers to purchase the securities from us or the selling stockholders at the public offering price set forth in the applicable prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. The contracts will be subject only to those conditions set forth in the related prospectus supplement, and the related prospectus supplement will set forth any commissions we pay for solicitation of these contracts.

Under agreements that may be entered into with us or the selling stockholders, underwriters, dealers and agents who participate in the distribution of the securities may be entitled to indemnification by us or the selling stockholders against certain civil liabilities, including liabilities under the Securities Act, or to contribution with respect to payments which the underwriters, dealers or agents may be required to make.

Conflict of Interest

We or the selling stockholders may engage underwriters, dealers and agents in connection with the offering of any of the securities described in this prospectus, some of whom may have a “conflict of interest,” as such term is defined by the Financial Industry Regulatory Authority, Inc. In the event an underwriter, dealer or agent who is participating in the offering has a conflict of interest, we will describe the nature of the conflict in the applicable prospectus supplement, and, if applicable, the name of the underwriter, dealer or agent who is acting as the “qualified independent underwriter” and its role and responsibilities in the offering.

The underwriters, dealers and agents that we may use, as well as their affiliates, may engage in financial or other business transactions with, or perform other services for, us, our subsidiaries and the selling stockholders in the ordinary course of business and may receive a portion of the proceeds from the offering.

LEGAL MATTERS

Unless otherwise specified in the applicable prospectus supplement, the validity of the securities offered hereby will be passed upon for us by McGuireWoods LLP, Richmond, Virginia. Any underwriters, dealers or agents will be advised by their own legal counsel concerning issues related to the offering of securities pursuant to this prospectus.

EXPERTS

The financial statements incorporated by reference in this prospectus and elsewhere in the registration statement have been so incorporated by reference in reliance upon the report of Grant Thornton LLP, independent registered public accountants, upon the authority of said firm as experts in accounting and auditing.

PART II**INFORMATION NOT REQUIRED IN THE PROSPECTUS****ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION**

Set forth below is an estimate (except in the case of the registration fee) of the amount of fees and expenses to be incurred in connection with the issuance and distribution of the offered securities registered hereby, other than underwriting discounts and commission, if any, incurred in connection with the sale of the offered securities.

Securities and Exchange Commission registration fee	\$	21,119.64	
Accounting fees and expenses			*
Legal fees and expenses			*
Printing expenses			*
Miscellaneous (including transfer agent fees)			*
Total	\$		*

* Estimated expenses are not presently known. Estimated fees and expenses associated with future offerings will be provided in the applicable prospectus supplement.

ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Sections 145(a) and (b) of the Delaware General Corporation Law (“DGCL”) provide generally that a corporation has the power to indemnify its officers, directors, employees and agents against expenses, including attorneys’ fees, judgments, fines and settlement amounts actually and reasonably incurred by them in connection with the defense of any action by reason of being or having been directors, officers, employees or agents of the corporation (or serving or having served in such positions in another entity at the request of the corporation) if such person shall have acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation (and, with respect to any criminal action, had no reasonable cause to believe the person’s conduct was unlawful), provided that in the event of any action or suit by or in the right of the corporation to procure a judgment in its favor, the corporation may indemnify against expenses, including attorneys’ fees, actually and reasonably incurred by such person, except that no such indemnification shall be provided as to any claim, issue or matter as to which such person shall have been judged to have been liable to the corporation unless and only to the extent that the Court of Chancery of the State of Delaware, or another court in which the suit was brought, shall determine upon application that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court deems proper.

Section 145(c) of the DGCL provides that to the extent that a present or former director or officer of a corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to in Sections 145(a) and (b) of the DGCL, as described in the preceding paragraph, or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses, including attorneys’ fees, actually and reasonably incurred by such person in connection therewith.

As permitted by Section 102(b)(7) of the DGCL, the Company’s Certificate of Incorporation, as amended, provides that a director shall not be personally liable to the Company or its stockholders for monetary damages for breach of fiduciary duty as a director, except that a director may be liable (i) for any breach of the director’s duty of loyalty to the Company or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the DGCL or (iv) for any transaction from which the director derived an improper personal benefit.

In addition, as permitted by the DGCL, the Company’s By-Laws and Certificate of Incorporation, as amended, provide that the Company will indemnify its directors and officers to the fullest extent permitted by applicable law. Further, the Company’s By-Laws provide that the Company will, to the fullest extent not prohibited by applicable law, pay the expenses, including attorneys’ fees, incurred by a director or officer in defending any proceeding in advance of its final disposition, provided, however, that, to the extent required by law, such payment of expenses in advance of the final disposition of the proceeding shall be made only upon receipt of an undertaking by the applicable person to repay all amounts advanced if it should be ultimately determined that he or she is not entitled to be indemnified.

ITEM 16. EXHIBITS

The following exhibits are filed herewith or incorporated by reference herein as indicated:

EXHIBIT INDEX

Exhibit No.	Description
1.1	Form of Underwriting Agreement.**
2.1	Stock Purchase Agreement, dated as of February 21, 2012, by and among the Registrant, Elcom Technologies Inc. and the stockholders of Elcom Technologies Inc. identified on the signature pages thereto. (Incorporated by reference to Exhibit 2.1 to Registrant's Current Report on Form 8-K, File No. 001-08061, filed on February 27, 2012.)
4.1	Copy of Certificate of Incorporation of the Registrant filed with the Secretary of State of Delaware. (Incorporated by reference to Exhibit 3.1 to Registrant's Annual Report on Form 10-K for the year ended April 30, 2026, File No. 001-08061.)
4.2	Amendment to Certificate of Incorporation of the Registrant filed with the Secretary of State of Delaware on March 27, 1981. (Incorporated by reference to Exhibit 3.2 to Registrant's Annual Report on Form 10-K for the year ended April 30, 2026, File No. 001-08061.)
4.3	Amendment to Certificate of Incorporation of the Registrant filed with the Secretary of State of Delaware on October 26, 1984. (Incorporated by reference to Exhibit 3.3 to Registrant's Annual Report on Form 10-K for the year ended April 30, 2026, File No. 001-08061.)
4.4	Amendment to Certificate of Incorporation of the Registrant filed with the Secretary of State of Delaware on October 22, 1986. (Incorporated by reference to Exhibit 3.4 to Registrant's Annual Report on Form 10-K for the year ended April 30, 2026, File No. 001-08061.)
4.5	Amended and Restated Certificate of Incorporation of the Registrant filed with the Secretary of State of Delaware on October 26, 1987. (Incorporated by reference to Exhibit 3.5 to Registrant's Annual Report on Form 10-K for the year ended April 30, 2026, File No. 001-08061.)
4.6	Amended Certificate of Incorporation of the Registrant filed with the Secretary of State of Delaware on November 2, 1989. (Incorporated by reference to Exhibit 3.6 to Registrant's Annual Report on Form 10-K for the year ended April 30, 2026, File No. 001-08061.)
4.7	Amended and Restated By-Laws of the Registrant, as amended. (Incorporated by reference to Exhibit 3.1 to Registrant's Current Report on Form 8-K, File No. 001-08061, filed on June 25, 2020.)
4.8	Specimen of Common Stock certificate. (Incorporated by reference to Exhibit 4.1 to Registrant's registration statement on Form S-1, File No. 2-29609.)
4.9	Form of Certificate of Designation (for Preferred Stock).**
4.10	Specimen Preferred Stock Certificate.**
4.11	Form of Warrant Agreement.**
4.12	Form of Warrant Certificate.**
5.1	Opinion of McGuireWoods LLP.*
23.1	Consent of Grant Thornton LLP.*
23.2	Consent of McGuireWoods LLP (included in Exhibit 5.1).*
24.1	Power of Attorney (included on signature page).*
107	Filing Fee Table.*

* Filed herewith.

** To be filed, if necessary, by amendment to this Registration Statement or as an exhibit to a report filed under the Exchange Act and incorporated herein by reference.

ITEM 17. UNDERTAKINGS

(a) The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Filing Fee Tables" in the effective registration statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that: paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Exchange Act that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement;

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act to any purchaser:

(i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of this Registration Statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. *Provided, however,* that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date; or

(5) That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities:

The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in this Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that, in the opinion of the Securities and Exchange Commission, such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Mitchel Field, State of New York, on July 17, 2026.

FREQUENCY ELECTRONICS, INC.

By: /s/ Steven L. Bernstein
Steven L. Bernstein
Chief Financial Officer, Secretary and Treasurer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints each of Thomas McClelland and Steven L. Bernstein, or either of them, his or her true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments and registrations filed pursuant to Rule 462 under the Securities Act) to this Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his substitutes or substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed below by the following persons in the capacities indicated on July 17, 2026.

Signature	Title
<u>/s/ Thomas McClelland</u> Thomas McClelland	President, Chief Executive Officer and Director (principal executive officer)
<u>/s/ Steven L. Bernstein</u> Steven L. Bernstein	Chief Financial Officer, Secretary and Treasurer (principal financial and accounting officer)
<u>/s/ Russell M. Sarachek</u> Russell M. Sarachek	Director
<u>/s/ Richard Schwartz</u> Richard Schwartz	Director
<u>/s/ Jonathan Brolin</u> Jonathan Brolin	Director
<u>/s/ Lance W. Lord</u> Lance W. Lord	Director



July 17, 2026

Frequency Electronics, Inc.
55 Charles Lindbergh Blvd.
Mitchel Field, New York 11553

Frequency Electronics, Inc.
Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as special counsel to Frequency Electronics, Inc., a Delaware corporation (the “Company”), in connection with the Registration Statement on Form S-3 (the “Registration Statement”) being filed by the Company on the date of this opinion letter with the Securities and Exchange Commission (the “SEC”) in connection with the registration under the Securities Act of 1933, as amended (the “Securities Act”), of (i) up to \$100,000,000 in aggregate offering price of the Primary Common Stock, Preferred Stock and Warrants that may be offered and sold from time to time by the Company (each as defined below, collectively, the “Primary Securities”) and (ii) up to 1,000,000 shares of Common Stock (the “Secondary Common Stock”) that may be offered and sold from time to time by certain selling stockholders (such selling stockholders, the “Selling Stockholders”) to be identified in one or more prospectus supplements (the Primary Securities and the shares of Secondary Common Stock, collectively, the “Securities”). This opinion letter is being furnished in accordance with the requirements of Item 16 of Form S-3 and Item 601(b)(5)(i) of Regulation S-K promulgated under the Securities Act.

We understand that the Securities, which are described in the Registration Statement, will be issued, or have been acquired by the Selling Stockholders, as applicable, as follows:

(a) any shares of the Company’s common stock, par value \$1.00 per share (the “Common Stock”), to be offered and sold by the Company (the “Primary Common Stock”), will be issued pursuant to the Company’s Certificate of Incorporation, as amended (the “Certificate of Incorporation”), and any shares of the Company’s preferred stock, par value \$1.00 per share (the “Preferred Stock”), will be issued pursuant to a certificate of amendment to the Certificate of Incorporation;

(b) the warrants described in the Registration Statement (the “Warrants”) to purchase shares of Primary Common Stock, shares of Preferred Stock or any combination thereof will be designated by the Company at the time of the offering and may be issued pursuant to one or more warrant agreements (each, a “Warrant Agreement”) proposed to be entered into between the Company and a bank or trust company, as warrant agent, to be named therein; and

(c) the shares of Secondary Common Stock were acquired by the Selling Stockholders in the manner described in the Registration Statement.

The Primary Securities are to be issued in one or more series. The Primary Securities may be offered and sold by the Company, and the shares of Secondary Common Stock may be offered and sold by the Selling Stockholders, on a continuous or delayed basis pursuant to Rule 415 under the Securities Act, from time to time as set forth in the Registration Statement, the prospectus contained therein (the “Prospectus”) and any amendments or supplements thereto.

McGuireWoods LLP | www.mcguirewoods.com

Atlanta | Austin | Baltimore | Charlotte | Charlottesville | Chicago | Dallas | Houston | Jacksonville | London | Los Angeles - Century City | New York |
Norfolk | Pittsburgh | Raleigh | Richmond | San Francisco | Seattle | Tysons | Washington, D.C.

Documents Reviewed

In connection with this opinion letter, we have examined the following documents:

- (a) the Registration Statement, including the exhibits thereto; and
- (b) the Prospectus.

In addition we have examined and relied upon the following:

(i) a certificate from the Secretary of the Company certifying as to (A) true and correct copies of the Certificate of Incorporation and the Amended and Restated By-Laws of the Company (the “Organizational Documents”) and (B) the resolutions of the Board of Directors of the Company authorizing, among other things, the filing of the Registration Statement by the Company;

(ii) a certificate, dated July 17, 2026, issued by the Secretary of State of the State of Delaware, attesting to the corporate status of the Company in the State of Delaware (the “Corporate Status Certificate”); and

(iii) originals, or copies identified to our satisfaction as being true copies, of such other records, documents and instruments as we have deemed necessary for the purposes of this opinion letter.

“Applicable Law” means the laws of the State of New York and the Delaware General Corporation Law.

Assumptions Underlying Our Opinions

For all purposes of the opinions expressed herein, we have assumed, without independent investigation, the following:

(a) Factual Matters. To the extent that we have reviewed and relied upon or will review and rely upon (i) certificates of the Company or authorized representatives thereof, (ii) representations of the Company set forth in any Warrant Agreement and (iii) certificates and assurances from public officials, all of such certificates, representations and assurances are accurate with regard to factual matters and all official records (including filings with public authorities) are properly indexed and filed and are accurate and complete.

(b) Authentic and Conforming Documents. All documents submitted to us as originals are authentic, complete and accurate, and all documents submitted to us as copies conform to authentic original documents.

(c) Signatures; Legal Capacity. The signatures of individuals who have signed or will sign any Warrant or Warrant Agreement are genuine. All individuals who have signed or will sign any Warrant or Warrant Agreement have the legal capacity to execute such Warrant or Warrant Agreement.

(d) Organizational Status, Power and Authority of Certain Parties. All parties to any Warrant Agreement (other than any individual) (i) are or will be, as of the date any such Warrant Agreement is executed and delivered, validly existing and in good standing in their respective jurisdictions of formation, except that no such assumption is made as to the Company as of the date hereof and (ii) have or will have, as of the date any such Warrant Agreement is executed and delivered, the power and authority to execute, deliver and perform any such Warrant Agreement and the documents required or permitted to be delivered and performed thereunder, except that no such assumption is made as to the Company as of the date hereof.

(e) Authorization, Execution and Delivery of Warrant Agreement by Certain Parties. Any Warrant Agreement and the documents required or permitted to be delivered thereunder have been or will be, as of the date any such Warrant Agreement is executed and delivered, duly authorized by all necessary corporate, limited liability company, business trust, partnership or other action on the part of the parties thereto and have been or will be, as of the date any such Warrant Agreement is executed and delivered, duly executed and delivered by such parties, except that no such assumptions are made as to the Company as of the date hereof.

(f) Warrant Agreement Binding on Certain Parties. Any Warrant Agreement and the documents required or permitted to be delivered thereunder are or will be, as of the date any such Warrant Agreement is executed and delivered, valid and binding obligations enforceable against the parties thereto in accordance with their terms, except that no such assumption is made as to the Company as of the date hereof.

(g) Governing Law. Any Warrant or Warrant Agreement will be governed by the laws of the State of New York.

(h) Noncontravention. The execution and delivery of any Warrant Agreement by any party thereto nor the performance by such party of its obligations thereunder will not conflict with or result in a breach of (i) the certificate or articles of incorporation, bylaws, certificate or articles of organization, operating agreement, certificate of limited partnership, partnership agreement, trust agreement or other similar organizational documents of any such party, except that no such assumption is made as to the Company as to its Organizational Documents as of the date hereof, (ii) any law or regulation of any jurisdiction applicable to any such party, except that no such assumption is made as to the Company as to any Applicable Law as of the date hereof, or (iii) any order, writ, injunction or decree of any court or governmental instrumentality or agency applicable to any such party or any agreement or instrument to which any such party may be a party or by which its properties are subject or bound, except that no such assumption is made as to the Company as to any Warrant Agreement as of the date hereof.

(i) Governmental Approvals. All consents, approvals and authorizations of, or filings with, governmental authorities that were required as a condition to the issuance of the shares of Secondary Common Stock have been obtained or made. All consents, approvals and authorizations of, or filings with, governmental authorities that are required as a condition to the issuance of the Primary Securities or the offer and sale of the shares of Secondary Common Stock as contemplated by the Registration Statement, or the execution and delivery of any Warrant Agreement by the parties thereto or the performance by such parties of their obligations thereunder will have been obtained or made, except that no such assumption is made with respect to any consent, approval, authorization or filing that is applicable to the Company or the Selling Stockholders as of the date hereof.

(j) Registration. The Registration Statement shall have been declared effective under the Securities Act and such effectiveness shall not have been terminated or rescinded.

(k) No Mutual Mistake, Amendments, etc. There has not been any mutual mistake of fact, fraud, duress or undue influence in connection with the issuance of the shares of Secondary Common Stock. There will not be, as of the date any Primary Security is issued or any Warrant Agreement is executed and delivered, any mutual mistake of fact, fraud, duress or undue influence in connection with the issuance of the Primary Securities or the offer and sale of the shares of Secondary Common Stock as contemplated by the Registration Statement, the Prospectus and any amendments or supplements thereto. There are and will be no oral or written statements or agreements that modify, amend or vary, or purport to modify, amend or vary, any of the terms of any Warrant Agreement.

Our Opinions

Based on and subject to the foregoing and the exclusions, qualifications, limitations and other assumptions set forth in this opinion letter, we are of the opinion that:

1. Organizational Status. The Company is a validly existing corporation under the laws of the State of Delaware and is in good standing under such laws.

2. Power and Authority. The Company has the corporate power and authority to issue the Primary Securities.

3. Primary Common Stock. With respect to any Primary Common Stock, when (a) the Board of Directors of the Company or a duly constituted and acting committee thereof (such Board of Directors or committee being hereinafter referred to as the “Board”) has taken all necessary corporate action to authorize and approve (“Authorizing Resolutions”) the issuance of such Primary Common Stock from the then authorized number of Common Stock available therefore, (b) the terms for the issuance and sale of such Primary Common Stock have been established in conformity with the applicable Authorizing Resolutions, (c) such Primary Common Stock has been issued and sold as contemplated by the Registration Statement, the Prospectus and the applicable supplement to such Prospectus, (d) the Company has received the consideration provided for in the applicable supplement to the Prospectus and any applicable definitive purchase, underwriting or similar agreement, (e) such consideration per share is not less than the amount specified in the applicable Authorizing Resolutions and (f) certificates in the form required under the laws of the State of Delaware representing the shares of such Primary Common Stock are duly executed, countersigned, registered and delivered, if such Primary Common Stock is certificated, or book-entry notations in the form required under the laws of the State of Delaware have been made in the share register of the Company, if such Primary Common Stock is not represented by certificates, such Primary Common Stock will be validly issued, fully paid and non-assessable.

4. Preferred Stock. With respect to any Preferred Stock of any series, when (a) the Board has taken all necessary corporate action to authorize and approve the issuance of such series of Preferred Stock from the then authorized number of Preferred Stock available therefore, (b) the terms of such series of Preferred Stock and for their issuance and sale have been established in conformity with the applicable Authorizing Resolutions, (c) such Preferred Stock has been issued and sold as contemplated by the Registration Statement, the Prospectus and the applicable supplement to such Prospectus, (d) the Company has received the consideration provided for in the applicable supplement to the Prospectus and any applicable definitive purchase, underwriting or similar agreement, (e) such consideration per share is not less than the amount specified in the applicable Authorizing Resolutions, (f) a certificate of designation with respect to such series of Preferred Stock has been duly filed with the Secretary of State of the State of Delaware and (g) certificates in the form required under the laws of the State of Delaware representing the shares of such Preferred Stock are duly executed, countersigned, registered and delivered, if such Preferred Stock is certificated, or book-entry notations in the form required under the laws of the State of Delaware have been made in the share register of the Company, if such Preferred Stock is not represented by certificates, such Preferred Stock of such series will be validly issued, fully paid and non-assessable.

5. Warrants. With respect to any Warrants, when (a) the Board has taken all necessary corporate action to authorize and approve the issuance of such Warrants, (b) the terms of such Warrants and for their issuance and sale have been established in conformity with the applicable Authorizing Resolutions, (c) such Warrants have been issued and sold as contemplated by the Registration Statement, the Prospectus and the applicable supplement to such Prospectus, (d) the Company has received the consideration provided for in the applicable supplement to the Prospectus and any applicable definitive purchase, underwriting or similar agreement and (e) such Warrants have been authenticated or countersigned in accordance with the provisions of any applicable Warrant Agreement, such Warrants will constitute the valid and binding obligations of the Company, enforceable against the Company in accordance with their terms, under the laws of the State of New York.

6. Secondary Common Stock. The shares of Secondary Common Stock are validly issued, fully paid and non-assessable.

Matters Excluded from Our Opinions

We express no opinion with respect to the following matters:

(a) Indemnification and Change of Control. The enforceability of any agreement relating to (i) indemnification, contribution or exculpation from costs, expenses or other liabilities or (ii) changes in the organizational control or ownership of any party, which agreement (in the case of clause (i) or clause (ii)) is contrary to public policy or Applicable Law.

(b) Jurisdiction, Venue, etc. The enforceability of any agreement to submit to the jurisdiction of any specific federal or state court (other than the enforceability in a court of the State of New York of any such agreement to submit to the jurisdiction of a court of the State of New York), to waive any objection to the laying of the venue, to waive the defense of forum non conveniens in any action or proceeding referred to therein, to waive trial by jury, to effect service of process in any particular manner or to establish evidentiary standards, and the enforceability of any agreement regarding the choice of law governing any Warrant or Warrant Agreement (other than the enforceability in a court of the State of New York or in a federal court sitting in the State of New York and applying New York law to any such agreement that the laws of the State of New York shall govern).

(c) Remedies. The enforceability of any provision in any Warrant Agreement to the effect that rights or remedies are not exclusive, that every right or remedy is cumulative and may be exercised in addition to any other right or remedy, that the election of some particular remedy does not preclude recourse to one or more others or that failure to exercise or delay in exercising rights or remedies will not operate as a waiver of any such right or remedy.

(d) Exercise Price Adjustments. The validity, legally binding effect or enforceability of any provision in any Warrant or Warrant Agreement that requires or relates to adjustments to the exercise price at a rate or in an amount that a court would determine in the circumstances under Applicable Law to be commercially unreasonable or a penalty or forfeiture.

Qualifications and Limitations Applicable to Our Opinions

The opinions set forth above are subject to the following qualifications and limitations:

(a) Applicable Law. Our opinions are limited to the Applicable Law, and we do not express any opinion concerning any other law.

(b) Bankruptcy. Our opinions are subject to the effect of any applicable bankruptcy, insolvency (including laws relating to preferences, fraudulent transfers and equitable subordination), reorganization, moratorium and other similar laws affecting creditors' rights generally.

(c) Equitable Principles. Our opinions are subject to the effect of general principles of equity (regardless of whether considered in a proceeding in equity or at law), including concepts of materiality, reasonableness, good faith and fair dealing. In applying such principles, a court, among other things, might limit the availability of specific equitable remedies (such as injunctive relief and the remedy of specific performance), might not allow a creditor to accelerate maturity of debt or exercise other remedies upon the occurrence of a default deemed immaterial or for non-credit reasons or might decline to order a debtor to perform covenants in any Warrant Agreement.

(d) Unenforceability of Certain Provisions. Provisions contained in the Securities or any Warrant Agreement that require waivers or amendments to be made only in writing may be unenforceable or ineffective, in whole or in part. The inclusion of such provisions, however, does not render any of the Securities or any such Warrant Agreement invalid as a whole.

(e) Choice of New York Law and Forum. To the extent that any of our opinions relate to the enforceability of the choice of New York law or any choice of New York forum provisions of any Warrant or Warrant Agreement, our opinion is rendered in reliance upon N.Y. Gen. Oblig. Law §§ 5-1401 and 5-1402 and N.Y. CPLR 327(b) and is subject to the qualification that such enforceability may be limited by principles of public policy, comity and constitutionality. We express no opinion as to whether a United States federal court would have subject-matter or personal jurisdiction over a controversy arising under any Warrant or Warrant Agreement.

Miscellaneous

The foregoing opinions are being furnished only for the purpose referred to in the first paragraph of this opinion letter. Our opinions are based on statutes, regulations and administrative and judicial interpretations that are subject to change. We undertake no responsibility to update or supplement these opinions subsequent to the effective date of the Registration Statement. Headings in this opinion letter are intended for convenience of reference only and shall not affect its interpretation. We hereby consent to the filing of this opinion letter as Exhibit 5.1 to the Registration Statement and to the reference to our firm in the Registration Statement and the Prospectus under the caption "Legal Matters." In giving this consent, we do not admit that we are within the category of persons whose consent is required by Section 7 of the Securities Act or the rules and regulations of the SEC promulgated thereunder.

Very truly yours,

/s/ McGuireWoods LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have issued our report dated July 16, 2026 with respect to the consolidated financial statements of Frequency Electronics, Inc. included in the Annual Report on Form 10-K for the year ended April 30, 2026, which are incorporated by reference in this Registration Statement. We consent to the incorporation by reference of the aforementioned report in this Registration Statement, and to the use of our name as it appears under the caption “Experts.”

/s/ GRANT THORNTON LLP

Melville, New York
July 17, 2026

CALCULATION OF FILING FEE TABLES

S-3

Frequency Electronics, Inc.

Table 1: Newly Registered and Carry Forward Securities

Line Item Type	Security Type	Security Class Title	Notes	Fee Calculation Rule	Amount Registered	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
<i>Newly Registered Securities</i>									
Fees to be Paid	Equity	Common Stock, par value \$1.00 per share	(1)	457(a)	1,000,000	\$ 52.93	\$ 52,930,000.00	0.0001381	\$ 7,309.64
Fees to be Paid	Equity	Common Stock, par value \$1.00 per share	(2)	457(o)				0.0001381	
Fees to be Paid	Equity	Preferred Stock, par value \$1.00 per share	(3)	457(o)				0.0001381	
Fees to be Paid	Other	Warrants	(4)	457(o)				0.0001381	
Fees to be Paid	Unallocated (Universal) Shelf	Unallocated (Universal) Shelf	(5)	457(o)		\$	\$ 100,000,000.00	0.0001381	\$ 13,810.00
Total Offering Amounts:							\$ 152,930,000.00		21,119.64
Total Fees Previously Paid:									
Total Fee Offsets:									0.00
Net Fee Due:									<u>\$ 21,119.64</u>

Offering Note(s)

- (1) Represents the shares of common stock of the registrant that may be offered for resale by the selling stockholders pursuant to the prospectus included in the registration statement to which this exhibit is attached.

Estimated solely for the purpose of computing the amount of the registration fee pursuant to Rule 457(c) under the Securities Act. The maximum price per share and maximum aggregate offering price are based on the average of the high and low sale prices of the shares of common stock as reported on The Nasdaq Global Market on July 16, 2026, which date is within five business days prior to filing the registration statement to which this exhibit is attached.

- (2) The amount to be registered consists of up to \$100,000,000 of an indeterminate amount of shares of common stock, shares of preferred stock and/or warrants that may be offered and sold from time to time in one or more offerings. In addition, pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), the registration statement to which this exhibit is attached also covers such indeterminate number of additional shares of common stock and preferred stock as may become issuable with respect to the shares being registered hereunder to prevent dilution in the event of a reorganization, reclassification, stock split, dividend or distribution, or any similar transaction.
- (3) The amount to be registered consists of up to \$100,000,000 of an indeterminate amount of shares of common stock, shares of preferred stock and/or warrants that may be offered and sold from time to time in one or more offerings. In addition, pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), the registration statement to which this exhibit is attached also covers such indeterminate number of additional shares of common stock and preferred stock as may become issuable with respect to the shares being registered hereunder to prevent dilution in the event of a reorganization, reclassification, stock split, dividend or distribution, or any similar transaction.
- (4) The amount to be registered consists of up to \$100,000,000 of an indeterminate amount of shares of common stock, shares of preferred stock and/or warrants that may be offered and sold from time to time in one or more offerings. In addition, pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), the registration statement to which this exhibit is attached also covers such indeterminate number of additional shares of common stock and preferred stock as may become issuable with respect to the shares being registered hereunder to prevent dilution in the event of a reorganization, reclassification, stock split, dividend or distribution, or any similar transaction.
- (5) The amount to be registered consists of up to \$100,000,000 of an indeterminate amount of shares of common stock, shares of preferred stock and/or warrants that may be offered and sold from time to time in one or more offerings. In addition, pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), the registration statement to which this exhibit is attached also covers such indeterminate number of additional shares of common stock and preferred stock as may become issuable with respect to the shares being registered hereunder to prevent dilution in the event of a reorganization, reclassification, stock split, dividend or distribution, or any similar transaction.