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

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the month of December 2025 Commission File Number: 001-40884

ARBE ROBOTICS LTD.

(Translation of registrant's name into English)

HaHashmonaim St. 107
Tel Aviv-Yafo, Israel
Tel: +972-73-7969804, ext. 200
(Address of principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F:

Form 20-F ⊠ Form 40-F □

INFORMATION CONTAINED IN THIS CURRENT REPORT ON FORM 6-K

On December 8, 2025, Arbe Robotics Ltd. (the "Company") issued a press release announcing information regarding a proposal to extend to December 31, 2026 the deadline for meeting the conditions under its series A convertible bonds for the release of the proceeds raised from the issuance of the convertibles bonds which proceeds are held by the trustee of such bonds. This trustee published a notice regarding a meeting of the bondholders (without physical convening) to be held on December 16, 2025, to vote on the proposed extension and updated terms, which include a reduction of the interest rate of the bonds from 6.5% to 4.35% effective January 1, 2026. The bonds would remain convertible into the Company's ordinary shares at a conversion price of ILS 9.53 (approximately \$2.95) per share. In addition, if the amendment is approved by the bondholders, the Company is considering the issuance of additional bonds of the same series increasing the principal amount of outstanding bonds to up to \$20 million. As of the date of this press release, the principal amount of outstanding bonds is approximately \$8.5 million.

The decision to seek an extension follows, among others, recent developments as a result of which the Company does not expect to secure the potential strategic program award with a European OEM in the near future. The Company continues to stand by its recently announced 2026 goals.

The press release is furnished as Exhibit 99.1 to this Current Report on Form 6-K.

Cautionary Note Regarding Forward-Looking Statements

This Current Report on Form 6-K (the "report") contains "forward-looking statements" within the meaning of the Securities Act of 1933 and the Securities Exchange Act of 1934, both as amended by the Private Securities Litigation Reform Act of 1995. The words "expect," "believe," "estimate," "intend," "plan," "anticipate," "may," "should," "strategy," "future," "will," "project," "potential" and similar expressions indicate forward-looking statements. Forward-looking statements are predictions, projections and other statements about future events that are based on current expectations and assumptions and, as a result, are subject to risks and uncertainties. These risks and uncertainties include the approval by the bond holders of the amended terms of the bonds, including the extension of the date the Company must meet the conditions to the release of the funds by the trustee; whether and when the Company will meet the conditions to the release of the proceeds from the sale of the bonds which are held by the trustee, whether and when the Company secures the orders it anticipates and the extent of any orders the Company receives; the Company's ability to meet expectations with respect to its financial guidance and outlook; the timing and completion of key product and project orders and milestones; expectations regarding our collaborations and business with third parties; the effect of tariffs and trade policies of the United States, China and other countries, whether announced or implemented; the effect on the Israeli economy generally and on the Company's business resulting from the terrorism and the hostilities in Israel and with its neighboring countries including the effects of the continuing war with Hamas in Gaza and any intensification of hostilities with others, including Iran and Hezbollah, and the effect of the callup of a significant portion of its working population, including the Company's employees; the effect of any potential boycott both of Israeli products and business and of stocks in Israeli companies; the effect of any downgrading of the Israeli economy and the effect of changes in the exchange rate between the US dollar and the Israeli shekel; and the risk and uncertainties described in "Cautionary Note Regarding Forward-Looking Statements," "Item 3. Key Information - D. Risk Factors" and "Item 5. Operating and Financial Review and Prospects" and in the Company's Annual Report on Form 20-F for the year ended December 31, 2024, which was filed with the Securities and Exchange Commission (the "SEC") on March 28, 2025, as well as other documents filed by the Company with the SEC. Accordingly, you are cautioned not to place undue reliance on these forward-looking statements. Forwardlooking statements relate only to the date they were made, and the Company does not undertake any obligation to update forward-looking statements to reflect events or circumstances after the date they were made except as required by law or applicable regulation.

Information contained on, or that can be accessed through, the Company's website or any other website or any social media is expressly not incorporated by reference into and is not a part of this report.

Exhibit Index

Exhibit No. Document Description

99.1 Press Release dated December 8, 2025*

* The information in this press release is incorporated by reference in any registration statement on Form F-3 or Form S-8 that incorporates by reference material filed by the Company with the SEC.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ARBE ROBOTICS LTD.

Date: December 8, 2025 By: /s/ Kobi Marenko

Name: Kobi Marenko

Title: CEO



Arbe Announces Proposed Extension of Convertible Debenture Milestones

Tel Aviv, Israel, December 8, 2025 - Arbe Robotics Ltd. (Nasdaq: ARBE) (TASE: ARBE) ("Arbe" or the "Company"), a global leader in perception radar solutions, today announced that, subject to approval of the bondholders, it proposes to extend to December 31, 2026 the deadline for meeting the conditions under its series A convertible bonds for the release of the proceeds raised from the issuance of the convertible bonds which proceeds are held by the trustee. Under the present terms of the bonds, if the conditions are not met by December 31, 2025, the Company will be required to effect an early redemption of those bonds which have not been converted.

Earlier today, the trustee published a notice regarding a meeting of the bondholders (without physical convening) to be held on December 16, 2025, to vote on the proposed extension and updated terms, which include a reduction of the interest rate of the bonds from 6.5% to 4.35% effective January 1, 2026. The bonds would remain convertible into Arbe's ordinary shares at a conversion price of ILS 9.53 (approximately \$2.95) per share. In addition, if the amendment is approved by the bondholders, the Company is considering the issuance of additional bonds of the same series increasing the principal amount of outstanding bonds to up to \$20 million. As of the date of this press release, the principal amount of outstanding bonds is approximately \$8.5 million. The Company's board of directors has the discretion to determine whether to issue additional bonds and, if it approves the issuance, the amount and terms of any additional bonds which the Company may issue.

The three conditions under these series A convertible bonds for the release of the funds by the trustee are:

- The Company wins a tender or contract to supply its products as a single supplier of chips of imaging radar (directly or through one of the international Tier 1 manufacturers) to one of ten named major automobile manufacturers.
- The average closing trading price of Arbe's ordinary shares on Nasdaq is not less than \$3.10 per share during 30 consecutive trading days, and the average combined trading volume on Nasdaq and TASE during such 30 trading days is at least 300,000 shares per day.
- The closing price of the Company's ordinary shares on Nasdaq on the date the Company presents to the trustee the documentation confirming the fulfillment of the abovementioned conditions precedent, is not less than \$3.10.

The decision to seek an extension follows, among others, recent developments as a result of which Arbe does not expect to secure the potential strategic program award with a European OEM in the near future. The Company continues to stand by its recently announced 2026 goals.

About Arbe

Arbe (Nasdaq: ARBE) (TASE: ARBE), a global leader in ultra-high-resolution radar solutions, is driving a radar revolution. Its cutting-edge radar chipset delivers up to 100 times more detail than other radar systems, empowering automakers and radar Tier-1s to develop truly safe driving systems that scale from ADAS to hands-free, eyes-off capabilities and up to full vehicle autonomy. Arbe's technology addresses the most critical use cases by delivering real-time, 4-dimensional imaging that enables the perception stack with information such as precise mapping of drivable free space in highway and urban environments across all weather and lighting conditions. With its transformative impact across passenger, commercial, and industrial vehicle segments, as well as other advanced safety applications, Arbe is redefining the role of radar in next-generation mobility. Headquartered in Tel Aviv, Israel, the Company also operates offices in the United States, Germany, and China.

For more information, visit https://arberobotics.com/

Cautionary Note Regarding Forward-Looking Statements

This press release contains "forward-looking statements" within the meaning of the Securities Act of 1933 and the Securities Exchange Act of 1934, both as amended by the Private Securities Litigation Reform Act of 1995. The words "expect," "believe," "estimate," "intend," "plan," "anticipate," "may," "should," "strategy," "future," "will," "project," "potential" and similar expressions indicate forward-looking statements. Forward-looking statements are predictions, projections and other statements about future events that are based on current expectations and assumptions and, as a result, are subject to risks and uncertainties. These risks and uncertainties include the approval by the bond holders of the amended terms of the bonds, including the extension of the date the Company must meet the conditions to the release of the funds by the trustee; whether and when the Company will meet the conditions to the release of the proceeds from the sale of the bonds which are held by the trustee, whether and when the Company secures the orders it anticipates and the extent of any orders the Company receives; the Company's ability to meet expectations with respect to its financial guidance and outlook; the timing and completion of key product and project orders and milestones; expectations regarding our collaborations and business with third parties; the effect of tariffs and trade policies of the United States, China and other countries, whether announced or implemented; the effect on the Israeli economy generally and on the Company's business resulting from the terrorism and the hostilities in Israel and with its neighboring countries including the effects of the continuing war with Hamas in Gaza and any intensification of hostilities with others, including Iran and Hezbollah, and the effect of the call-up of a significant portion of its working population, including the Company's employees; the effect of any potential boycott both of Israeli products and business and of stocks in Israeli companies; the effect of any downgrading of the Israeli economy and the effect of changes in the exchange rate between the US dollar and the Israeli shekel; and the risk and uncertainties described in "Cautionary Note Regarding Forward-Looking Statements," "Item 3. Key Information - D. Risk Factors" and "Item 5. Operating and Financial Review and Prospects" and in the Company's Annual Report on Form 20-F for the year ended December 31, 2024, which was filed with the Securities and Exchange Commission (the "SEC") on March 28, 2025, as well as other documents filed by the Company with the SEC. Accordingly, you are cautioned not to place undue reliance on these forward-looking statements. Forward-looking statements relate only to the date they were made, and the Company does not undertake any obligation to update forward-looking statements to reflect events or circumstances after the date they were made except as required by law or applicable regulation.

Information contained on, or that can be accessed through, the Company's website or any other website or any social media is expressly not incorporated by reference into and is not a part of this press release.

Investor Relations:

Ehud Helft & Kenny Green EK Global Investor Relations arbe@ekgir.com +1 212 378 8040