

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM S-1
REGISTRATION STATEMENT
UNDER THE SECURITIES ACT OF 1933

Polar Power, Inc.

(Exact name of Registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

3621
(Primary Standard Industrial
Classification Code Number)

33-0479020
(I.R.S. Employer
Identification No.)

**249 E. Gardena Blvd.
Gardena, California 90248
(310) 830-9153**

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

**Arthur D. Sams
President and Chief Executive Officer
Polar Power, Inc.
249 E. Gardena Blvd.
Gardena, California 90248
(310) 830-9153**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:
**Mitchell Nussbaum, Esq.
Holt Goddard, Esq.
Xiaoqin "Sherry" Li, Esq.
Loeb & Loeb LLP
345 Park Avenue
New York, New York 10154
Phone: (212) 407-4000
Fax: (212) 407-4990**

Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement is declared effective.

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, 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 post-effective amendment filed pursuant to Rule 462(d) 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. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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
Non-accelerated filer

☐ 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 pursuant to Section 7(a)(2)(B) of the 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 or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

The information in this preliminary prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and we are not soliciting offers to buy these securities in any jurisdiction where the offer or sale is not permitted.

Preliminary Prospectus

Subject To Completion

Dated July 27, 2026

POLAR POWER, INC.

Up to 18,341,893 Shares of Common Stock

This prospectus relates to the offer and resale from time to time by Roth Principal Investments, LLC (“Roth Principal Investments” or the “Selling Stockholder”) of up to 18,341,893 shares of our common stock, par value \$0.0001 per share (“Common Stock”), that we may, in our sole discretion, elect to issue and sell to the Selling Stockholder from time to time under a Common Stock Purchase Agreement, dated July 27, 2026, between us and the Selling Stockholder (the “Purchase Agreement”), establishing a committed equity facility (the “Committed Equity Facility”). The number of shares registered hereby has been determined by us and does not necessarily reflect the number of shares we will actually issue and sell under the Purchase Agreement, which depends on the market price of our Common Stock at the time of each sale, our election to deliver purchase notices, and the limitations described in this prospectus, including the Exchange Cap (as defined below), the 4.99% beneficial ownership limitation and the number of shares of Common Stock we have authorized and available for issuance. See “The Committed Equity Facility,” “Selling Stockholder” and “Risk Factors.”

We are not selling any securities under this prospectus and will not receive any proceeds from the resale of shares of Common Stock by the Selling Stockholder. We may, however, receive up to \$25.0 million in aggregate gross proceeds from sales of Common Stock that we elect to make to the Selling Stockholder under the Purchase Agreement from time to time, before deducting up to \$500,000 for a cash commitment fee payable to the Selling Stockholder and our other offering expenses. See “Use of Proceeds.”

Our Common Stock is listed on the Nasdaq Capital Market under the symbol “POLA.” On July 24, 2026, the last reported sale price of our Common Stock on the Nasdaq Capital Market was \$1.45 per share.

The Selling Stockholder may sell or otherwise dispose of the shares of Common Stock covered by this prospectus in a number of different ways and at varying prices. The shares of Common Stock that we may issue and sell to the Selling Stockholder under the Purchase Agreement will be purchased at a discount to the volume-weighted average price of our Common Stock for the applicable purchase period, 3.0% for market open purchases and intraday purchases, and 5.0% for pre-market and post-market (extended hours) purchases. Roth Principal Investments is an “underwriter” within the meaning of Section 2(a)(11) of the Securities Act of 1933, as amended (the “Securities Act”). See “Plan of Distribution (Conflict of Interest).”

Roth Principal Investments is an affiliate of Roth Capital Partners, LLC (“RCP”), a registered broker-dealer and FINRA member that is expected to act as the executing broker for resales of our Common Stock by Roth Principal Investments in this offering. Because Roth Principal Investments will receive all of the net proceeds from such resales, RCP is deemed to have a “conflict of interest” within the meaning of FINRA Rule 5121. Accordingly, this offering is being conducted in compliance with FINRA Rule 5121, and Digital Offering, LLC (“Digital Offering”) has agreed to act as the “qualified independent underwriter” within the meaning of Rule 5121. See “Plan of Distribution (Conflict of Interest).”

We are a “smaller reporting company” as defined in Rule 12b-2 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and have elected to take advantage of certain of the scaled disclosures available to smaller reporting companies. See “Prospectus Summary—Implications of Being a Smaller Reporting Company.”

Investing in our securities involves a high degree of risk. See “Risk Factors” beginning on page 7 of this prospectus for a discussion of information that should be considered in connection with an investment in our securities.

Neither the Securities and Exchange Commission (the “SEC”) nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is , 2026.

TABLE OF CONTENTS

About This Prospectus	1
Cautionary Note Regarding Forward-Looking Statements	2
Prospectus Summary	3
The Offering	6
Risk Factors	7
The Committed Equity Facility	11
Use of Proceeds	16
Determination of Offering Price	16
Dividend Policy	16
The Selling Stockholder	17
Description of Capital Stock	18
Plan of Distribution (Conflict of Interest)	21
Legal Matters	23
Experts	23
Where You Can Find More Information	23
Incorporation of Certain Information by Reference	24

ABOUT THIS PROSPECTUS

You should rely only on the information contained in this prospectus or any free writing prospectus that we may authorize to be delivered or made available to you. Neither we nor the Selling Stockholder has authorized any person to provide you with information different from or in addition to that contained in this prospectus or in any related free writing prospectus. We and the Selling Stockholder take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of our securities.

We are offering to sell, and seeking offers to buy, our securities only in jurisdictions where offers and sales are permitted. The distribution of this prospectus and the offering of our securities in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus must inform themselves about and observe any restrictions relating to the offering of the securities and the distribution of this prospectus outside the United States.

Unless the context otherwise requires, references in this prospectus to “Polar Power,” the “Company,” “we,” “us” and “our” refer to Polar Power, Inc., a Delaware corporation, and its consolidated subsidiaries.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. These forward-looking statements include, but are not limited to, statements concerning our strategy, future operations, future financial position, future revenues, projected costs, prospects, plans, objectives of management, expected market growth and the anticipated use of proceeds of this offering. The words “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “plan,” “predict,” “project,” “target,” “potential,” “will,” “would,” “could,” “should,” “continue” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

Forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Factors that might cause or contribute to such differences include, but are not limited to, those discussed in the section entitled “Risk Factors” and elsewhere in this prospectus.

You should not place undue reliance on forward-looking statements. Any forward-looking statement made by us in this prospectus speaks only as of the date on which it is made. We undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by applicable law.

PROSPECTUS SUMMARY

This summary highlights selected information appearing elsewhere or incorporated by reference in this prospectus. Because it is only a summary, it does not contain all of the information that you should consider before investing in our securities and it is qualified in its entirety by, and should be read in conjunction with, the more detailed information appearing elsewhere or incorporated by reference in this prospectus. Before you decide to invest in our securities, you should read the entire prospectus carefully, including “Risk Factors” and the financial statements and related notes incorporated by reference into this prospectus.

Our Company

We design, manufacture, and sell DC power generators, renewable energy and cooling systems for applications primarily in the telecommunications market and, to a lesser extent, in other markets, including military, electric vehicle, marine and industrial. We are continuously diversifying our customer base and are selling our products into non-telecommunication markets and applications at an increasing rate. The changes in customer diversity are reported in the financial section.

Within the various markets we service, our DC power systems provide reliable and low-cost DC power to service applications that do not have access to the utility grid (i.e., prime power and mobile applications) or have critical power needs and cannot be without power in the event of utility grid failure (i.e., back-up power applications) or charge batteries of various chemistries to be used in electric vehicle or renewable storage applications.

We believe it's more efficient to build power systems around the DC generator because it's more efficient to integrate with battery storage and solar photovoltaics which also operate on DC. Many applications in communications, water pumping, lighting, electric vehicle and vessel propulsion, security systems operate on DC power only. Many micro-grids and renewable energy storage systems use battery storage and therefore are DC based and use inverters to convert the DC to AC.

Serving these various markets, we offer the following configurations of our DC power systems, with output power ranging from 5 kW to 50 kW:

- Base power systems. These stationary systems integrate a DC generator with automated controls and remote monitoring, contained in an environmentally regulated enclosure.
- Hybrid power systems. These systems integrate lithium-ion batteries (or other advanced battery chemistries) storage and our standard DC power systems to provide power in both bad and off-grid applications.
- DC solar hybrid power systems. These stationary systems incorporate photovoltaic and other sources of renewable energy into our DC hybrid power systems.
- Mobile power systems. These are very light weight and compact power systems used for EV charging, robotics, communications, security.

Our DC power systems are available in diesel, natural gas, LPG / propane and renewable fuel formats, with diesel, natural gas and propane gas being the predominant formats.

Our principal executive offices are located at 249 E. Gardena Boulevard, Gardena, California 90248, and our telephone number is (310) 830-9153. Our website is www.polarpower.com. The information contained on, or that can be accessed through, our website is not part of, and is not incorporated by reference into, this prospectus, and you should not consider it part of this prospectus.

Our Strategy

Our strategic priorities include: (i) restoring profitability through operating cost discipline and product mix optimization; (ii) expanding our DC generator and hybrid power product lines to serve growing telecom, defense, and industrial backup-power demand; (iii) commercializing our lithium-ion battery storage and EV powertrain platforms; (iv) selectively pursuing strategic transactions, including acquisitions of, or mergers with, complementary businesses; and (v) strengthening our balance sheet to support these initiatives.

Recent Developments

The following summarizes certain material developments that have occurred since the filing of our Annual Report on Form 10-K for the year ended December 31, 2025. This summary should be read together with the more detailed disclosures contained in our periodic and current reports incorporated by reference into this prospectus.

Nasdaq Continued Listing Deficiency. On May 1, 2026, we received a letter from the Nasdaq staff notifying us that we were not in compliance with the \$2.5 million minimum stockholders' equity requirement for continued listing under Nasdaq Listing Rule 5550(b)(1), based on the approximately \$0.1 million of stockholders' equity reported in our Annual Report on Form 10-K for the year ended December 31, 2025. Our Common Stock continues to trade on the Nasdaq Capital Market under the symbol "POLA." On June 29, 2026, we received a letter from the Staff granted us an extension of time to regain compliance with the Rule. The terms of the extension are as follows: on or before October 28, 2026, we must opt for one of the two following alternatives to evidence compliance with the Rule: (A) we must furnish to the SEC and Nasdaq a publicly available report (e.g., a Form 8-K or Form 6-K) including: (1) a disclosure of Staff's deficiency letter and the specific deficiency(ies) cited; (2) a description of the completed transaction or event that enabled us to satisfy the stockholders' equity requirement for continued listing; (3) an affirmative statement that, as of the date of the report, we believe it has regained compliance with the stockholders' equity requirement based upon the specific transaction or event referenced in Step 2; and (4) a disclosure stating that Nasdaq will continue to monitor the our ongoing compliance with the stockholders' equity requirement and, if at the time of its next periodic we do not evidence compliance, that it may be subject to delisting, or (B) we must furnish to the SEC and Nasdaq a publicly available report including: (1) steps 1 & 2 set forth above; (2) a balance sheet no older than 60 days with pro forma adjustments for any significant transactions or event occurring on or before the report date. The pro forma balance sheet must evidence compliance with the stockholders' equity requirement; and (3) a disclosure that we believe it also satisfies the stockholders' equity requirement as of the report date and that Nasdaq will continue to monitor our ongoing compliance with the stockholders' equity requirement and, if at the time of its next periodic report we do not evidence compliance, that it may be subject to delisting.

Convertible Note Financings in May. On May 21, 2026, we issued (i) a 6% convertible redeemable note to CFI Capital LLC in the aggregate principal amount of \$600,000, for which we received net proceeds of approximately \$500,000, and (ii) a 6% convertible redeemable note to Monroe Street Capital Partners, LP in the aggregate principal amount of \$370,600, for which we received net proceeds of approximately \$307,100. Each note matures twelve months after issuance and, beginning six months after issuance, is convertible into shares of Common Stock at a conversion price equal to 80% of the lowest daily volume-weighted average price of our Common Stock over the ten trading days prior to conversion (with the conversion price decreasing to 65% of the lowest trading price over a twenty-trading-day lookback if our Common Stock is delisted from Nasdaq). In a related side letter, we agreed to seek stockholder approval, within 60 days, to permit issuances of Common Stock under these notes in excess of 19.99% of our outstanding shares.

Restructuring and Management Services Agreement. On May 21, 2026, we entered into a Restructuring, Implementation and Management Services Agreement with Mammoth Crest Capital, LLC ("MCC"), effective as of May 19, 2026, pursuant to which MCC will lead and implement operational, organizational, governance, financial and capital-structure initiatives for the Company. Under the agreement, we agreed to reconstitute our board of directors to consist of seven directors and to appoint two MCC designees, Barrett Evans and Michael Hill, as directors; Arthur D. Sams will remain Chairman and Michael Fields will remain a director. As consideration, we agreed to pay MCC \$500,000 (consisting of a \$100,000 non-refundable retainer and a \$400,000 balance, the collection of which is deferred until we consummate debt or equity financings yielding at least \$5.0 million in aggregate gross proceeds), a \$25,000 monthly retainer following delivery of specified deliverables and milestones, and to issue MCC shares of Common Stock representing 4.5% of our outstanding shares as of the effective date, which shares we agreed to include for resale registration in our next registration statement.

Revolving Loan Agreement. On May 13, 2026, we entered into a Revolving Loan Agreement with Stone Brothers Capital providing for a revolving credit facility of up to \$2.5 million bearing interest at 12% per annum. On May 18, 2026, we delivered notice terminating the agreement, effective after five business days. No loans were drawn under the facility.

Facilities and Lease Settlements. On May 11, 2026, we entered into settlement agreements with the landlords of our headquarters and warehouse facilities. On May 19, 2026, the landlord of our headquarters facility evicted us from that facility for failing to make payment per the settlement agreement, and on May 22, 2026 we entered into a new settlement agreement under which we paid the landlords a combined \$755,000 and regained access to our headquarters facility. The new settlement agreement provides for a schedule of monthly payments through April 2027 in exchange for the landlord's agreement not to seek to evict us from the headquarters facility through June 30, 2027, and provides for us to vacate the warehouse facility by August 31, 2026 in exchange for a waiver of June, July and August 2026 rents. If we fail to satisfy the conditions of the new settlement agreement, the landlords may resume eviction proceedings and we may be liable for liquidated damages and previously waived rents. We made timely rent payments in July 2026 and are in compliance with the new settlement agreement.

Board Changes. On May 14, 2026, two of our independent directors, Keith Albrecht and Katherine Koster, submitted resignations effective May 19, 2026. On May 18, 2026, Mr. Albrecht rescinded his resignation, which our board approved effective immediately.

Going Concern. For the year ended December 31, 2025, we incurred a net loss of approximately \$9.1 million and our stockholders' equity declined to approximately \$0.1 million. The report of our independent registered public accounting firm on our 2025 consolidated financial statements includes an explanatory paragraph expressing substantial doubt about our ability to continue as a going concern. For the three-month period ending March 31, 2026, we incurred a net loss of \$0.1 million, and our stockholders' equity improved to \$2.3 million as reported in our unaudited condensed financial statements on Form 10-Q filed with the Securities and Exchange Commission on May 20, 2026.

Convertible Note Financing in June. On June 30, 2026, we issued to Mayers Ventures LLC ("Mayers") a convertible promissory note in the aggregate principal amount of \$275,000. The consideration price of the note was \$250,000. The note has an interest rate of 10% per annum, and the maturity date is December 30, 2027. It is convertible into shares of Common Stock at a conversion price equal to 90% of the lowest daily volume-weighted average price of our Common Stock over the seven trading days prior to conversion.

Series A Convertible Preferred Stock Financing. On July 21, 2026, we issued and sold to LU2 Holdings LLC, in a private placement, 500 shares of our Series A Convertible Preferred Stock, par value \$0.0001 per share (the "Series A Preferred"), having an aggregate stated value of \$500,000, together with warrants to purchase an aggregate of 150,915 and 83,841 shares of Common Stock at an exercise price of \$1.64 per share, to LU2 Holdings LLC and Mayers, respectively. The Series A Preferred has a stated value of \$1,000 per share, accrues a 10% payment-in-kind dividend, is perpetual, ranks senior to our Common Stock, and is convertible into Common Stock at a price equal to 90% of the lowest VWAP over the seven consecutive trading days immediately preceding the applicable conversion date, but not less than the floor price. The shares of Common Stock issuable upon conversion of the Series A Preferred and upon exercise of those warrants are NOT registered by this prospectus and are expected to be registered pursuant to a separate registration statement. See "Risk Factors" and "Description of Capital Stock."

The Committed Equity Facility

On July 27, 2026, we entered into a Common Stock Purchase Agreement (the "Purchase Agreement") and a related Registration Rights Agreement (the "Registration Rights Agreement") with Roth Principal Investments. Under the Purchase Agreement, upon the initial satisfaction of each of the conditions to Roth Principal Investments' purchase obligations set forth in the Purchase Agreement (the initial satisfaction of all of such conditions, the "Commencement"), none of which are within Roth Principal Investments' control, including that the registration statement that includes this prospectus shall have been declared effective by the SEC, we have the right, but not the obligation, to sell to Roth Principal Investments, and Roth Principal Investments is obligated to purchase, from time to time over a 36-month period (unless the Purchase Agreement is earlier terminated), beginning on the date on which the Commencement occurs (such date, the "Commencement Date"), up to the lesser of (i) \$25,000,000 in aggregate gross purchase price of Common Stock and (ii) the number of shares of Common Stock that does not exceed 19.99% of the shares of our common stock outstanding immediately prior to the execution of the Purchase Agreement (the "Exchange Cap"). The purchase price per share is 97% of the volume-weighted average price of our Common Stock over the applicable purchase period for market open purchases and intraday purchases, and 95% of such volume-weighted average price for pre-market and post-market (extended hours) purchases, in each case subject to a \$0.50 threshold price below which we may not require purchases. We agreed to pay Roth Principal Investments a \$500,000 for a cash commitment fee, equal to 2.0% of the \$25,000,000 commitment, payable exclusively through Roth Principal Investments' withholding of 10% of the purchase price otherwise payable to us in connection with each purchase. Sales under the Purchase Agreement are subject to the effectiveness of the registration statement of which this prospectus forms a part, a 4.99% beneficial ownership limitation, and the Exchange Cap until we obtain stockholder approval. Other than a prohibition, subject to certain exceptions, on our entering into specified "Variable Rate Transactions" (as defined in the Purchase Agreement) during the term of the Purchase Agreement, there are no restrictions on future financings, rights of first refusal, participation rights, penalties or liquidated damages in the Purchase Agreement or the Registration Rights Agreement. Roth Principal Investments has agreed that it will not engage in or effect, directly or indirectly, any short sales of the Common Stock or any hedging transaction that establishes a net short position in the Common Stock during the term of the Purchase Agreement. The registration statement of which this prospectus forms a part is being filed to satisfy our obligations under the Registration Rights Agreement. See "The Committed Equity Facility."

Our ability to draw on the Committed Equity Facility is, as a practical matter, limited to approximately \$1.3 million, approximately 5.1% of the \$25.0 million commitment, until we obtain stockholder approval under Nasdaq Rule 5635(d), and we do not currently have a sufficient number of authorized and unissued shares of Common Stock to draw the facility in full at lower prices. See "Risk Factors."

Corporate Information

We were incorporated in California in October 1979 and reincorporated in Delaware on November 21, 2016. Our Common Stock is listed on the Nasdaq Capital Market under the symbol "POLA."

Implications of Being a Smaller Reporting Company

We are a "smaller reporting company" as defined in Rule 12b-2 of the Exchange Act. As a smaller reporting company, we are eligible to take advantage of certain exemptions from various reporting requirements applicable to other public companies that are not smaller reporting companies, including, but not limited to, presenting only the two most recent fiscal years of audited financial statements in our Annual Report on Form 10-K and reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements.

THE OFFERING

Securities offered by the Selling Stockholder	Up to 18,341,893 shares of Common Stock that we may elect, in our sole discretion, to issue and sell to the Selling Stockholder from time to time under the Purchase Agreement.
Selling Stockholder	Roth Principal Investments, LLC
Common Stock outstanding⁽¹⁾	3,851,684 shares as of July 27, 2026. The number of shares outstanding does not give effect to the issuance of the 18,341,893 shares registered hereby, the conversion of the Series A Preferred or the exercise of the related warrants.
Use of proceeds	We will not receive any proceeds from the resale of shares by the Selling Stockholder. We may receive up to \$25.0 million in aggregate gross proceeds from sales of Common Stock to the Selling Stockholder under the Purchase Agreement, before deducting up to \$500,000 for a cash commitment fee and our other offering expenses. We intend to use any such proceeds for working capital and general corporate purposes, including repayment of outstanding indebtedness and funding our restructuring. See “Use of Proceeds.”
Exchange Cap	Until we obtain stockholder approval under Nasdaq Listing Rule 5635(d), we may not issue more than 769,952 shares of Common Stock under the Purchase Agreement (19.99% of the 3,851,684 shares of Common Stock outstanding immediately prior to execution of the Purchase Agreement). At recent market prices, this permits draws of only approximately \$1.3 million, or approximately 5.1% of the \$25.0 million commitment.
Risk Factors	Investing in our Common Stock involves a high degree of risk. See “Risk Factors.”
Trading Symbol	Our Common Stock is listed on the Nasdaq Capital Market under the symbol “POLA.”
Transfer Agent	VStock Transfer, LLC
Plan of Distribution	The Selling Stockholder may sell the shares as described under “Plan of Distribution (Conflict of Interest).” Roth Principal Investments is an “underwriter” within the meaning of Section 2(a)(11) of the Securities Act.
Committed Equity Facility	Under the Purchase Agreement we may sell up to \$25.0 million of Common Stock to the Selling Stockholder over a 36-month period following the Commencement Date, at a purchase price of 97% of the volume-weighted average price of our Common Stock for the applicable purchase period (95% for pre-market and post-market extended-hours purchases), subject to a \$0.50 threshold price. We control the timing and amount of each sale; the Selling Stockholder has no right to require us to sell any shares.
Beneficial Ownership Limitation	We may not issue, and the Selling Stockholder may not acquire, shares under the Purchase Agreement to the extent the Selling Stockholder would beneficially own more than 4.99% of our outstanding Common Stock.
Conflict of Interest	Roth Principal Investments is an affiliate of RCP, a registered broker-dealer and FINRA member expected to act as executing broker for resales in this offering. RCP is therefore deemed to have a “conflict of interest” under FINRA Rule 5121, and Digital Offering is acting as qualified independent underwriter.
Authorized Shares	We have 50,000,000 shares of Common Stock authorized. After giving effect to shares outstanding, existing reserves, the Series A Preferred required reserve and the new warrants, approximately 38.4 million shares remain available for the Committed Equity Facility. If the average purchase price is below approximately \$0.65 per share, we will not have enough authorized shares to draw the facility in full.

(1) The number of shares of our Common Stock outstanding is based on 3,851,684 shares of Common Stock outstanding as of July 27, 2026, and excludes: (i) shares issuable upon exercise of stock options outstanding under our equity incentive plans; (ii) shares reserved for future issuance under our equity incentive plans; (iii) shares issuable upon conversion of the convertible notes we issued in May 2026; (iv) shares issuable upon conversion of the Series A Preferred; (v) shares issuable upon exercise of the warrants issued on July 10, 2026; and (vi) the 18,341,893 shares registered for resale under this prospectus.

Unless otherwise indicated, all information in this prospectus is based on 3,851,684 shares of Common Stock outstanding as of July 27, 2026 and does not give effect to the issuance of any shares to the Selling Stockholder under the Purchase Agreement, the conversion of the Series A Preferred, or the exercise of the warrants issued on July 10, 2026.

RISK FACTORS

An investment in our securities involves a high degree of risk. You should carefully consider the following risks, together with the other information contained in this prospectus as well as the risks described under the caption “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2025 and in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2026 and in the other filings we make with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, which we have incorporated herein by reference, before deciding to invest in our securities. The risks and uncertainties described below and elsewhere in this prospectus are not the only risks that we face. Additional risks and uncertainties not currently known to us, or that we currently deem immaterial, may also impair our business operations or adversely affect our financial condition. The risks described in these documents are not the only ones we face, but those that we consider to be material. Additional risks not presently known to us or that we currently believe are immaterial may also significantly impair our business operations and financial condition. Please also read carefully the section titled “Cautionary Note Regarding Forward-Looking Statements,” where we describe additional uncertainties associated with our business and the forward-looking statements included or incorporated by reference in this prospectus.

Risks Related to this Offering and Ownership of Our Common Stock

The market price of our Common Stock has been, and is likely to continue to be, volatile.

The trading price of our Common Stock has fluctuated significantly and is likely to remain volatile. Broad market and industry factors, as well as factors specific to us, may significantly affect the trading price of our Common Stock, regardless of our actual operating performance.

We may be unable to maintain compliance with the continued listing requirements of the Nasdaq Capital Market.

On May 1, 2026, we received a letter from the Nasdaq staff notifying us that we were not in compliance with the \$2.5 million minimum stockholders’ equity requirement for continued listing on the Nasdaq Capital Market under Nasdaq Listing Rule 5550(b)(1), based on the approximately \$0.1 million of stockholders’ equity reported in our Annual Report on Form 10-K for the year ended December 31, 2025. We submitted a compliance plan with Nasdaq on June 15, 2026, outlining specific measures that we intend to take to regain and maintain compliance with the Rule including, among other things, planned upcoming financing activities and an internal restructuring. We provided financial information demonstrating its ability to regain compliance.

On June 29, 2026, we received a letter from the Staff granted us an extension of time to regain compliance with the Rule. The terms of the extension are as follows: on or before October 28, 2026, we must opt for one of the two following alternatives to evidence compliance with the Rule: (A) we must furnish to the SEC and Nasdaq a publicly available report (e.g., a Form 8-K or Form 6-K) including: (1) a disclosure of Staff’s deficiency letter and the specific deficiency(ies) cited; (2) a description of the completed transaction or event that enabled us to satisfy the stockholders’ equity requirement for continued listing; (3) an affirmative statement that, as of the date of the report, we believe it has regained compliance with the stockholders’ equity requirement based upon the specific transaction or event referenced in Step 2; and (4) a disclosure stating that Nasdaq will continue to monitor the our ongoing compliance with the stockholders’ equity requirement and, if at the time of its next periodic we do not evidence compliance, that it may be subject to delisting, or (B) we must furnish to the SEC and Nasdaq a publicly available report including: (1) steps 1 & 2 set forth above; (2) a balance sheet no older than 60 days with pro forma adjustments for any significant transactions or event occurring on or before the report date. The pro forma balance sheet must evidence compliance with the stockholders’ equity requirement; and (3) a disclosure that we believe it also satisfies the stockholders’ equity requirement as of the report date and that Nasdaq will continue to monitor our ongoing compliance with the stockholders’ equity requirement and, if at the time of its next periodic report we do not evidence compliance, that it may be subject to delisting.

Regardless of which alternative we choose, if we fail to evidence compliance upon filing its periodic report for the year ending December 31, 2026, with the SEC and Nasdaq, we may be subject to delisting. In the event we do not satisfy these terms, Nasdaq will provide written notification that its securities will be delisted. At that time, we may appeal Nasdaq’s determination to a Hearings Panel.

We effected a 1-for-7 reverse stock split of our Common Stock in 2025, and we may seek to effect an additional reverse stock split in order to satisfy Nasdaq’s continued listing requirements or for other reasons. A reverse stock split may not increase, or maintain over time, the market price of our Common Stock, and could adversely affect the liquidity and trading market for our Common Stock.

We may seek stockholder approval for, and effect, a reverse stock split in order to satisfy Nasdaq's minimum bid price requirement. There can be no assurance that any such reverse stock split will result in a sustained increase in the market price of our Common Stock.

Future sales of our Common Stock or securities convertible into Common Stock could depress the market price.

Sales of substantial amounts of our Common Stock in the public market, or the perception that such sales may occur, could cause the market price of our Common Stock to decline and could impair our ability to raise capital through future offerings. For example, the convertible notes we issued in May 2026 are convertible into Common Stock at variable conversion prices set at a discount to the market price of our Common Stock, which could result in the issuance of a substantial and increasing number of shares as our stock price declines, causing significant dilution and downward pressure on the market price of our Common Stock.

The issuance and sale of our Common Stock to Roth Principal Investments may cause dilution to our other stockholders and the sale of the shares of Common Stock acquired by Roth Principal Investments, or the perception that such sales may occur, could cause the price of our Common Stock to decrease.

On July 27, 2026, we entered into the Purchase Agreement with Roth Principal Investments, pursuant to which Roth Principal Investments has committed to purchase up to \$25,000,000 of Purchase Shares, upon the terms and subject to the conditions set forth in the Purchase Agreement. We are registering 18,341,893 shares of Common Stock for resale under this prospectus, which is approximately 476% of the 3,851,684 shares of Common Stock outstanding as of July 27, 2026 and many times our current public float. If we issue and sell all of those shares to the Selling Stockholder, our existing stockholders would be diluted to a very substantial degree. The Selling Stockholder is expected to resell the shares it acquires into the public market, and the resale of a large number of shares, or the perception that such resales may occur, could cause the market price of our Common Stock to decline and impair our ability to raise capital.

Shares are sold to the Selling Stockholder at a discount to market, and a declining stock price increases the number of shares we must issue to raise the same amount of capital.

The purchase price for shares sold under the Purchase Agreement is 97% of the volume-weighted average price of our Common Stock over the applicable purchase period for market open and intraday purchases, a 3.0% discount to market and 95% of such volume-weighted average price for pre-market and post-market (extended hours) purchases, a 5.0% discount to market. Because the number of shares we must issue to raise a given dollar amount rises as our stock price falls, and because resales by the Selling Stockholder may themselves put downward pressure on the price, sales under the Committed Equity Facility could contribute to a cycle of declining price and increasing dilution. We may not require the Selling Stockholder to purchase shares at a price below the \$0.50 threshold price, which may prevent us from accessing the facility precisely when we most need capital.

Our ability to draw on the Committed Equity Facility is severely limited until we obtain stockholder approval under Nasdaq Rule 5635(d).

Until we obtain stockholder approval, Nasdaq Listing Rule 5635(d) limits the number of shares we may issue under the Purchase Agreement to 769,952 shares, or 19.99% of the 3,851,684 shares of Common Stock outstanding immediately prior to execution of the Purchase Agreement. At recent market prices, that cap permits us to draw only approximately \$1.3 million, approximately 5.1% of the \$25.0 million commitment. There is no assurance that we will obtain stockholder approval. Until we do, the Committed Equity Facility is, as a practical matter, largely unavailable to us.

The Exchange Cap may not be lifted by the Base Price mechanic, and Nasdaq may disagree with how we have calculated it.

The Exchange Cap does not apply for so long as the average price paid for all shares issued under the Purchase Agreement equals or exceeds the Base Price. Pursuant to the Purchase Agreement, the Base Price equals the sum of (i) the Minimum Price and (ii) \$0.6494. Minimum Price means \$1.45, representing the Nasdaq official closing price of the Common Stock on the Trading Market (as reflected on Nasdaq.com) on July 24, 2026, the Trading Day immediately preceding the date of the Purchase Agreement, which was lower than the average Nasdaq official closing price of the Common Stock on the Trading Market for the five (5) consecutive Trading Days ending on that date (subject to adjustment for any reorganization, recapitalization, non-cash dividend, stock split, reverse stock split or other similar transaction that occurs on or after the date of the Purchase Agreement). Nasdaq Listing Rule 5635(d) does not prescribe how the Base Price is to be computed, and Nasdaq has not confirmed our formulation. We have computed the Base Price by adding the entire commitment fee to the Minimum Price and dividing by the number of shares issuable under the Exchange Cap, which produces a materially higher Base Price of \$2.0994 per share and makes the Exchange Cap substantially more difficult to exceed. If Nasdaq were to determine that our formulation does not satisfy Rule 5635(d), we could be required to obtain stockholder approval before issuing shares in excess of the Exchange Cap, we may be unable to access a substantial portion of the Committed Equity Facility, and any issuance in excess of the Exchange Cap could constitute a violation of Nasdaq listing rules. We are already subject to a Nasdaq deficiency with respect to the stockholders' equity requirement, and an additional listing rule violation could result in the delisting of our Common Stock.

We may not have a sufficient number of authorized shares of Common Stock to draw the Committed Equity Facility in full, and we may need stockholder approval to increase our authorized share capital.

We are authorized to issue 50,000,000 shares of Common Stock. After giving effect to the 3,854,181 shares issued, approximately 4.2 million shares subject to existing reserves (including our at-the-market offering program with ThinkEquity LLC, the May 2026 convertible notes and our equity incentive plans), the 3,518,292 shares reserved for issuance upon conversion of the Series A Preferred and exercise of the related warrants, only approximately 38.4 million shares remain available for issuance under the Committed Equity Facility. If the average purchase price under the Purchase Agreement is below approximately \$0.65 per share, we will not have enough authorized shares to draw the full \$25.0 million, and we would be unable to access the remaining commitment unless our stockholders approve an increase in our authorized share capital. There is no assurance that such approval will be obtained.

Draws under the Committed Equity Facility before the conversion price of our Series A Preferred is fixed will permanently increase the dilution from the Series A Preferred.

The conversion price of our Series A Preferred is determined by reference to the lowest of several measurement dates, one of which is the date the registration statement of which this prospectus forms a part is declared effective. Because sales of Common Stock to the Selling Stockholder at a discount to market may depress the market price of our Common Stock, draws under the Committed Equity Facility before the Series A conversion price is finally fixed would lower that conversion price and permanently increase the number of shares issuable on conversion of the Series A Preferred. The Series A conversion price can only decrease from its initial reference price and cannot increase. This dynamic transfers value from our common stockholders to the holders of the Series A Preferred.

The SEC may require us to reduce the number of shares registered under this prospectus, and we may be required to file one or more additional registration statements.

Under the SEC staff's interpretation of Rule 415 under the Securities Act, a resale registration by a single selling stockholder that is large relative to the issuer's public float may be recharacterized as a primary offering by the issuer through the selling stockholder, which would not permit the registration statement to be used for continuous resales at prevailing market prices. We are registering 18,341,893 shares, many times our public float. If the SEC staff seeks to so characterize this offering, or otherwise requires us to reduce the number of shares registered, the Registration Rights Agreement requires us to reduce the number of registrable securities included in the registration statement, after consultation with the Selling Stockholder and its counsel, until the staff permits the registration statement to become effective, and to file one or more additional registration statements covering the remaining shares as and when permitted. Any such reduction would delay or limit our ability to draw on the Committed Equity Facility, because we may not sell shares to the Selling Stockholder that are not covered by an effective registration statement. Unlike some registration rights agreements, the Registration Rights Agreement does not provide for the payment of liquidated damages if we fail to meet the filing or effectiveness deadlines; our exposure is instead that the Committed Equity Facility would be unavailable to us.

Roth Principal Investments is an underwriter, and its affiliate has a conflict of interest under FINRA Rule 5121.

Roth Principal Investments is an “underwriter” within the meaning of Section 2(a)(11) of the Securities Act. Roth Principal Investments is an affiliate of RCP, a registered broker-dealer and FINRA member that is expected to act as the executing broker for resales of our Common Stock in this offering. Because Roth Principal Investments will receive all of the net proceeds of those resales, RCP is deemed to have a “conflict of interest” under FINRA Rule 5121, and this offering is being conducted in compliance with that rule. Digital Offering has agreed to act as the qualified independent underwriter, and we have agreed to pay Digital Offering a \$50,000 fee and to indemnify it against certain liabilities. The qualified independent underwriter has not, and will not, independently verify the adequacy or accuracy of the information contained in this prospectus.

We control the timing and amount of draws, but there is no assurance we will be able to sell the full \$25.0 million of Common Stock under the Committed Equity Facility.

The Selling Stockholder has no right to require us to sell any shares, and we have no obligation to sell any shares. Our ability to sell shares depends on the effectiveness of the registration statement of which this prospectus forms a part, our satisfaction of the conditions to each purchase, the market price and trading volume of our Common Stock, the Exchange Cap, the 4.99% beneficial ownership limitation, the \$0.50 threshold price and our authorized share capital. As a result, we may receive substantially less than \$25.0 million, and we may receive nothing at all.

We will not receive any proceeds from the resale of shares by the Selling Stockholder.

We will not receive any proceeds from the resale of shares of Common Stock by the Selling Stockholder. The Selling Stockholder will receive all of the proceeds from those resales. We will receive proceeds only from our sales of Common Stock to the Selling Stockholder under the Purchase Agreement, which are subject to the limitations described above and are reduced by our other offering expenses and the \$500,000 for a cash commitment fee, which is satisfied through the Selling Stockholder’s withholding of 5% of the purchase price otherwise payable to us in connection with each purchase.

Our management team will have broad discretion over the use of the net proceeds from our sale of shares of common stock to Roth Principal Investments, if any, and you may not agree with how we use the proceeds and the proceeds may not be invested successfully.

Our management team will have broad discretion as to the use of the net proceeds from our sale of shares of common stock to Roth Principal Investments, if any, and we could use such proceeds for purposes other than those contemplated at the time of commencement of this offering. Accordingly, you will be relying on the judgment of our management team with regard to the use of those net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used appropriately. It is possible that, pending their use, we may invest those net proceeds in a way that does not yield a favorable, or any, return for us. The failure of our management team to use such funds effectively could have a material adverse effect on our business, financial condition, operating results and cash flows.

Our restructuring and our ability to continue as a going concern depend substantially on the Committed Equity Facility and on obtaining stockholder approvals.

Our ability to fund our operations and complete our restructuring depends substantially on our access to the Committed Equity Facility and on our ability to obtain the stockholder approvals necessary to lift the Exchange Cap and increase our authorized share capital. If we are unable to obtain those approvals, if the registration statement of which this prospectus forms a part is not declared effective or ceases to be available, or if the conditions to purchases under the Purchase Agreement are not satisfied, our business, financial condition and our ability to continue as a going concern would be materially and adversely affected.

THE COMMITTED EQUITY FACILITY

On July 27, 2026, we entered into the Purchase Agreement and the Registration Rights Agreement with Roth Principal Investments. The following summary describes the material terms of those agreements and is qualified in its entirety by reference to the agreements themselves, which are filed as exhibits to the registration statement of which this prospectus forms a part.

Common Stock

The material terms and provisions of our Common Stock are described under the caption “Description of Capital Stock.”

Purchase of Shares Under the Purchase Agreement

Under the Purchase Agreement, we have the right, but not the obligation, to issue and sell to Roth Principal Investments, and Roth Principal Investments is obligated to purchase from us, up to the lesser of (i) \$25,000,000 in aggregate gross purchase price of Common Stock and (ii) the number of shares of Common Stock not exceeding the Exchange Cap, from time to time during the 36-month period following the Commencement Date, by our delivery of purchase notices. We may direct market open purchases, intraday purchases and pre-market and post-market purchases. The purchase price per share is 97% of the volume-weighted average price of our Common Stock for the applicable purchase period in the case of market open purchases and intraday purchases, and 95% of such volume-weighted average price in the case of pre-market purchases and post-market purchases. We may specify a Minimum Price threshold for any purchase, and in no event may we require Roth Principal Investments to purchase shares at a price below the \$0.50 threshold price. Roth Principal Investments has no right to require us to sell any shares, and we have no obligation to sell any shares; we control the timing and amount of each sale.

Market Open Purchases

From and after the Commencement Date, we will have the right, but not the obligation, from time to time at our sole discretion over the 36-month period following the Commencement Date (unless the Purchase Agreement is earlier terminated), to direct Roth Principal Investments to purchase a specified number of shares of Common Stock (each, a “Market Open Purchase”), not to exceed the maximum number of shares described below, by timely delivering an irrevocable written notice (a “Market Open Purchase Notice”) to Roth Principal Investments after 7:30 a.m. and prior to 9:00 a.m., New York City time, on any trading day we select as the purchase date (a “Purchase Date”), so long as:

- the closing sale price of our Common Stock on the trading day immediately prior to such Purchase Date is not less than the \$0.50 threshold price (the “Threshold Price”); and
- all shares of Common Stock subject to all prior purchases have been received by Roth Principal Investments.

The maximum number of shares of Common Stock that Roth Principal Investments will be required to purchase in a Market Open Purchase will not exceed the lesser of:

- 2,000,000 shares of Common Stock; and
- the product of (a) a percentage, not to exceed 25.0%, that we specify in the applicable Market Open Purchase Notice (the “Market Open Purchase Percentage”) and (b) the total number (or volume) of shares of Common Stock traded on Nasdaq during the applicable Market Open Purchase Period.

The purchase price per share for a Market Open Purchase will be equal to 97.0% of the volume-weighted average price of our Common Stock (the “VWAP”) for the applicable Market Open Purchase Period, representing a fixed 3.0% discount to such VWAP. The Market Open Purchase Period begins at the official open of the regular trading session on Nasdaq on the applicable Purchase Date and ends at the earliest of:

- 3:59 p.m., New York City time (or the earlier close of the regular trading session);
- the time at which the total number or volume of shares of Common Stock traded on Nasdaq during the period has exceeded the applicable share volume maximum for such Market Open Purchase; and
- if we specify in the applicable Market Open Purchase Notice for such Market Open Purchase that a Limit Order Discontinue Election shall apply to such Market Open Purchase, such time that the trading price of our Common Stock falls below the minimum price threshold we specify (or, if we do not specify one, 75.0% of the closing sale price on the trading day immediately prior to the Purchase Date) (the “Minimum Price Threshold”).

Certain opening and closing transactions, and, if we specify a “limit order continue election”, all trades below the applicable Minimum Price Threshold, are excluded in determining the traded volume and the VWAP for the period.

Intraday Purchases

In addition to Market Open Purchases, from and after the Commencement Date, we will also have the right, but not the obligation, to direct Roth Principal Investments to purchase, on any trading day that qualifies as a Purchase Date (whether or not a Market Open Purchase is effected on such Purchase Date), a specified number of shares of Common Stock (each, an “Intraday Purchase”), not to exceed the maximum number of shares described below, by delivering an irrevocable written notice (an “Intraday Purchase Notice”) to Roth Principal Investments after the later of 10:00 a.m., New York City time, and the end of the Market Open Purchase Period (and the Intraday Purchase Period for any earlier Intraday Purchase) on such Purchase Date, and prior to 2:00 p.m., New York City time, on such Purchase Date, so long as:

- the closing sale price of our Common Stock on the trading day immediately prior to such Purchase Date is not less than the Threshold Price; and
- all shares of Common Stock subject to all prior purchases have been received by Roth Principal Investments.

The Intraday Purchase Maximum Amount applicable to such Intraday Purchase will be equal to the lesser of:

- 2,000,000 shares of Common Stock; and
- the Intraday Purchase Percentage (as specified by us in the applicable Intraday Purchase Notice for such Intraday Purchase) of the total aggregate number (or volume) of shares of our common stock traded on Nasdaq during the applicable Intraday Purchase Valuation Period for such Intraday Purchase.

The actual number of shares of common stock that Roth Principal Investments will be required to purchase in an Intraday Purchase, which we refer to as the Intraday Purchase Share Amount, will be equal to the number of shares that we specify in the applicable Intraday Purchase Notice, subject to adjustment to the extent necessary to give effect to the applicable Intraday Purchase Maximum Amount and other applicable limitations set forth in the Purchase Agreement, including the Beneficial Ownership Limitation and, if then applicable, the Exchange Cap.

The per share purchase price that Roth Principal Investments will be required to pay for the Intraday Purchase Share Amount in an Intraday Purchase effected by us pursuant to the Purchase Agreement, if any, will be calculated in the same manner as in the case of a Market Open Purchase (including the same 3.0% fixed percentage discount to the

applicable VWAP used to calculate the per share purchase price for a Market Open Purchase as described above), provided that the VWAP used to determine the purchase price for the Intraday Purchase Share Amount to be purchased in an Intraday Purchase will be equal to the VWAP for the applicable Intraday Purchase Valuation Period on the Purchase Date for such Intraday Purchase. The Intraday Purchase Valuation Period for an Intraday Purchase is defined in the Purchase Agreement as the period during the regular trading session on Nasdaq on such Purchase Date, beginning at the latest to occur of:

- such time of confirmation of Roth Principal Investments' receipt of the applicable Intraday Purchase Notice;
- such time that the Market Open Purchase Valuation Period for any prior Market Open Purchase effected on the same Purchase Date (if any) has ended; and
- such time that the Intraday Purchase Valuation Period for the most recent prior Intraday Purchase effected on the same Purchase Date (if any) has ended,

and ending at the earliest to occur of:

- 3:59 p.m., New York City time, on such Purchase Date or such earlier time publicly announced by the trading market as the official close of the regular trading session on such Purchase Date;
- such time that the total aggregate number (or volume) of shares of common stock traded on Nasdaq during such Intraday Purchase Valuation Period reaches the applicable Intraday Purchase Share Volume Maximum for such Intraday Purchase, which will be determined by dividing (a) the applicable Intraday Purchase Share Amount for such Intraday Purchase, by (b) the Purchase Percentage we specified in the applicable Intraday Purchase Notice for determining the applicable Intraday Purchase Share Amount for such Intraday Purchase; and
- if we further specify Limit Order Discontinue Election in the applicable Intraday Purchase Notice for such Intraday Purchase, such time that the trading price of our common stock on Nasdaq during such Intraday Purchase Valuation Period (calculated in accordance with the Purchase Agreement) falls below the applicable Minimum Price Threshold.

As with Market Open Purchases, for purposes of calculating the volume of shares of common stock traded during an Intraday Purchase Valuation Period, including for purposes of determining whether the applicable Intraday Purchase Share Volume Maximum for an Intraday Purchase has been reached, for purposes of calculating the VWAP of our common stock for the applicable Intraday Purchase Valuation Period, the following transactions, to the extent they occur during such Intraday Purchase Valuation Period, are excluded: (x) the opening or first purchase of common stock at or following the official open of the regular trading session on Nasdaq on the applicable Purchase Date for such Intraday Purchase, (y) the last or closing sale of common stock at or prior to the official close of the regular trading session on Nasdaq on the applicable Purchase Date for such Intraday Purchase, and (z) if we have specified in the applicable Intraday Purchase Notice for such Intraday Purchase that a Limit Order Continue Election, rather than a Limit Order Discontinue Election, shall apply to such Intraday Purchase, all purchases and sales of common stock on Nasdaq during such Intraday Purchase Valuation Period at a price per share that is less than the applicable Minimum Price Threshold for such Intraday Purchase.

We may, in our sole discretion, timely deliver multiple Intraday Purchase Notices to Roth Principal Investments prior to 2:00 p.m., New York City time, on a single Purchase Date to effect multiple Intraday Purchases on such same Purchase Date, provided that the Market Open Purchase Valuation Period for any earlier Market Open Purchase effected on the same Purchase Date (as applicable) and the Intraday Purchase Valuation Period for the most recent prior Intraday Purchase effected on the same Purchase Date have ended prior to 2:00 p.m., New York City time, on such Purchase Date, and so long as all shares of common stock subject to all prior Purchases (as applicable) effected by us under the Purchase Agreement, including all prior purchases effected on the same Purchase Date as such applicable Intraday Purchase, have been timely received by Roth Principal Investments on the applicable Purchase Share Delivery Dates for such prior Purchases in accordance with the Purchase Agreement.

The terms and limitations that will apply to each subsequent additional Intraday Purchase effected on the same Purchase Date will be the same as those applicable to any earlier Market Open Purchase (as applicable) and any earlier Intraday Purchase effected on the same Purchase Date as such subsequent additional Intraday Purchase, and the per share purchase price for the shares of common stock that we elect to sell to Roth Principal Investments in each subsequent additional Intraday Purchase effected on the same Purchase Date as an earlier Market Open Purchase (as applicable) and/or earlier Intraday Purchase(s) effected on such Purchase Date will be calculated in the same manner as in the case of such earlier Market Open Purchase (as applicable) and such earlier Intraday Purchase(s) effected on the same Purchase Date as such subsequent additional Intraday Purchase, with the exception that the Intraday Purchase Valuation Period for each subsequent additional Intraday Purchase will begin and end at different times (and may vary in duration) during the regular trading session on such Purchase Date, in each case as determined in accordance with the Purchase Agreement.

In the case of Market Open Purchases, Intraday Purchases, Pre-Market Purchases and Post-Market Purchases effected by us under the Purchase Agreement, if any, all share and dollar amounts used in determining the purchase price per share of common stock to be purchased by Roth Principal Investments in a Market Open Purchase, an Intraday Purchase, a Pre-Market Purchase or a Post-Market Purchase (as applicable), or in determining the applicable maximum purchase share amounts or applicable volume or minimum price threshold in connection with any such Purchase (as applicable), in each case, will be equitably adjusted for any reorganization, recapitalization, non-cash dividend, stock split, reverse stock split or other similar transaction occurring during any period used to calculate such per share purchase price, maximum purchase share amounts or applicable volume or minimum price thresholds.

Pre-Market Purchases

In addition to Market Open Purchases and Intraday Purchases, from and after the Commencement Date, we will also have the right, but not the obligation, to direct Roth Principal Investments to purchase, on any trading day that qualifies as a Purchase Date, a specified number of shares of Common Stock in a pre-market (extended hours) purchase (each, a “Pre-Market Purchase”), not to exceed the lesser of (i) 1,000,000 shares of Common Stock and (ii) the product of (a) a percentage, not to exceed 20.0%, that we specify in the applicable Pre-Market Purchase Notice (the “Pre-Market Purchase Percentage”) and (b) the total volume of shares of Common Stock traded on Nasdaq during the applicable Pre-Market Purchase Period, by delivering an irrevocable written notice (a “Pre-Market Purchase Notice”) to Roth Principal Investments after 7:00 a.m. and prior to 8:30 a.m., New York City time, on such Purchase Date, so long as (i) the closing sale price of our Common Stock on the trading day immediately prior to such Purchase Date is not less than the Threshold Price and (ii) all shares of Common Stock subject to all prior purchases have been received by Roth Principal Investments.

The purchase price per share for a Pre-Market Purchase will be equal to 95% of the VWAP of our Common Stock for the applicable Pre-Market Purchase Period, representing a fixed 5.0% discount to such VWAP. We may specify a Minimum Price Threshold for a Pre-Market Purchase in the same manner as for a Market Open Purchase.

Post-Market Purchases

In addition to Market Open Purchases, Intraday Purchases and Pre-Market Purchases, from and after the Commencement Date, we will also have the right, but not the obligation, to direct Roth Principal Investments to purchase, on any trading day that qualifies as a Purchase Date, a specified number of shares of Common Stock in a post-market (extended hours) purchase (each, a “Post-Market Purchase”), not to exceed the lesser of (i) 1,000,000 shares of Common Stock and (ii) the product of (a) a percentage, not to exceed 20.0%, that we specify in the applicable Post-Market Purchase Notice (the “Post-Market Purchase Percentage”) and (b) the total volume of shares of Common Stock traded on Nasdaq during the applicable Post-Market Purchase Period, by delivering an irrevocable written notice (a “Post-Market Purchase Notice”) to Roth Principal Investments after 4:05 p.m. and prior to 5:00 p.m., New York City time, on such Purchase Date, so long as (i) the closing sale price of our Common Stock on such Purchase Date is not less than the Threshold Price and (ii) all shares of Common Stock subject to all prior purchases have been received by Roth Principal Investments.

The purchase price per share for a Post-Market Purchase will be equal to 95% of the VWAP of our Common Stock for the applicable Post-Market Purchase Period, representing a fixed 5.0% discount to such VWAP. There is no upper limit on the price per share that Roth Principal Investments could be obligated to pay for Common Stock in any Market Open Purchase, Intraday Purchase, Pre-Market Purchase or Post-Market Purchase. All share and dollar amounts used in determining the purchase price per share, the applicable maximum purchase share amounts and the applicable volume or price thresholds are subject to equitable adjustment for any reorganization, recapitalization, non-cash dividend, stock split, reverse stock split or other similar transaction as set forth in the Purchase Agreement.

Conditions Precedent to Commencement and Each Purchase

Roth Principal Investments’ obligation to accept the Purchase Notices we timely deliver under the Purchase Agreement, and to purchase shares of Common Stock in Market Open Purchases, Intraday Purchases, Pre-Market Purchases and Post-Market Purchases under the Purchase Agreement, is subject to the initial satisfaction, at Commencement, and the satisfaction, at the applicable time on the applicable Purchase Date for each purchase after the Commencement Date, of the conditions precedent set forth in the Purchase Agreement, none of which are within Roth Principal Investments’ control, including, among others, the following:

- the accuracy in all material respects of the representations and warranties of the Company in the Purchase Agreement;
- the Company having performed and complied in all material respects with all covenants, agreements and conditions required to be performed or complied with by it under the Purchase Agreement and the Registration Rights Agreement;
- the registration statement of which this prospectus forms a part having been declared effective by the SEC and remaining effective and available for the resale by Roth Principal Investments of the shares of Common Stock covered by it, and the absence of any SEC stop order suspending its effectiveness or prohibiting or suspending the use of this prospectus;
- FINRA having confirmed in writing that it has determined not to raise any objection with respect to the fairness and reasonableness of the terms and arrangements of the transactions contemplated by the Purchase Agreement and the Registration Rights Agreement;
- the final prospectus, and all reports and other documents required to have been filed by the Company under the Exchange Act, having been filed with the SEC;
- trading in the Common Stock not having been suspended by the SEC, Nasdaq or FINRA, the absence of any final and non-appealable notice that the Common Stock will be delisted, and the absence of any suspension of, or restriction on, DTC services with respect to the Common Stock;
- the Company having complied with all applicable laws in connection with the execution, delivery and performance of the Purchase Agreement and the other transaction documents;
- the absence of any law, order or injunction prohibiting, and the absence of any proceeding seeking to restrain, prevent or change, the transactions contemplated by the Purchase Agreement or the Registration Rights Agreement;
- all of the shares of Common Stock that may be issued under the Purchase Agreement having been approved for listing or quotation on Nasdaq (or an eligible market), subject only to notice of issuance;
- no Material Adverse Effect (as defined in the Purchase Agreement) having occurred and being continuing, and the absence of any bankruptcy proceeding involving the Company;
- the Company having reserved the shares of Common Stock required under the Purchase Agreement and having delivered the irrevocable transfer agent instructions and notice of effectiveness contemplated by the Purchase Agreement; and
- Roth Principal Investments having received the legal opinions and negative assurances, bring-down opinions and negative assurances, and auditor comfort letters required under the Purchase Agreement.

Exchange Cap

We may not issue, and Roth Principal Investments may not purchase, any shares of Common Stock under the Purchase Agreement to the extent the aggregate number of shares issued would exceed 769,952 shares, 19.99% of the 3,851,684 shares of Common Stock issued and outstanding immediately prior to the execution of the Purchase Agreement, unless and until we obtain stockholder approval in accordance with Nasdaq Listing Rule 5635(d), or unless the average price paid for all shares issued under the Purchase Agreement equals or exceeds the applicable Minimum Price, such that the Exchange Cap would not apply under Nasdaq rules.

Beneficial Ownership Limitation

We may not issue, and Roth Principal Investments may not acquire, any shares of Common Stock under the Purchase Agreement which, when aggregated with all other shares of Common Stock then beneficially owned by Roth Principal Investments and its affiliates, would result in beneficial ownership by Roth Principal Investments of more than 4.99% of our outstanding Common Stock.

Commitment Fee and Expenses

As consideration for its irrevocable commitment to purchase our Common Stock at our direction under the Purchase Agreement, we agreed to pay Roth Principal Investments a cash commitment fee of up to \$500,000, equal to 2.0% of the \$25,000,000. The commitment fee is payable solely and exclusively through Roth Principal Investments' withholding of cash amounts equal to 10% of the aggregate purchase price payable to us in connection with each purchase of shares under the Purchase Agreement, until the commitment fee has been paid in full; we have no obligation to pay any portion of the commitment fee by any other means. We do not issue any commitment shares under the Purchase Agreement. We also agreed to reimburse Roth Principal Investments \$75,000 for the fees and disbursements of its legal counsel incurred prior to the closing (of which a \$25,000 retainer is payable on or prior to the closing date), an additional amount of up to \$7,500 per fiscal quarter thereafter, and \$50,000 as reimbursement for the fee payable to Digital Offering, the qualified independent underwriter, in each case payable on or prior to the closing date and non-refundable regardless of whether any purchases are made. In accordance with FINRA Rule 5110, these reimbursed fees and expenses are deemed to be underwriting compensation in connection with resales by Roth Principal Investments.

Termination

We may terminate the Purchase Agreement at any time, for any reason, effective upon ten trading days' prior written notice to Roth Principal Investments, provided that we have paid the earned portion of the commitment fee and all legal fee reimbursements then due. The Purchase Agreement terminates automatically on the earliest of (i) the first day of the month following the 36-month anniversary of the Commencement Date, (ii) the date on which Roth Principal Investments has purchased shares for an aggregate gross purchase price equal to the \$25,000,000, and (iii) the occurrence of specified events, including the delisting of our Common Stock. Roth Principal Investments has no right to terminate the Purchase Agreement other than in specified circumstances.

Base Price

The Exchange Cap does not apply for so long as the average price paid for all shares issued under the Purchase Agreement equals or exceeds the Base Price. The Purchase Agreement defines the Base Price as a price per Share equal to the sum of (i) the Minimum Price and (ii) \$0.6494 (subject to adjustment for any reorganization, recapitalization, non-cash dividend, stock split, reverse stock split or other similar transaction that occurs on or after the date of the Purchase Agreement). The additional amount included in the Base Price is intended to ensure that our net proceeds per share, after giving effect to the commitment fee (which is payable exclusively through the Selling Stockholder's withholding of amounts from the purchase price otherwise payable to us, and by no other means), are not less than the Minimum Price for purposes of Nasdaq Listing Rule 5635(d). The additional amount represents the full amount of the commitment fee of \$500,000 divided by the 769,952 shares of Common Stock issuable under the Exchange Cap, resulting in a Base Price of \$2.0994 per share. We have not obtained, and may not obtain, written guidance from Nasdaq confirming our formulation. See "Risk Factors."

No Short-Selling or Hedging by Roth Principal Investments

Roth Principal Investments has agreed that none of Roth Principal Investments, any of its officers, or any entity managed or controlled by Roth Principal Investments will engage in or effect, directly or indirectly, for Roth Principal Investments' own account or for the principal account of any such entity managed or controlled by Roth Principal Investments, any short sales of the Common Stock or hedging transaction that establishes a net short position in the Common Stock during the term of the Purchase Agreement.

Prohibition on Variable Rate Transactions

Subject to specified exceptions included in the Purchase Agreement, we are limited in our ability to enter into specified "Variable Rate Transactions" (as such term is defined in the Purchase Agreement) during the term of the Purchase Agreement. Such transactions include, among others, the issuance of convertible securities with a conversion or exercise price that is based upon or varies with the trading price of our Common Stock after the date of issuance, or our effecting or entering into an agreement to effect an "equity line of credit" or other substantially similar continuous offering with a third party, in which we may offer, issue or sell Common Stock or any securities exercisable, exchangeable or convertible into Common Stock at a future determined price. Notwithstanding the foregoing, we are permitted to sell up to \$2,500,269 of shares of Common Stock pursuant to the At the Market sales agreement between the Company and ThinkEquity LLC, dated October 6, 2025, and the related prospectus supplement dated December 12, 2025 (the "ATM Program"), subject to certain restrictions. In addition, the Purchase Agreement permits the issuance of the convertible promissory notes that we anticipate issuing in one or more financings expected to close within approximately one to three weeks after the date of the Purchase Agreement, notwithstanding that such notes may otherwise constitute Variable Rate Transactions.

Effect of Sales of our Common Stock under the Purchase Agreement on our Stockholders

The shares of Common Stock to be issued or sold by us to Roth Principal Investments under the Purchase Agreement that are being registered under the Securities Act for resale by Roth Principal Investments in this offering are expected to be freely tradable. The 18,341,893 shares of Common Stock being registered for resale in this offering may be issued and sold by us to Roth Principal Investments from time to time at our discretion over a period of up to 36 months (unless the Purchase Agreement is earlier terminated), beginning on the Commencement Date. The resale by Roth Principal Investments of a significant amount of shares of Common Stock registered for resale in this offering at any given time, or the perception that these sales may occur, could cause the market price of our Common Stock to decline and to be highly volatile. Sales of our Common Stock, if any, to Roth Principal Investments under the Purchase Agreement will depend upon market conditions and other factors to be determined by us. We may ultimately decide to sell to Roth Principal Investments all, some or none of the shares of our Common Stock that may be available for us to sell to Roth Principal Investments pursuant to the Purchase Agreement.

If and when we do elect to sell shares of our Common Stock to Roth Principal Investments pursuant to the Purchase Agreement, after Roth Principal Investments has acquired such shares, Roth Principal Investments may resell all, some or none of such shares at any time or from time to time in its discretion and at different prices. As a result, investors who purchase shares from Roth Principal Investments in this offering at different times will likely pay different prices for those shares, and so may experience different levels of dilution, and in some cases substantial dilution, and different outcomes in their investment results. Investors may experience a decline in the value of the shares they purchase from Roth Principal Investments in this offering as a result of future sales made by us to Roth Principal Investments at prices lower than the prices such investors paid for their shares in this offering. In addition, if we sell a substantial number of shares of our Common Stock to Roth Principal Investments under the Purchase Agreement, or if investors expect that we will do so, the actual sales of shares or the mere existence of our arrangement with Roth Principal Investments may make it more difficult for us to sell equity or equity-related securities in the future at a time and at a price that we might otherwise wish to effect such sales.

Because the per share purchase price that Roth Principal Investments will pay for shares of Common Stock that we may elect to sell to it under the Purchase Agreement will be determined by reference to the volume weighted average price of our Common Stock during the applicable purchase valuation period on the applicable purchase date for such purchase, as of the date of this prospectus, we cannot determine the actual purchase price per share that Roth Principal Investments will be required to pay for any shares of Common Stock that we may elect to sell to Roth Principal Investments under the Purchase Agreement from and after Commencement and, therefore, we cannot be certain how many shares of Common Stock, in the aggregate, we may issue and sell to Roth Principal Investments under the Purchase Agreement from and after Commencement. As of July 27, 2026, there were 3,851,684 shares of our Common Stock outstanding, of which 3,051,613 shares were held by non-affiliates of our company. If all of the 18,341,893 shares of Common Stock offered for resale by Roth Principal Investments under this prospectus were issued and outstanding, such shares would represent approximately 82.7% of the total number of outstanding shares of Common Stock (and approximately 601% of the total number of outstanding shares of Common Stock held by non-affiliates of our company), in each case as of July 27, 2026.

Although the Purchase Agreement provides that we may sell up to \$25,000,000 of our Common Stock to Roth Principal Investments, 18,341,893 shares of Common Stock are being registered under the Securities Act for resale by Roth Principal Investments under the registration statement that includes this prospectus. At an assumed purchase price per share of \$1.45, representing the closing sale price of our Common Stock on the Nasdaq Capital Market immediately prior to the execution of the Purchase Agreement, the 18,341,893 shares of Common Stock being registered under the registration statement that includes this prospectus would sufficient to enable us to receive the full \$25,000,000 in aggregate gross proceeds from the sale of such Purchase Shares to Roth Principal Investments under the Purchase Agreement. However, depending on the market prices of our Common Stock on the purchase dates on which we elect to sell shares to Roth Principal Investments under the Purchase Agreement, we may need to register under the Securities Act additional shares of our Common Stock for resale by Roth Principal Investments in order for us to receive aggregate proceeds equal to Roth Principal Investments' \$25,000,000 maximum aggregate purchase commitment available to us under the Purchase Agreement. Moreover, to the extent that the Exchange Cap remains applicable to issuances and sales of our Common Stock under the Purchase Agreement, if we elect to issue and sell to Roth Principal Investments more shares of Common Stock than the Exchange Cap (or 769,952 shares of Common Stock) under the Purchase Agreement, which we have the right, but not the obligation, to do, we must first obtain stockholder approval to issue shares of Common Stock in excess of the Exchange Cap under the Purchase Agreement in accordance with applicable Nasdaq listing rules. Any issuance and sale by us under the Purchase Agreement of a substantial amount of shares of Common Stock in addition to the 18,341,893 shares of common stock being registered for resale by Roth Principal Investments under the registration statement that includes this prospectus could cause additional substantial dilution to our stockholders. The number of shares of Common Stock ultimately offered for resale by Roth Principal Investments through this prospectus is dependent upon the number of shares of Common Stock, if any, we elect to sell to Roth Principal Investments under the Purchase Agreement from and after the Commencement Date.

Registration Rights Agreement

Under the Registration Rights Agreement, we agreed to file with the SEC an initial registration statement on Form S-1 covering the resale by Roth Principal Investments of the maximum number of registrable securities permitted to be included thereon under applicable SEC rules, regulations and interpretations, by the tenth business day after the date of the Registration Rights Agreement, and to use commercially reasonable efforts to cause it to be declared effective by the earlier of (i) the 60th calendar day after that filing deadline, if the registration statement is reviewed by the SEC, and (ii) the fifth business day after we are notified that the registration statement will not be reviewed. The Registration Rights Agreement provides that, if the SEC staff seeks to characterize the offering as one that does not permit continuous resales at prevailing market prices under Rule 415, or otherwise requires us to reduce the number of shares registered, we will reduce the number of registrable securities included in the registration statement, after consultation with Roth Principal Investments and its counsel, and will file one or more additional registration statements covering the remaining registrable securities as and when permitted. In no event may we include any securities other than registrable securities on a registration statement filed under the Registration Rights Agreement. The Registration Rights Agreement does not provide for the payment of liquidated damages in the event we fail to satisfy the filing or effectiveness deadlines. We may not sell shares to Roth Principal Investments under the Purchase Agreement unless the shares are covered by an effective registration statement.

USE OF PROCEEDS

We will not receive any proceeds from the resale of shares of Common Stock by the Selling Stockholder. The Selling Stockholder will receive all of the proceeds from any resale of the shares covered by this prospectus.

We may receive up to \$25.0 million in aggregate gross proceeds from sales of Common Stock that we may elect to make to the Selling Stockholder from time to time under the Purchase Agreement over the 36-month period following the Commencement Date. The actual proceeds we receive will depend on the number of shares we elect to sell, the market price of our Common Stock at the time of each sale, and the limitations described under “Risk Factors” and “The Committed Equity Facility,” including the Exchange Cap, the 4.99% beneficial ownership limitation, the \$0.50 threshold price and the number of shares of Common Stock we have authorized and available for issuance. We may receive substantially less than \$25.0 million. Gross proceeds will be reduced by our other offering expenses and up to \$500,000 for a cash commitment fee payable to the Selling Stockholder, which is satisfied exclusively through the Selling Stockholder’s withholding of an amount equal to 10% of the purchase price otherwise payable to us in connection with each purchase, until the fee is paid in full.

We intend to use the net proceeds for working capital and general corporate purposes, including the repayment of outstanding indebtedness and the funding of our restructuring. The amounts and timing of our actual use of any proceeds we receive will depend on numerous factors, including those described under “Risk Factors,” and our management will retain broad discretion over their application.

We have engaged Digital Offering, a registered broker-dealer and FINRA member, to act as a qualified independent underwriter in this offering and, in such capacity, participate in the preparation of the registration statement that includes this prospectus and exercise the usual standards of “due diligence” with respect thereto. Roth Principal Investments has agreed to pay directly to Digital Offering a cash fee of \$50,000 as consideration for its services in connection with acting as the qualified independent underwriter in this offering, with such amount to be reimbursed by us on the first closing of funds received by us. Digital Offering will receive no other compensation for acting as the qualified independent underwriter in this offering. See the section titled “Plan of Distribution (Conflict of Interest)” in this prospectus for more information.

DETERMINATION OF OFFERING PRICE

We cannot currently determine the price or prices at which the shares of common stock may be sold by the Selling Stockholder under this prospectus. See “Plan of Distribution (Conflict of Interest).”

DIVIDEND POLICY

We have never declared or paid any cash dividends on our capital stock. We currently intend to retain all available funds and any future earnings to fund the development and expansion of our business, and we do not anticipate paying any cash dividends in the foreseeable future. Any future determination to declare and pay cash dividends, if any, will be made at the discretion of our board of directors and will depend on then-existing conditions, including our financial condition, results of operations, contractual restrictions, capital requirements, business prospects, and other factors that our board of directors may deem relevant.

SELLING STOCKHOLDER

This prospectus relates to the offer and sale by Roth Principal Investments of up to 18,341,893 shares of our Common Stock that may be issued by us to Roth Principal Investments under the Purchase Agreement. For additional information regarding the shares of our Common Stock included in this prospectus, see the section titled “The Committed Equity Facility” above. We are registering the shares of our Common Stock included in this prospectus pursuant to the provisions of the Registration Rights Agreement we entered into with Roth Principal Investments on July 27, 2026 in order to permit the Selling Stockholder to offer the shares of Common Stock included in this prospectus for resale from time to time. Except for the transactions contemplated by the Purchase Agreement and the Registration Rights Agreement and as set forth in the section titled “*Plan of Distribution (Conflict of Interest)*” in this prospectus, Roth Principal Investments has not had any material relationship with us within the past three years. As used in this prospectus, the term “Selling Stockholder” means Roth Principal Investments, LLC.

The table below presents information regarding the Selling Stockholder and the shares of our Common Stock that may be resold by the Selling Stockholder from time to time under this prospectus. This table is prepared based on information supplied to us by the Selling Stockholder, and reflects holdings as of July 27, 2026. The number of shares in the column “Maximum Number of Shares of Common Stock to be Offered Pursuant to this Prospectus” represents all of the shares of our Common Stock being offered for resale by the Selling Stockholder under this prospectus. The Selling Stockholder may sell some, all or none of the shares of Common Stock being offered for resale in this offering. We do not know how long the Selling Stockholder will hold the shares before selling them and, except as set forth in the section titled “*Plan of Distribution (Conflict of Interest)*” in this prospectus, we are not aware of any existing arrangements between the Selling Stockholder and any other stockholder, broker, dealer, underwriter or agent relating to the sale or distribution of the shares of our Common Stock being offered for resale by this prospectus.

Beneficial ownership is determined in accordance with Rule 13d-3(d) promulgated by the SEC under the Exchange Act, and includes shares of our Common Stock with respect to which the Selling Stockholder has sole or shared voting and investment power. Because the purchase price to be paid by the Selling Stockholder for shares of our Common Stock, if any, that we may elect to sell to the Selling Stockholder in one or more Purchases from time to time under the Purchase Agreement will be determined on the applicable purchase dates therefor, the actual number of shares of our Common Stock that we may sell to the Selling Stockholder under the Purchase Agreement may be fewer than the number of shares being offered for resale under this prospectus. The fourth column assumes the resale by the Selling Stockholder of all of the shares of our Common Stock being offered for resale pursuant to this prospectus.

Name of Selling Stockholder	Number of Shares of Common Stock Owned		Maximum Number of Shares of Common Stock to be Offered Pursuant to this Prospectus	Number of Shares of Common Stock Owned	
	Prior to Offering			After Offering	
	Number(1)	Percent		Number(2)	Percent
Roth Principal Investments, LLC(3)	0	-	18,341,893	0	-

(1) In accordance with Rule 13d-3(d) under the Exchange Act, we have excluded from the number of shares of Common Stock beneficially owned prior to the offering all of the shares of Common Stock that Roth Principal Investments may be required to purchase under the Purchase Agreement, because the issuance of such shares is solely at our discretion and is subject to conditions contained in the Purchase Agreement, the satisfaction of which are entirely outside of Roth Principal Investments’ control, including the registration statement that includes this prospectus becoming and remaining effective. Furthermore, the Purchases of Common Stock under the Purchase Agreement are subject to certain agreed upon maximum amount limitations set forth in the Purchase Agreement. Also, the Purchase Agreement prohibits us from issuing and selling any shares of common stock to Roth Principal Investments to the extent such shares, when aggregated with all other shares of common stock then beneficially owned by Roth Principal Investments, would cause Roth Principal Investments’ beneficial ownership of our common stock to exceed the 4.99% Beneficial Ownership Limitation. The Purchase Agreement also prohibits us from issuing or selling shares of our common stock under the Purchase Agreement in excess of the 19.99% Exchange Cap, unless we obtain stockholder approval to do so, or unless the average price for all shares of our common stock purchased by Roth Principal Investments under the Purchase Agreement equals or exceeds \$2.0994 per share, such that the Exchange Cap limitation would not apply under applicable Nasdaq rules. Neither the Beneficial Ownership Limitation nor the Exchange Cap (to the extent applicable under Nasdaq) may be amended or waived under the Purchase Agreement.

(2) Assumes the sale of all shares of Common Stock being offered pursuant to this prospectus.

(3) The business address of Roth Principal Investments, LLC (“Roth Principal Investments”) is 2340 Collins Avenue, Suite 402, Miami Beach, Florida 33139. The principal business of Roth Principal Investments is that of a private investor. Roth Principal Investments is a wholly owned subsidiary of CR Financial Holdings, Inc. (“CRFH”). CRFH expressly disclaims beneficial ownership of securities held of record by Roth Principal Investments, except to the extent of its pecuniary interest therein. All voting and investment decisions with respect to securities held of record by Roth Principal Investments are made by majority vote of an investment policy committee of Roth Principal Investments composed of five individuals, each of whom is not involved in the management of CRFH and at least three of whom are not affiliates or associated persons of Roth Capital Partners, LLC (“RCP”), a registered broker-dealer and member of the Financial Industry Regulatory Authority, Inc. (“FINRA”), and a wholly owned subsidiary of CRFH. We have been advised that neither CRFH nor Roth Principal Investments is a FINRA member or an independent broker-dealer. Because each of Roth Principal Investments and RCP is a wholly owned subsidiary of CRFH, Roth Principal Investments is deemed to be an affiliate of RCP. RCP will act as an executing broker that will effectuate resales of our common stock that may be acquired by Roth Principal Investments from us pursuant to the Purchase Agreement to the public in this offering. See “*Plan of Distribution (Conflict of Interest)*” for more information about the relationship between Roth Principal Investments and RCP.

DESCRIPTION OF CAPITAL STOCK

The following description of our capital stock and provisions of our certificate of incorporation, as amended (the “Certificate of Incorporation”) and bylaws (the “Bylaws”) are summaries and are qualified in their entirety by reference to our Certificate of Incorporation and Bylaws and the applicable provisions of the Delaware General Corporation Law (the “DGCL”).

Authorized Capital Stock

Our authorized capital stock consists of 50,000,000 shares of Common Stock, par value \$0.0001 per share, and 5,000,000 shares of preferred stock, par value \$0.0001 per share. As of July 27, 2026, there were 3,851,684 shares of Common Stock and 500 Series A Preferred issued and outstanding.

Common Stock

Holders of Common Stock are entitled to one vote per share on all matters submitted to a vote of stockholders. Subject to preferences that may be applicable to any then-outstanding preferred stock, holders of Common Stock are entitled to receive ratably such dividends, if any, as may be declared from time to time by our board of directors out of legally available funds. Upon our liquidation, dissolution or winding up, holders of Common Stock are entitled to share ratably in all assets remaining after payment of liabilities and the liquidation preferences of any then-outstanding preferred stock. Holders of Common Stock have no preemptive, conversion, redemption or sinking fund rights. The rights, preferences and privileges of holders of Common Stock are subject to, and may be adversely affected by, the rights of holders of any series of preferred stock that we may designate and issue in the future.

Preferred Stock

Our board of directors is authorized, without further action by our stockholders, to issue from time to time shares of preferred stock in one or more series, to fix the number of shares of any such series, and to determine the designations, powers, preferences, rights, qualifications, limitations and restrictions thereof. Any such issuance could adversely affect the rights of the holders of Common Stock.

Series A Preferred

On July 10, 2026, we filed a Certificate of Designation designating 25,000 shares of our preferred stock as Series A Preferred in connection with a private placement. On July 21, 2026, we issued an aggregate of 500 Series A Preferred to the investors in this private placement. The Series A Preferred has a stated value of \$1,000 per share, accrues a 10% payment-in-kind dividend, is perpetual, ranks senior to our Common Stock as to dividends and on liquidation, and is convertible into Common Stock at 90% of the lowest volume-weighted average price of our Common Stock over the seven consecutive trading days preceding applicable conversion date, but not less than the floor price. The shares of Common Stock issuable upon conversion of the Series A Preferred are not registered by this prospectus. We have reserved an aggregate of 3,518,292 shares of Common Stock with our transfer agent for issuance upon conversion of the Series A Preferred and exercise of the related warrants, representing 200% of the shares of Common Stock issuable upon conversion of the Series A Preferred at the floor price then in effect together with the shares issuable upon exercise of the related warrants.

Qualification and Election of Directors

Our bylaws provide that to be eligible to be a nominee for election to our board of directors, a person must submit a written questionnaire regarding his or her background and qualifications and must agree to other representations as set forth in our bylaws. In addition, we have adopted a director resignation policy. The director resignation policy is incorporated into our bylaws and Corporate Governance Guidelines and provides that any nominee for director in an uncontested election who receives a greater number of votes “withheld” from his or her election than votes “for” his or her election must tender his or her resignation to the board of directors for consideration in accordance with the procedures set forth in our Corporate Governance Guidelines. The Nominating and Corporate Governance Committee will then evaluate the best interests of our company and our stockholders and will recommend to the board of directors the action to be taken with respect to the tendered resignation. Following the board of directors’ determination, we will promptly publicly disclose the board of directors’ decision of whether or not to accept the resignation and an explanation of how the decision was reached, including, if applicable, the reasons for rejecting the resignation.

Anti-Takeover Provisions of Delaware Law, our Certificate of Incorporation and our Bylaws

The provisions of Delaware law, our certificate of incorporation and our bylaws discussed below could discourage or make it more difficult to accomplish a proxy contest or other change in our management or the acquisition of control by a holder of a substantial amount of our voting stock. It is possible that these provisions could make it more difficult to accomplish, or could deter, transactions that stockholders may otherwise consider to be in their best interests or in our best interests. These provisions are intended to enhance the likelihood of continuity and stability in the composition of our board of directors and in the policies formulated by our board of directors and to discourage certain types of transactions that may involve an actual or threatened change of our control. These provisions are designed to reduce our vulnerability to an unsolicited acquisition proposal and to discourage certain tactics that may be used in proxy fights. Such provisions also may have the effect of preventing changes in our management.

Advance Notification of Stockholder Nominations and Proposals

Our bylaws provide that, for nominations to our board of directors or for other business to be properly brought by a stockholder before a meeting of stockholders, the stockholder must first have given timely notice of the proposal in writing to our Chief Executive Officer. For an annual meeting, a stockholder's notice generally must be delivered not less than 90 days nor more than 120 days prior to the anniversary of the mailing date of the proxy statement for the previous year's annual meeting. For a special meeting, the notice must generally be delivered not earlier than the 90th day prior to the meeting and not later than the later of (i) the 60th day prior to the meeting or (ii) the 10th day following the day on which public announcement of the meeting is first made. Detailed requirements as to the form of the notice and information required in the notice are specified in the bylaws. If it is determined that business was not properly brought before a meeting in accordance with our bylaw provisions, such business will not be conducted at the meeting. These provisions may preclude our stockholders from bringing matters before our annual meeting of stockholders or from making nominations for directors at our annual meeting of stockholders if the proper procedures are not followed. We expect that these provisions may also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of our company.

Board Vacancies; Removal

Our bylaws provide that any vacancy occurring on our board of directors may be filled by a majority of directors then in office, even if less than a quorum. Our certificate of incorporation provides that directors may be removed only for cause by affirmative vote of the holders of a majority of the voting power of the outstanding shares of common stock entitled to vote. Furthermore, any vacancy on our board of directors, however occurring, including a vacancy resulting from an increase in the size of our board of directors, may only be filled by the affirmative vote of a majority of our directors then in office even if less than a quorum. In addition, the number of directors constituting our board of directors is permitted to be set only by a resolution adopted by our board of directors. These provisions prevent a stockholder from increasing the size of our board of directors in order to gain control of our board of directors by filling the resulting vacancies with its own nominees. This makes it more difficult to change the composition of our board of directors but promotes continuity of management.

Special Meetings of Stockholders

Our bylaws and certificate of incorporation provide that only our board of directors may call a special meeting, and that stockholders may only conduct business at special meetings of stockholders that was specified in the notice of the meeting. This provision limits the ability of a stockholder to call a special meeting of the stockholders.

Issuance of Undesignated Shares of Preferred Stock

Our board of directors has the authority, without further action by the stockholders, to issue up to 5,000,000 shares of undesignated preferred stock with rights, preferences and privileges, including voting rights, designated from time to time by our board of directors. The existence of authorized but unissued shares of preferred stock enables our board of directors to render more difficult or to discourage an attempt to obtain control of our company by means of a merger, tender offer, proxy contest or other means.

Exclusive Forum

Our certificate of incorporation provides that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders, (iii) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law, our certificate of incorporation or our bylaws, or (iv) any action asserting a claim against us governed by the internal affairs doctrine. This choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and other employees.

Limitation on Liability and Indemnification of Directors and Officers

Our certificate of incorporation and bylaws contain provisions that eliminate, to the maximum extent permitted by the General Corporation Law of the State of Delaware, or the DGCL, the personal liability of our directors and executive officers for monetary damages for breach of their fiduciary duties as directors or officers. Our certificate of incorporation and bylaws provide that we must indemnify our directors and executive officers and may indemnify our employees and other agents to the fullest extent permitted by the DGCL.

Sections 145(a) and 102(b)(7) of the DGCL empower a corporation to indemnify any director, officer, employee or agent, or former director, officer, employee or agent, who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation), by reason of such person's service as a director, officer, employee or agent of the corporation, or such person's service, at the corporation's request, as a director, officer, employee or agent of another corporation or enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding; *provided* that such director, officer employee or agent acted in good faith and in a manner reasonably believed to be in or not opposed to the best interests of the corporation; and, with respect to any criminal action or proceeding, *provided* that such director, officer employee or agent had no reasonable cause to believe his conduct was unlawful.

Section 145(b) of the DGCL empowers a corporation to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that such person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another enterprise, against expenses (including attorneys' fees) actually and reasonably incurred in connection with the defense or settlement of such action or suit; *provided* that such director, officer, employee or agent acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification may be made in respect of any claim, issue or matter as to which such director, officer, employee or agent shall have been adjudged to be liable to the corporation unless and only to the extent that the Delaware Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such director, officer, employee or agent is fairly and reasonably entitled to indemnity for such expenses that the court shall deem proper.

We have also entered into indemnification agreements with our directors and executive officers, in addition to the indemnification provided for in our certificate of incorporation and bylaws, and we intend to enter into indemnification agreements with any new directors and executive officers in the future.

We have purchased and currently intend to maintain directors' and officers' liability insurance.

Transfer Agent and Registrar

The transfer agent and registrar for our Common Stock is VStock Transfer, LLC.

Listing

Our Common Stock is listed on the Nasdaq Capital Market under the symbol "POLA."

PLAN OF DISTRIBUTION (CONFLICT OF INTEREST)

The shares of our Common Stock offered by this prospectus are being offered by the Selling Stockholder, Roth Principal Investments. The shares may be sold or distributed from time to time by the Selling Stockholder directly to one or more purchasers or through brokers, dealers, or underwriters who may act solely as agents at market prices prevailing at the time of sale, at prices related to the prevailing market prices, at negotiated prices, or at fixed prices, which may be changed. The sale of the shares of our Common Stock offered by this prospectus could be effected in one or more of the following methods:

- ordinary brokers' transactions;
- transactions involving cross or block trades;
- through brokers, dealers, or underwriters who may act solely as agents;
- "at the market" into an existing market for our Common Stock;
- in other ways not involving market makers or established business markets, including direct sales to purchasers or sales effected through agents;
- in privately negotiated transactions; or
- any combination of the foregoing.

In order to comply with the securities laws of certain states, if applicable, the shares may be sold only through registered or licensed brokers or dealers. In addition, in certain states, the shares may not be sold unless they have been registered or qualified for sale in the state or an exemption from the state's registration or qualification requirement is available and complied with.

Roth Principal Investments is an "underwriter" within the meaning of Section 2(a)(11) of the Securities Act.

Roth Principal Investments has informed us that it presently anticipates using, but is not required to use, RCP, a registered broker-dealer and FINRA member and an affiliate of Roth Principal Investments, as a broker to effectuate resales, if any, of our Common Stock that it may acquire from us pursuant to the Purchase Agreement, and that it may also engage one or more other registered broker-dealers to effectuate resales, if any, of such Common Stock that it may acquire from us, although, as of the date of this prospectus, it does not anticipate engaging any such other registered broker-dealers. Such resales will be made at prices and at terms then prevailing or at prices related to the then current market price. Each such registered broker-dealer, including RCP, will be an underwriter within the meaning of Section 2(a)(11) of the Securities Act. Roth Principal Investments has informed us that RCP, and any other broker-dealer it may engage to effectuate resales of our Common Stock on its behalf (as the case may be), may receive commissions from Roth Principal Investments for executing such resales for Roth Principal Investments and, if so, such commissions will not exceed customary brokerage commissions.

Roth Principal Investments is an affiliate of RCP, a registered broker-dealer and FINRA member, which will act as an executing broker that will effectuate resales of our Common Stock that may be acquired by Roth Principal Investments from us pursuant to the Purchase Agreement to the public in this offering. Because Roth Principal Investments will receive all the net proceeds from such resales of our Common Stock made to the public through RCP, RCP is deemed to have a "conflict of interest" within the meaning of FINRA Rule 5121. Consequently, this offering will be conducted in compliance with the provisions of FINRA Rule 5121, which requires that a "qualified independent underwriter," as defined in FINRA Rule 5121, participate in the preparation of the registration statement that includes this prospectus and exercise the usual standards of "due diligence" with respect thereto. Accordingly, we have engaged Digital Offering, LLC, a registered broker-dealer and FINRA member ("Digital Offering"), to be the qualified independent underwriter in this offering and, in such capacity, participate in the preparation of the registration statement that includes this prospectus and exercise the usual standards of "due diligence" with respect thereto. Roth Principal Investments has agreed to pay directly to Digital Offering on or prior to the Commencement Date an aggregate cash fee of \$50,000, as consideration for its services in connection with acting as the qualified independent underwriter in this offering. We have agreed to reimburse Roth Principal Investments the full \$50,000 paid to Digital Offering, at such time after the Commencement Date and in such manner as set forth in the Purchase Agreement. Digital Offering will receive no other compensation for acting as the qualified independent underwriter in this offering. In accordance with FINRA Rule 5110, such cash fee paid to Digital Offering for acting as the qualified independent underwriter in this offering, is deemed to be underwriting compensation in connection with sales of our Common Stock by Roth Principal Investments to the public. In accordance with FINRA Rule 5121, RCP is not permitted to sell shares of our Common Stock in this offering to an account over which it exercises discretionary authority without the prior specific written approval of the account holder.

Except as set forth above, we know of no existing arrangements between the Selling Stockholder and any other stockholder, broker, dealer, underwriter or agent relating to the sale or distribution of the shares of our Common Stock offered by this prospectus.

Brokers, dealers, underwriters or agents participating in the distribution of the shares of our Common Stock offered by this prospectus may receive compensation in the form of commissions, discounts, or concessions from the purchasers, for whom the broker-dealers may act as agent, of the shares sold by the Selling Stockholder through this prospectus. The compensation paid to any such particular broker-dealer by any such purchasers of shares of our Common Stock sold by the Selling Stockholder may be less than or in excess of customary commissions. Neither we nor the Selling Stockholder can presently estimate the amount of compensation that any agent will receive from any purchasers of shares of our Common Stock sold by the Selling Stockholder.

We may from time to time file with the SEC one or more supplements to this prospectus or amendments to the registration statement of which this prospectus forms a part to amend, supplement or update information contained in this prospectus, including, if and when required under the Securities Act, to disclose certain information relating to a particular sale of shares offered by this prospectus by the Selling Stockholder, including with respect to any compensation paid or payable by the Selling Stockholder to any brokers, dealers, underwriters or agents that participate in the distribution of such shares by the Selling Stockholder, and any other related information required to be disclosed under the Securities Act.

We will pay the expenses incident to the registration under the Securities Act of the offer and sale of the shares of our Common Stock by the Selling Stockholder covered by this prospectus. We estimate that the total expenses for the offering will be approximately \$194,000.

As consideration for its irrevocable commitment to purchase our Common Stock at our direction under the Purchase Agreement, we agreed to pay to Roth Principal Investments a cash commitment fee in the amount of \$500,000, which is equal to 2.0% of Roth Principal Investments' \$25,000,000 total dollar amount purchase commitment under the Purchase Agreement. The \$500,000 cash commitment fee will be paid over time by Roth Principal Investments withholding cash amounts equal to 10% of the total aggregate Purchase Price payable by Roth Principal Investments to us in connection with each Purchase of shares of our Common Stock effected under the Purchase Agreement, until such time as Roth Principal Investments shall have received from such cash withholdings a total aggregate amount in cash equal to \$500,000, representing the entire cash commitment fee payable to Roth Principal Investments pursuant to the Purchase Agreement. If, however, Roth Principal Investments has not held back from purchases of Common Stock it is required make at our direction an aggregate cash amount of \$500,000 at or prior to the time of the expiration or earlier termination of the Purchase Agreement, either because we have not elected to make sales of our Common Stock to Roth Principal Investments having an aggregate gross purchase price of at least

\$5,000,000 (sufficient to aggregate \$500,000 of funds to Roth Principal Investments, holding back 10% of the purchase price for such Common Stock), if any, prior to such expiration or termination of the Purchase Agreement, then, unless we terminate the Purchase Agreement within 90 days following the effective date of the registration statement that includes this prospectus, we are not required to pay the balance of any portion of the cash commitment fee that has not been so withheld by Roth Principal Investments from purchases effected under the Purchase Agreement. If we do terminate the Purchase Agreement within 90 days following the effective date of the registration statement that includes this prospectus, we are required to pay the balance of any portion of the cash commitment fee that has not been so withheld by Roth Principal Investments from purchases effected under the Purchase Agreement. However, if we do not terminate the Purchase Agreement within 90 days following the effective date of the registration statement that includes this prospectus, Roth Principal Investments would be entitled to receive only such portion (if any) of the cash commitment fee it had withheld from any purchases effected by us before the expiration or earlier termination of the Purchase Agreement, and Roth Principal Investments would not be entitled to receive any further cash payments from us in respect of the cash commitment fee. In accordance with FINRA Rule 5110, the \$500,000 cash commitment fee is deemed to be underwriting compensation in connection with sales of our Common Stock by Roth Principal Investments to the public.

In addition, we have agreed to reimburse Roth Principal Investments the Initial Legal Fee Reimbursement Amount of \$25,000 upon our execution of the Purchase Agreement and Registration Rights Agreement, the Additional Investor Legal Fee Reimbursement Amount of \$50,000 at such time after the Commencement Date and in such manner as set forth in the Purchase Agreement, and the Additional Investor Legal Fee Reimbursement Amount of up to \$7,500 per fiscal quarter, in each case in connection with the transactions contemplated by the Purchase Agreement and the Registration Rights Agreement. In accordance with FINRA Rule 5110, these reimbursed fees and expenses are deemed to be underwriting compensation in connection with sales of our Common Stock by Roth Principal Investments to the public. Moreover, in accordance with FINRA Rule 5110, the 3.0% fixed discount to current market prices of our Common Stock reflected in the purchase prices payable by Roth Principal Investments for our Common Stock that we may require it to purchase from us from time to time in one or more Market Open Purchases and/or one or more Intraday Purchases under the Purchase Agreement, and the 5.0% fixed discount to current market prices of our Common Stock reflected in the purchase prices payable by Roth Principal Investments for our Common Stock that we may require it to purchase from us from time to time in one or more Pre-Market Purchases and/or one or more Post-Market Purchases under the Purchase Agreement, in each case are deemed to be underwriting compensation in connection with sales of our Common Stock by Roth Principal Investments to the public.

We also have agreed to indemnify Roth Principal Investments and certain other persons against certain liabilities in connection with the offering of shares of our Common Stock offered hereby, including liabilities arising under the Securities Act or, if such indemnity is unavailable, to contribute amounts required to be paid in respect of such liabilities. Roth Principal Investments has agreed to indemnify us against liabilities under the Securities Act that may arise from certain written information furnished to us by Roth Principal Investments specifically for use in this prospectus or, if such indemnity is unavailable, to contribute amounts required to be paid in respect of such liabilities. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers, and controlling persons, we have been advised that in the opinion of the SEC this indemnification is against public policy as expressed in the Securities Act and is therefore, unenforceable.

Roth Principal Investments has represented to us that at no time prior to the date of the Purchase Agreement has Roth Principal Investments, any of its officers, or any entity managed or controlled by Roth Principal Investments, engaged in or effected, in any manner whatsoever, directly or indirectly, for Roth Principal Investments' own principal account or for the principal account of any such entity managed or controlled by Roth Principal Investments, any short sale (as such term is defined in Rule 200 of Regulation SHO of the Exchange Act) of our Common Stock or any hedging transaction, which establishes a net short position with respect to our Common Stock that remained in effect as of the date of the Purchase Agreement. Roth Principal Investments has agreed that during the term of the Purchase Agreement, none of Roth Principal Investments, any of its officers, or any entity managed or controlled by Roth Principal Investments, will enter into or effect, directly or indirectly, any of the foregoing transactions either for Roth Principal Investments' own principal account or for the principal account of any such entity managed or controlled by Roth Principal Investments.

We have advised the Selling Stockholder that it is required to comply with Regulation M promulgated under the Exchange Act. With certain exceptions, Regulation M precludes the Selling Stockholder, any affiliated purchasers, and any broker-dealer or other person who participates in the distribution from bidding for or purchasing or attempting to induce any person to bid for or purchase any security which is the subject of the distribution until the entire distribution is complete. Regulation M also prohibits any bids or purchases made in order to stabilize the price of a security in connection with the distribution of that security. All of the foregoing may affect the marketability of the securities offered by this prospectus.

This offering will terminate on the date that all shares of our Common Stock offered by this prospectus have been sold by the Selling Stockholder.

Our Common Stock is currently listed on Nasdaq under the symbol "POLA".

RCP, an affiliate of Roth Principal Investments, has provided, currently provides and/or from time to time in the future may provide various investment banking and other financial services for us and/or one or more of our affiliates that are unrelated to the transactions contemplated by the Purchase Agreement and Registration Rights Agreement and the offering of shares for resale by Roth Principal Investments to which this prospectus relates, for which investment banking and other financial services RCP has received and may continue to receive customary fees, commissions and other compensation from us, aside from any discounts, fees and other compensation that Roth Principal Investments and RCP have received and may receive in connection with the transactions contemplated by the Purchase Agreement, including (i) the \$500,000 cash commitment fee we have agreed to pay or cause to be paid to Roth Principal Investments, in each case as consideration for its irrevocable commitment to purchase shares of our Common Stock from us at our direction under the Purchase Agreement, (ii) the 3.0% fixed discount to current market prices of our Common Stock reflected in the purchase prices payable by Roth Principal Investments for our Common Stock that we may require it to purchase from us from time to time in one or more Market Open Purchases and/or one or more Intraday Purchases under the Purchase Agreement, (iii) the 5.0% fixed discount to current market prices of our Common Stock reflected in the purchase prices payable by Roth Principal Investments for our Common Stock that we may require it to purchase from us from time to time in one or more Pre-Market Purchases and/or one or more Post-Market Purchases under the Purchase Agreement, (iv) our reimbursement of Roth Principal Investments' legal fees up to \$190,000 in the aggregate (\$25,000 upon execution of the Purchase Agreement, \$50,000 at such time and in such manner after the Commencement Date as set forth in the Purchase Agreement, and \$7,500 per fiscal quarter for the maximum three-year term of the Purchase Agreement) in connection with the transactions contemplated by the Purchase Agreement and the Registration Rights Agreement, and (iv) any customary brokerage commissions that may be received by RCP from Roth Principal Investments for executing resales of our Common Stock purchased or acquired by Roth Principal Investments from us pursuant to the Purchase Agreement to the public in this offering.

The total underwriting compensation to be received by all participating FINRA members, in the aggregate, in connection with this offering, as determined under FINRA Rule 5110, will not exceed 8.0% of the maximum aggregate offering price of all shares of our Common Stock that may be resold by Roth Principal Investments to the public through this prospectus. Accordingly, the total amount of any specific item of underwriting compensation described herein that may be received by any participating FINRA member in connection with this offering shall, in each case, be subject to the limitation on the total underwriting compensation to be received by all participating FINRA members, in the aggregate, in connection with this offering, as determined under FINRA Rule 5110, described in the immediately preceding sentence.

LEGAL MATTERS

The validity of the issuance of the shares of Common Stock offered by this prospectus will be passed upon for us by Loeb & Loeb LLP, New York, New York. Reed Smith LLP is acting as counsel to Roth Principal Investments in connection with the Purchase Agreement and the Registration Rights Agreement.

EXPERTS

Weinberg & Company, P.A., our independent, registered public accounting firm, has audited our consolidated financial statements as of December 31, 2025 and 2024 and for the years then ended included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2025, which is incorporated by reference into this prospectus and elsewhere in the registration statement of which this prospectus is a part. Our financial statements are incorporated by reference in reliance on Weinberg & Company P.A.'s report, which includes an explanatory paragraph regarding substantial doubt about the Company's ability to continue as a going concern, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1, including exhibits and schedules, under the Securities Act with respect to the securities offered by this prospectus. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits and schedules thereto. For further information about us and our securities, you should refer to the registration statement and the exhibits and schedules thereto. Statements contained in this prospectus regarding the contents of any contract or any other document are not necessarily complete; reference is made in each instance to the copy of the contract or document filed as an exhibit to the registration statement. Each statement is qualified in all respects by such reference.

We are subject to the informational requirements of the Exchange Act and file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings, including the registration statement and the exhibits and schedules thereto, are available to the public at the SEC's website at www.sec.gov. We also make available, free of charge, on our website at www.polarpower.com, our annual, quarterly and current reports, and amendments to those reports, as soon as reasonably practicable after we electronically file such material with, or furnish such material to, the SEC.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to “incorporate by reference” information that we file with it into this prospectus, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus, except for any information that is superseded by information that is included directly in this document or in any subsequently filed document that is also incorporated by reference herein. We incorporate by reference the documents listed below:

- our Annual Report on [Form 10-K](#) for the fiscal year ended December 31, 2025, filed with the SEC on April 15, 2026 (the “2025 Form 10-K”);
- our Quarterly Report on [Form 10-Q](#) for the quarter ended March 31, 2026, filed with the SEC on May 20, 2026;
- our Current Reports on Form 8-K filed with the SEC on [May 7, 2026](#), [May 14, 2026](#), [May 22, 2026](#), [June 2, 2026](#), [July 6, 2026](#), [July 7, 2026](#), [July 16, 2026](#) and [July 27, 2026/July 27, 2026](#); and
- the description of our capital stock contained in this prospectus, and in [Exhibit 4.1](#) to the 2025 Form 10-K, including any amendments or reports filed for the purposes of updating this description.

Notwithstanding the statements in the preceding paragraphs, no document, report or exhibit (or portion of any of the foregoing) or any other information that we have “furnished” to the SEC pursuant to the Exchange Act shall be incorporated by reference into this prospectus.

We also incorporate by reference any future filings (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items unless such Form 8-K expressly provides to the contrary) made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, including those made (i) on or after the date of the initial filing of the registration statement of which this prospectus forms a part and prior to effectiveness of such registration statement, and (ii) on or after the date of this prospectus but prior to the termination of the offering (i.e., until the earlier of the date on which all of the securities registered hereunder have been sold or the registration statement of which this prospectus forms a part has been withdrawn). Information in such future filings updates and supplements the information provided in this prospectus. Any statements in any such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that statements in the later filed document modify or replace such earlier statements.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, without charge upon written or oral request, a copy of any or all of the documents that are incorporated by reference into this prospectus but not delivered with the prospectus, including exhibits that are specifically incorporated by reference into such documents. You should direct any requests for documents to Polar Power, Inc., 249 E. Gardena Boulevard, Gardena, California 90248, Attn: Corporate Secretary, telephone (310) 830-9153.

You also may access these filings on our website at www.perasoinc.com. We do not incorporate the information on our website into this prospectus or any supplement to this prospectus and you should not consider any information on, or that can be accessed through, our website as part of this prospectus or any supplement to this prospectus (other than those filings with the SEC that we specifically incorporate by reference into this prospectus or any supplement to this prospectus). You may also access these filings at the SEC’s website at www.sec.gov.

Any statement contained in a document incorporated or deemed to be incorporated by reference in this prospectus will be deemed modified, superseded or replaced for purposes of this prospectus to the extent that a statement contained in this prospectus modifies, supersedes or replaces such statement.

PART II — INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution

The following table sets forth the costs and expenses, other than underwriting discounts and commissions, payable by us in connection with the issuance and distribution of the securities being registered hereunder. All amounts shown are estimates, except for the SEC registration fee and the FINRA filing fee.

Securities and Exchange Commission registration fee	\$	3,673
FINRA Filing Fee	\$	4,490
Accounting fees and expenses	\$	30,000
Printing and engraving expenses	\$	1,000
Legal fees and expenses	\$	150,000
Transfer agent and registrar fees	\$	2,000
Miscellaneous	\$	2,837
Total	\$	194,000

Item 14. Indemnification of Directors and Officers

Our certificate of incorporation and bylaws contain provisions that eliminate, to the maximum extent permitted by the General Corporation Law of the State of Delaware, or the DGCL, the personal liability of our directors and executive officers for monetary damages for breach of their fiduciary duties as directors or officers. Our certificate of incorporation and bylaws provide that we must indemnify our directors and executive officers and may indemnify our employees and other agents to the fullest extent permitted by the DGCL.

Sections 145(a) and 102(b)(7) of the DGCL empower a corporation to indemnify any director, officer, employee or agent, or former director, officer, employee or agent, who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation), by reason of such person's service as a director, officer, employee or agent of the corporation, or such person's service, at the corporation's request, as a director, officer, employee or agent of another corporation or enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding; *provided* that such director, officer employee or agent acted in good faith and in a manner reasonably believed to be in or not opposed to the best interests of the corporation; and, with respect to any criminal action or proceeding, *provided* that such director, officer employee or agent had no reasonable cause to believe his conduct was unlawful.

Section 145(b) of the DGCL empowers a corporation to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that such person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another enterprise, against expenses (including attorneys' fees) actually and reasonably incurred in connection with the defense or settlement of such action or suit; *provided* that such director, officer, employee or agent acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification may be made in respect of any claim, issue or matter as to which such director, officer, employee or agent shall have been adjudged to be liable to the corporation unless and only to the extent that the Delaware Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such director, officer, employee or agent is fairly and reasonably entitled to indemnity for such expenses that the court shall deem proper.

We have also entered into indemnification agreements with our directors and executive officers, in addition to the indemnification provided for in our certificate of incorporation and bylaws, and we intend to enter into indemnification agreements with any new directors and executive officers in the future.

We have purchased and currently intend to maintain directors' and officers' liability insurance.

Item 15. Recent Sales of Unregistered Securities

The following sets forth information regarding securities sold by us within the past three years that were not registered under the Securities Act.

Restructuring and Management Services Agreement. On May 21, 2026, we entered into a Restructuring, Implementation and Management Services Agreement with Mammoth Crest Capital, LLC (“MCC”), effective as of May 19, 2026, pursuant to which MCC will lead and implement operational, organizational, governance, financial and capital-structure initiatives for the Company. As consideration, we agreed to pay MCC \$500,000 (consisting of a \$100,000 non-refundable retainer and a \$400,000 balance, the collection of which is deferred until we consummate debt or equity financings yielding at least \$5.0 million in aggregate gross proceeds), a \$25,000 monthly retainer following delivery of specified deliverables and milestones, and to issue MCC shares of Common Stock representing 4.5% of our outstanding shares as of the effective date, which shares we agreed to include for resale registration in our next registration statement.

Convertible Note Financings in May. On May 21, 2026, we issued (i) a 6% convertible redeemable note to CFI Capital LLC in the aggregate principal amount of \$600,000, for which we received net proceeds of approximately \$500,000, and (ii) a 6% convertible redeemable note to Monroe Street Capital Partners, LP in the aggregate principal amount of \$370,600, for which we received net proceeds of approximately \$307,100. Each note matures twelve months after issuance and, beginning six months after issuance, is convertible into shares of Common Stock at a conversion price equal to 80% of the lowest daily volume-weighted average price of our Common Stock over the ten trading days prior to conversion (with the conversion price decreasing to 65% of the lowest trading price over a twenty-trading-day lookback if our Common Stock is delisted from Nasdaq). In a related side letter, we agreed to seek stockholder approval, within 60 days, to permit issuances of Common Stock under these notes in excess of 19.99% of our outstanding shares.

Convertible Note Financing in June. On June 30, 2026, we issued to Mayers a convertible promissory note in the aggregate principal amount of \$275,000. The consideration price of the note was \$250,000. The note has an interest rate of 10% per annum, and the maturity date is December 30, 2027. It is convertible into shares of Common Stock at a conversion price equal to 90% of the lowest daily volume-weighted average price of our Common Stock over the seven trading days prior to conversion.

Series A Convertible Preferred Stock Financing. On July 21, 2026, we issued and sold to LU2 Holdings LLC, in a private placement, 500 shares of our Series A Convertible Preferred Stock, par value \$0.0001 per share (the “Series A Preferred”), having an aggregate stated value of \$500,000, together with warrants to purchase an aggregate of 150,915 and 83,841 shares of Common Stock at an exercise price of \$1.64 per share, to LU2 Holdings LLC and Mayers, respectively. The Series A Preferred has a stated value of \$1,000 per share, accrues a 10% payment-in-kind dividend, is perpetual, ranks senior to our Common Stock, and is convertible into Common Stock at a price equal to 90% of the lowest VWAP over the seven consecutive trading days immediately preceding the applicable conversion date, but not less than the floor price.

ConnectM Advisory Shares. On July 16, 2026, we issued 40,000 restricted shares of Common Stock to ConnectM Technology Solutions, Inc. as compensation for advisory and management consulting services rendered under an engagement letter dated April 24, 2026 that provides for a monthly grant of 20,000 shares of Common Stock (subject to a review of value versus services after three months), with the shares issued valued at \$1.61 per share. The shares were issued in reliance on the exemption from registration provided by Section 4(a)(2) of the Securities Act as a transaction by an issuer not involving a public offering.

Item 16. Exhibits and Financial Statement Schedules

(a) Exhibits. The list of exhibits filed as part of this registration statement is set forth on the Exhibit Index immediately following the signature page hereto and is incorporated herein by reference.

Exhibit Number	Description*	Where Located				
		Form	File Number	Exhibit Number	Filing Date	Filed Herewith
3.1	Certificate of Incorporation	10-K	001-37960	3.1	3/10/2017	
3.2	Certificate of Amendment to Certificate of Incorporation	8-K	001-37960	3.1	11/21/2024	
3.3	Certificate of Designations, Rights and Limitations of Series A Convertible Preferred Stock of Polar Power, Inc.	8-K	001-37960	3.1	7/16/2026	
3.4	Certificate of Correction of the Certificate of Designations, Rights and Limitations of Series A Convertible Preferred Stock of Polar Power, Inc.	8-K	001-37960	3.1	7/27/2026	
3.5	Bylaws	10-K	001-37960	3.2	3/10/2017	
4.1	Description of Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934	10-K	001-37960	4.1	4/15/2026	
5.1	Opinion of Loeb & Loeb LLP					X
10.1	Polar Power, Inc. 2016 Omnibus Incentive Plan and forms of agreements thereunder#	S-1	333-213572	10.1	9/9/2016	
10.2	Amended and Restated Executive Employment Agreement dated July 8, 2016 between the Registrant and Arthur D. Sams#	S-1	333-213572	10.2	9/9/2016	
10.3	Amended and Restated Executive Employment Agreement dated July 8, 2016 between the Registrant and Luis Zavala#	S-1	333-213572	10.4	9/9/2016	
10.4	Form of Indemnification Agreement between the Registrant and each of its Executive Officers and Directors#	S-1/A	333-213572	10.5	11/18/2016	
10.5	Lease Agreement dated November 7, 2014 between the Registrant and Two Bros L.P.	S-1	333-213572	10.8	9/9/2016	
10.6	First Amendment to Lease Agreement dated February 5, 2019 between the Registrant and Two Bros L.P.	10-K	001-37960	10.9	3/31/2023	
10.7	Second Amendment to Lease Agreement dated January 31, 2023 between the Registrant and Two Bros L.P.	10-K	001-37960	10.10	3/31/2023	
10.8	Amendment No. 1 to Polar Power, Inc. 2016 Omnibus Incentive Plan	10-K	001-37960	10.10	4/1/2019	
10.9	Securities Purchase Agreement dated July 2, 2020 between Polar Power, Inc. and each purchaser identified on the signature pages thereto	8-K	001-37960	10.1	7/8/2020	
10.10	Registration Rights Agreement dated July 2, 2020 between Polar Power, Inc. and each purchaser identified on the signature pages thereto	8-K	001-37960	10.2	7/8/2020	
10.11	Loan and Security Agreement dated August 31, 2020 between Pinnacle Bank and Polar Power, Inc.	8-K	001-37960	10.1	10/9/2020	

10.12	<u>First Modification to Loan and Security Agreement dated October 7, 2020 by and between Polar Power, Inc. and Pinnacle Bank</u>	8-K	001-37960	10.2	10/9/2020
10.13	<u>Second Modification to Loan and Security Agreement dated November 3, 2022 by and between Polar Power, Inc. and Pinnacle Bank</u>	10-Q	001-37960	10.1	11/14/2022
10.14	<u>Third Modification to Loan and Security Agreement dated April 13, 2023 by and between Polar Power, Inc. and Pinnacle Bank</u>	8-K	001-37960	10.1	5/26/2023
10.15	<u>Fourth Modification to Loan and Security Agreement dated May 25, 2023 by and between Polar Power, Inc. and Pinnacle Bank</u>	8-K	001-37960	10.2	5/26/2023
10.16	<u>Fifth Modification to Loan and Security Agreement dated September 5, 2023 by and between Polar Power, Inc. and Pinnacle Bank</u>	8-K	001-37960	10.1	9/11/2023
10.17	<u>Offer Letter between Polar Power, Inc. and Michael G. Field, dated July 24, 2024</u>	8-K	001-37960	10.1	7/30/2024
10.18	<u>Notice of Additional Defaults and Forbearance Agreement dated March 10, 2026 by and between Polar Power, Inc. and Pinnacle Bank</u>	10-K	001-37960	10.18	4/15/2026
10.19	<u>Polar Power, Inc. 2026 Equity Incentive Plan</u>	10-K	001-37960	10.19	4/15/2026
10.20	<u>Revolving Loan Agreement dated May 13, 2026 by and between Polar Power, Inc. and Stone Brothers Capital</u>	8-K	001-37960	10.1	5/14/2026
10.21	<u>Securities Purchase Agreement dated May 21, 2026 by and between Polar Power, Inc. and CFI Capital LLC</u>	8-K	001-37960	10.1	5/22/2026
10.22	<u>Promissory Note issued by Polar Power, Inc. to CFI Capital LLC, dated May 21, 2026</u>	8-K	001-37960	10.2	5/22/2026
10.23	<u>Securities Purchase Agreement dated May 21, 2026 by and between Polar Power, Inc. and Monroe Street Capital Partners, LP</u>	8-K	001-37960	10.3	5/22/2026
10.24	<u>Promissory Note issued by Polar Power, Inc. to Monroe Street Capital Partners, LP, dated May 21, 2026</u>	8-K	001-37960	10.4	5/22/2026
10.25	<u>Side Letter Relating to Note Issuance by and among Polar Power, Inc., CFI Capital LLC and Monroe Street Capital Partners, LP, dated May 21, 2026</u>	8-K	001-37960	10.5	5/22/2026
10.26	<u>Restructuring, Implementation and Management Services Agreement effective as of May 19, 2026 by and between Polar Power, Inc. and Mammoth Crest Capital, LLC</u>	8-K	001-37960	10.6	5/22/2026

10.27	Promissory Note issued by Polar Power, Inc. to Mayers Ventures LLC, dated June 30, 2026	8-K	001-37960	10.1	7/7/2026	
10.28	Securities Purchase Agreement for Series A Convertible Preferred Stock dated July 21, 2026, by and among Polar Power, Inc. and LU2 Holdings LLC	8-K	001-37960	10.1	7/27/2026	
10.29	Common Stock Purchase Warrants issued to LU2 Holdings LLC	8-K	001-37960	10.2	7/27/2026	
10.30	Common Stock Purchase Warrant issued to Mayers Ventures LLC	8-K	001-37960	10.3	7/27/2026	
10.31	Registration Rights Agreement, dated July 21, 2026, by and among Polar Power, Inc. and LU2 Holdings LLC	8-K	001-37960	10.4	7/27/2026	
10.32	Consent, Acknowledgment and First Amendment to Convertible Promissory Note, dated July 21, 2026, by and among Polar Power, Inc. and Mayers Ventures LLC	8-K	001-37960	10.5	7/27/2026	
10.33	Consent, Waiver and First Amendment, dated July 21, 2026, by and among Polar Power, Inc. and LU2 Holdings LLC	8-K	001-37960	10.6	7/27/2026	
10.34	Common Stock Purchase Agreement, dated as of July 27, 2026, between Polar Power, Inc. and Roth Principal Investments, LLC	8-K	001-37960	10.1	7/27/2026	
10.35	Registration Rights Agreement, dated as of July 27, 2026, between Polar Power, Inc. and Roth Principal Investments, LLC	8-K	001-37960	10.2	7/27/2026	
10.36	Business Consultant Agreement, dated July 21, 2026, by and among Polar Power, Inc. and LU2 Holdings LLC	8-K	001-37960	10.7	7/27/2026	
14.1	Code of Ethics	10-K	001-37960	14.1	3/10/2017	
19.1	Insider Trading Policy	10-K	001-37960	19.1	3/31/2025	
21.1	Subsidiaries of the Registrant	10-K	001-37960	21.1	3/10/2017	
23.1	Consent of Independent Registered Public Accounting Firm					X
23.2	Consent of Loeb & Loeb LLP (included in Exhibit 5.1)					X
24.1	Power of Attorney (included on signature page to the initial filing of the registration statement)					X
97.1	Clawback Policy	10-K	001-37960	97.1	4/1/2024	
107	Filing fee table					X

(#) A contract, compensatory plan or arrangement to which a director or executive officer is a party or in which one or more directors or executive officers are eligible to participate.

(*) Certain of the agreements filed as exhibits contain representations and warranties made by the parties thereto. The assertions embodied in such representations and warranties are not necessarily assertions of fact, but a mechanism for the parties to allocate risk. Accordingly, investors should not rely on the representations and warranties as characterizations of the actual state of facts or for any other purpose at the time they were made or otherwise.

(b) Financial Statement Schedules. All financial statement schedules have been omitted because they are not required, are not applicable or the required information is included in the financial statements or notes thereto incorporated by reference into this registration statement.

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 of 1933;

(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 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table 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) above 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 SEC by the registrant pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement.

(2) That for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and this 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 of 1933 to any purchaser:

(i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the 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 of 1933 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.

(5) That, for the purpose of determining liability under the Securities Act of 1933 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 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 of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the 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 of 1933 may be permitted to directors, officers and controlling persons of the Registrant pursuant to the provisions described in Item 6 hereof, or otherwise, the Registrant has been advised that in the opinion of the SEC 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 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 has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Gardena, State of California, on the 27th day of July, 2026.

POLAR POWER, INC.

By: /s/ Arthur D. Sams

Arthur D. Sams President, Chief Executive Officer and Secretary

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Arthur D. Sams, our true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement, and any related registration statement filed pursuant to Rule 462(b) and any amendments thereto, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the SEC, granting unto said attorney-in-fact and agent, 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 attorney-in-fact and agent, or his substitute or substitutes, 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 by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
<u>/s/ Arthur D. Sams</u> Arthur D. Sams	President, Chief Executive Officer and Director (principal executive officer)	July 27, 2026
<u>/s/ Luis Zavala</u> Luis Zavala	Chief Financial Officer (principal financial and accounting officer)	July 27, 2026
<u>/s/ Keith Albrecht</u> Keith Albrecht	Director	July 27, 2026
<u>/s/ Michael G. Field</u> Michael G. Field	Director	July 27, 2026
II-7		

**LOEB & LOEB LLP**

345 Park Avenue
New York, NY 10154

Main 212.407.4000
Fax 212.407.4990

July 27, 2026

Polar Power, Inc.
249 E. Gardena Boulevard
Gardena, California 90248

Ladies and Gentlemen:

We have acted as counsel to Polar Power, Inc., a Delaware corporation (the “Company”), in connection with the Company’s Registration Statement on Form S-1 to which this opinion is filed as an exhibit (the “Registration Statement”), being filed with the Securities and Exchange Commission under the Securities Act of 1933, as amended (the “Act”), for the registration for resale by the selling securityholder listed therein of up to an aggregate of 18,341,893 shares (the “Shares”) of common stock, \$0.0001 par value per share of the Company (the “Common Stock”), that may be issued and sold pursuant to that certain common stock purchase agreement (“CSPA”) dated as of July 27, 2026 by and between the Company and Roth Principal Investments, LLC (“RPI”).

In connection with this opinion, we have examined and relied upon the Registration Statement, the CSPA, and certain other agreements relating to the issuance of the Shares. We have also examined originals or copies, certified or otherwise identified to our satisfaction, of the Company’s certificate of incorporation, as amended, bylaws, and such corporate records of the Company and other certificates and documents of officials of the Company, public officials and others as we have deemed appropriate for purposes of this letter. We have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, and the conformity to authentic original documents of all copies submitted to us as conformed and certified or reproduced copies.

Based upon the foregoing and subject to the assumptions, exceptions, qualifications and limitations set forth hereinafter, we are of the opinion that the Shares have been duly authorized for issuance and, when issued and paid for in accordance with the terms and conditions of the CSPA, will be validly issued, fully paid and nonassessable.

The opinions we express herein are limited to matters involving the Delaware General Corporation Law.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and to the reference made to us under the caption “Legal Matters” in the prospectus constituting part of the Registration Statement. In giving this consent, we do not thereby admit that we are within the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Securities and Exchange Commission promulgated thereunder.

Sincerely yours,

/s/ Loeb & Loeb LLP
Loeb & Loeb LLP

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in this Registration Statement on Form S-1 of our report dated April 15, 2026, relating to the consolidated financial statements of Polar Power Inc. as of and for the years ended December 31, 2025 and 2024 (which report includes an explanatory paragraph regarding substantial doubt about the Company's ability to continue as a going concern) included in Polar Power Inc. Annual Report on Form 10-K for the fiscal year ended December 31, 2025, as filed with the Securities and Exchange Commission. We also consent to the reference to our firm under the caption "Experts" in such Registration Statement.

Weinberg & Company, P.A.
Los Angeles, California
July 27, 2026

Polar Power, Inc.

Table 1: Newly Registered and Carry Forward Securities

☐ Not Applicable

	Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee	Carry Forward Form Type	Carry Forward File Number	Carry Forward Initial Effective Date	Filing Fee Previously Paid in Connection with Unsold Securities to be Carried Forward
Newly Registered Securities												
Fees to be Paid	1 Equity	Common Stock, par value \$0.0001 per share	Other	17,474,208	\$ 1.522	26,595,744.58	\$ 0.0001381	\$ 3,672.87				
Fees Previously Paid												
Carry Forward Securities												
Carry Forward Securities												
Total Offering Amounts:						\$ 26,595,744.58	\$ 3,672.87					
Total Fees Previously Paid:							\$ 0.00					
Total Fee Offsets:							\$ 0.00					
Net Fee Due:							\$ 3,672.87					

Offering Note

1

Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement also covers such indeterminate number of additional shares of Common Stock as may become issuable to prevent dilution resulting from any stock split, stock dividend, recapitalization or other similar transaction effected without the receipt of consideration that results in an increase in the number of outstanding shares of Common Stock. Represents shares of Common Stock, par value \$0.0001 per share ("Common Stock"), consisting of shares that the registrant may, in its sole discretion, elect to issue and sell to Roth Principal Investments, LLC, the selling stockholder, from time to time under the Common Stock Purchase Agreement, dated as of July 23, 2026, by and between the registrant and the selling stockholder, all of which shares are being registered for resale by the selling stockholder. The registrant is not offering or selling any shares of Common Stock under this registration statement and will not receive any proceeds from the resale of shares of Common Stock by the selling stockholder. Estimated solely for the purpose of calculating the amount of the registration fee in accordance with Rule 457(c) under the Securities Act. The proposed maximum offering price per share and the proposed maximum aggregate offering price are based on the average of the high and low prices of the Common Stock as reported on the Nasdaq Capital Market on July 22, 2026, a date within five business days prior to the date of the initial filing of this registration statement. Calculated pursuant to Rule 457 under the Securities Act by multiplying the proposed maximum aggregate offering price by 0.00013810.

Table 2: Fee Offset Claims and Sources

☒ Not Applicable[illegible]

Fee Offset Sources												
--------------------	--	--	--	--	--	--	--	--	--	--	--	--

Table 3: Combined Prospectuses

☒Not Applicable

	Security Type	Security Class Title	Amount of Securities Previously Registered	Maximum Aggregate Offering Price of Securities Previously Registered	Form Type	File Number	Initial Effective Date
--	---------------	----------------------	--	--	-----------	-------------	------------------------