

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

Investing in our common stock involves a high degree of risk. See “Risk Factors” beginning on page S-6 of this prospectus supplement.

YA II PN, Ltd.

July 1, 2016

TABLE OF CONTENTS

Prospectus Supplement

	Page
About This Prospectus Supplement	S-2
Cautionary Statement Regarding Forward-Looking Statements	S-3
Prospectus Supplement Summary	S-4
Risk Factors	S-6
Use of Proceeds	S-8
Description of Securities We Are Offering	S-9
Plan of Distribution	S-9
Legal Matters	S-10
Experts	S-10
Where You Can Find More Information	S-10
Incorporation of Certain Documents by Reference	S-11

Prospectus

	Page
About This Prospectus	1
Our Company	1
Risk Factors	2
Cautionary Statement Regarding Forward-Looking Statements	2
Use of Proceeds	2
The Securities We May Offer	3
Description of Capital Stock	3
Plan of Distribution	10
Legal Matters	12
Experts	12
Where You Can Find More Information	12
Incorporation of Documents by Reference	13

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus are part of a “shelf” registration statement on Form S-3 (File No. 333-196760), as amended, that we initially filed with the Securities and Exchange Commission, or the SEC, on June 13, 2014 and was declared effective on August 4, 2014. Under this shelf registration process, we may, from time to time, sell any combination of the securities described in the accompanying prospectus in one or more offerings up to a total dollar amount of \$30,000,000. We have not yet sold any securities under the foregoing shelf registration.

This prospectus supplement provides specific details regarding the issuance of up to \$2,390,000 of shares of our common stock pursuant to the SEDA. To the extent there is a conflict between the information contained in this prospectus supplement and accompanying prospectus, you should rely on the information in this prospectus supplement. Generally, when we refer to this prospectus supplement, we are referring to both parts of this document combined together with all documents incorporated by reference. This prospectus supplement, the accompanying prospectus and the documents we incorporate by reference herein and therein include important information about us and our common stock, and other information you should know before investing. You should read this prospectus supplement, the accompanying prospectus and the documents incorporated by reference in this prospectus supplement and the accompanying prospectus before making an investment decision. You should also read and consider the information in the documents referred to in the sections of this prospectus supplement entitled “Where You Can Find More Information” and “Incorporation of Certain Documents by Reference.”

This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of this offering and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus. The second part is the accompanying prospectus, which gives more general information about the shares of our common stock and other securities we may offer from time to time under our shelf registration statement, some of which does not apply to the common stock offered by this prospectus supplement.

You should rely only on the information contained in or incorporated by reference into this prospectus supplement or contained in or incorporated by reference into the accompanying prospectus to which we have referred you. We have not authorized anyone to provide you with information that is different. If anyone provides you with different or inconsistent information, you should not rely on it. The information contained in, or incorporated by reference into, this prospectus supplement and contained in, or incorporated by reference into, the accompanying prospectus is accurate only as of the respective dates thereof, regardless of the time of delivery of this prospectus supplement and the accompanying prospectus or of any sale of securities.

We are offering to sell, and are seeking offers to buy, the shares of common stock only in jurisdictions where such offers and sales are permitted. The distribution of this prospectus supplement and the accompanying prospectus and

the offering of the shares of common stock in certain states or jurisdictions or to certain persons within such states and jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement and the accompanying prospectus must inform themselves about and observe any restrictions relating to the offering of the shares of common stock and the distribution of this prospectus supplement and the accompanying prospectus outside the United States. This prospectus supplement and the accompanying prospectus do not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement and the accompanying prospectus by any person in any state or jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

As used in this prospectus supplement, the terms the “Company”, “we”, “us” and “our” mean Micronet Enertec Technologies, Inc., unless otherwise indicated.

All dollar amounts refer to U.S. dollars unless otherwise indicated.

S-2

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the documents we incorporate by reference herein and therein contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 and other federal securities laws regarding our business, financial condition, expenditures, results of operations and prospects. Words such as “expects,” “anticipates,” “intends,” “plans,” “planned expenditures,” “believes,” “seeks,” “estimates”, “may”, “will”, “should” or the negative thereof or other similar expressions or variations of such words are intended to identify forward-looking statements, but are not deemed to represent an all-inclusive means of identifying forward-looking statements as denoted in this prospectus supplement, the accompanying prospectus and the documents we incorporate by reference herein and therein. Additionally, statements concerning future matters are forward-looking statements.

Although forward-looking statements in this prospectus supplement, the accompanying prospectus and the documents we incorporate by reference herein and therein reflect the good faith judgment of our management, such statements can only be based on facts and factors known by us as of such date. Consequently, forward-looking statements are inherently subject to risks and uncertainties and actual results and outcomes may differ materially from the results and outcomes discussed in or anticipated by the forward-looking statements. Factors that could cause or contribute to such differences in results and outcomes include, without limitation, those specifically addressed under the heading “*Risk Factors*” in this prospectus supplement, the accompanying prospectus and the documents we incorporate by reference herein and therein, as well as those discussed elsewhere in this prospectus supplement and the accompanying prospectus. Readers are urged not to place undue reliance on these forward-looking statements, which speak only as of the date of this prospectus supplement, the accompanying prospectus or the respective documents incorporated by reference herein or therein, as applicable. Except as required by law, we undertake no obligation to revise or update any forward-looking statements in order to reflect any event or circumstance that may arise after the date of such forward-looking statements. Readers are urged to carefully review and consider the various disclosures made throughout the entirety of this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein, which attempt to advise interested parties of the risks and factors that may affect our business, financial condition, results of operations and prospects.

PROSPECTUS SUPPLEMENT SUMMARY

This summary contains basic information about us and this offering. Because it is a summary, it does not contain all of the information that you should consider before investing. Before you decide to invest in our common stock, you should read this entire prospectus supplement and the accompanying prospectus carefully, including the sections entitled “Risk Factors,” and our consolidated financial statements and the related notes and other documents incorporated by reference herein and in the accompanying prospectus.

OUR COMPANY

We operate primarily through two Israel-based companies, Enertec Systems 2001 Ltd, or Enertec, our wholly-owned subsidiary, and Micronet Ltd, or Micronet, in which we have a controlling interest. Enertec and Micronet develop, manufacture, integrate and globally market rugged computers, tablets and computer-based systems and instruments for the commercial, defense and aerospace markets. Our products, solutions and services are designed to perform in severe environments and battlefield conditions.

Micronet is a publicly-traded company on the Tel Aviv Stock Exchange and operates in the growing commercial mobile resource management, or MRM, market and is a global developer, manufacturer and provider of mobile computing platforms, designed for integration into fleet management and mobile workforce management solutions. In June 2014, Micronet expanded its MRM business and operations in the U.S. market through the acquisition of the U.S.-based vehicle business of Beijer Electronics Inc. located in Utah and as a result adding to its business U.S.-based facilities which include manufacturing and technical support infrastructure, sales and marketing capabilities as well as expanding its U.S. customer base and presence with local fleets and local MRM service providers. As a result of this acquisition, Micronet currently operates via its Israeli and U.S. facilities, the first located in Azur, Israel, near Tel Aviv, and the second located in Salt Lake City, Utah.

Enertec operates in the defense and aerospace markets and designs, develops, manufactures and supplies various customized military computer-based systems, simulators, automatic test equipment and electronic instruments. Enertec’s solutions and systems are designed according to major aerospace integrators’ specifications and market technological needs. These solutions are integrated by them into various critical systems such as command and control stations, missile fire control, military aircraft support systems and missile simulators marketed mainly by Israeli defense industries and for use by the Israeli Air Force, Israeli Navy and by foreign defense entities.

Our Corporate Information

Our executive offices in the United States are located at 28 West Grand Avenue, Suite 3, Montvale, NJ 07645. Our telephone number is (201) 225-0190. Our executive offices in Israel are located at 27 Hamezuda Street, Azur 5800171, Israel, P.O. Box 193, 5810101. Our telephone number in Israel is 972 (3) 533-5126. Our website address is www.micronet-enertec.com The information on our website is not incorporated by reference in this prospectus supplement and should not be considered to be part of this prospectus supplement. Our website address is included in this prospectus supplement as an inactive technical reference only.

S-4

THE OFFERING

Shares of common stock with aggregate gross sale proceeds of up to \$2,390,000.

Common
stock offered
by us

Further information regarding the number of shares issued to YA II, and for any other drawdowns during the term of the SEDA, will be disclosed in supplements to this prospectus to be filed in connection with the settlement of the shares.

Use of
proceeds

The proceeds from this offering will vary depending on the number of shares that we offer and the offering price per share. We estimate that our net maximum proceeds, after discounts and offering expenses, will be up to approximately \$2.265 million. We may sell fewer than all of the shares offered by this prospectus supplement, in which case our net offering proceeds will be less, and we may raise less than the maximum \$2,390,000 aggregate gross sales proceeds permitted by this prospectus supplement.

We intend to use the net proceeds from this offering to increase our holdings in our subsidiary, Micronet Ltd., and/or for working capital and general corporate purposes, which may include repayment of certain existing debts. See "Use of Proceeds" on page S-8 for more information.

Risk factors

See "Risk Factors" beginning on page S-6 of this prospectus supplement and other information included or incorporated by reference into this prospectus supplement and the accompanying prospectus for a discussion of factors you should carefully consider before deciding to purchase our common stock.

Nasdaq
symbol

MICT

S-5

RISK FACTORS

An investment in our common stock involves significant risks. You should carefully consider the risk factors contained in this prospectus supplement, the accompanying prospectus and in the documents incorporated by reference herein and therein, including our Annual Report on Form 10-K for the fiscal year ended December 31, 2015, or Annual Report, as well as all of the information contained below and elsewhere in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein or therein, before you decide to invest in our common stock. Our business, prospects, financial condition and results of operations may be materially and adversely affected as a result of any of such risks. The value of our common stock could decline as a result of any of these risks. You could lose all or part of your investment in our common stock. Some of our statements in sections entitled “*Risk Factors*” are forward-looking statements. The risks and uncertainties we have described are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business, prospects, financial condition and results of operations.

Risks Relating to Our Business and Industry

We have been named as a defendant in a lawsuit commenced in the Superior District Court of the State of Delaware with respect to an alleged breach of contract claim.

On February 18, 2016, we entered into an Asset Purchase Agreement, or the Asset Purchase Agreement, with Novatel Wireless, Inc., or the Seller, pursuant to which we agreed to acquire certain assets and liabilities of the Seller used in the operation of its telematics hardware business, or the Telematics Business Acquisition. The Asset Purchase Agreement provided that the Telematics Business Acquisition would close on or before March 31, 2016, subject to certain extensions and termination provisions. On April 11, 2016, the Seller notified us that it was terminating the Asset Purchase Agreement due to the failure to meet such closing deadline and certain conditions required to extend it, and demanded a termination fee equal to \$250,000 pursuant to the terms of the Asset Purchase Agreement. On May 3, 2016, the Seller filed a complaint in the Superior District Court of the State of Delaware naming us as the defendant. The complaint alleges, among other things, that we breached the terms of the Asset Purchase Agreement and seeks, among other things, the payment of the termination fee equal to \$250,000, plus interest as well as all costs and expenses associated with the commencement of the lawsuit. We reject the claims and intend to vigorously defend against the claims made in the litigation. However, due to the lawsuit being at an early stage, we are unable to predict the outcome of the lawsuit and the possible loss or range of loss, if any, associated with its resolution.

Risks Related to this Offering

There Is No Assurance That We Will Receive 2.39 Million In Gross Proceeds Under the SEDA

Pursuant to applicable Nasdaq regulations regarding the sale of discounted shares of common stock and pursuant to the terms of the SEDA, we can only sell up to 19.9% of the outstanding number of shares as of the date of this prospectus. The sale of more than 20% of the outstanding shares of our common stock would require stockholder approval, which, if sought, may not be obtained. Under the terms of the SEDA, we have the right, but not the obligation, to sell shares to YA II in an amount up to \$2,390,000 over the three-year term of the SEDA. Future drawdowns are subject to the limitations set forth in the SEDA, and the amount of future drawdowns, if any, may be limited by the future trading volume of our common stock.

The Sale of Our Common Stock in this Offering and any Future Sales of Our Common Stock May Depress Our Stock Price

If we elect to draw down amounts under the SEDA, which will result in the sale of shares of our common stock to YA II, any such draw downs may have a dilutive impact on our existing shareholders. YA II may resell some or all of the shares we issue to it pursuant to draw downs under the SEDA and such sales could cause the market price of our common stock to decline.

Our management has significant flexibility in using the net proceeds of this offering.

We intend to use the net proceeds from this offering to increase our holdings in our subsidiary Micronet Ltd. and/or, for working capital and general corporate purposes, which may include repayment of certain existing debts. Our management will have significant flexibility in applying the net proceeds of this offering. The actual amounts and timing of expenditures will vary significantly depending on a number of factors, including the amount of cash used in our operations and our research and development efforts. Management's failure to use these funds effectively would have an adverse effect on the value of our common stock and could make it more difficult and costly to raise funds in the future.

We may need additional financing in the future. We may be unable to obtain additional financing or if we obtain financing it may not be on terms favorable to us. You may lose your entire investment.

Based on our current plans, we believe our existing cash and cash equivalents, along with cash generated from this offering, will be sufficient to fund our operating expense and capital requirements for at least twelve months from the date hereof, although there is no assurance of this and we may need funds in the future. If our capital resources are insufficient to meet future capital requirements, we will have to raise additional funds. If we are unable to obtain additional funds on terms favorable to us, we may be required to cease or reduce our operating activities. If we must cease or reduce our operating activities, you may lose your entire investment.

Our share price may be volatile.

The market price of our common stock has fluctuated in the past. Consequently, the current market price of our common stock may not be indicative of future market prices, and we may be unable to sustain or increase the value of an investment in our common stock.

We do not anticipate paying any dividends.

No dividends have been paid on our common stock. We do not intend to pay cash dividends on our common stock in the foreseeable future, and anticipate that profits, if any, received from operations will be reinvested in our business. Any decision to pay dividends will depend upon our profitability at the time, cash available and other relevant factors.

Our actual financial results may differ materially from any guidance we may publish from time to time.

We have in the past and may, from time to time, voluntarily publish guidance regarding our future performance that represents our management's estimates as of the date of relevant release. Any such guidance is based upon a number of assumptions and estimates that, while presented with numerical specificity, is inherently subject to significant business, economic and competitive uncertainties and contingencies, many of which are beyond our control and are based upon specific assumptions with respect to future business decisions, some of which will change. Guidance is necessarily speculative in nature, and it can be expected that some or all of the assumptions of the guidance furnished by us will not materialize or will vary significantly from actual results. Further, our sales during any given year may be unevenly distributed as individual orders tend to close in greater numbers immediately prior to the relevant year end. Our revenues from individual customers may also fluctuate from time to time based on the timing and the terms under which further orders are received and the duration of the delivery and implementation of such orders. Therefore, if our projected sales do not close before the end of the relevant year, our actual results may be inconsistent with our published guidance. Accordingly, our guidance is only an estimate of what management believes is realizable as of the date of release. Actual results may vary from the guidance and the variations may be material. Investors should also recognize that the reliability of any forecasted financial data diminishes the farther in the future that the data is forecast. In light of the foregoing, investors are urged to consider any guidance we may publish in context and not to place undue reliance on it.

USE OF PROCEEDS

We may receive up to \$2,390,000 in proceeds from the sale of shares of common stock to YA II pursuant to the SEDA. For each share of common stock purchased under the SEDA, YA II will pay 98.5% of the lowest daily volume weighted average price, or VWAP, during the five consecutive trading days after the date that we deliver an advance notice. Except for our initial advance, each such advance may be for an amount not to exceed the greater of (i) 20% of the aggregate daily value traded (meaning the product obtained by multiplying the daily trading volume of our common stock for that day on the principal market by the VWAP for such day) during the five trading days immediately prior to the date we submit an advance notice, or the Pricing Period, but not to exceed \$750,000, (ii) \$25,000, or (iii) such other amount as may be agreed by us and YA II. Pursuant to the terms of the SEDA, our initial advance may be up to \$400,000 in the aggregate. The term "VWAP" as used in this prospectus supplement means, as of any date, the daily dollar volume-weighted average price for such security as reported by Bloomberg, L.P. The amount also cannot cause the aggregate number of shares of common stock beneficially owned by YA II and its affiliates to exceed 4.99% of the then outstanding common stock. If an advance notice requests the purchase of shares exceeding any of the amounts described above, that portion of the advance notice will be deemed as automatically withdrawn. Additionally, in any advance notice delivered by us, we may set a minimum acceptable price for the purchase of our common stock, provided, however, that the advance amount requested may be reduced by 20% for each trading day during the applicable Pricing Period that the VWAP of our common stock is below such minimum acceptable price.

If we sell the maximum dollar value of shares under the SEDA, we estimate that the net proceeds we will receive from this offering will be approximately \$2,265,000 after deducting estimated offering related expenses.

We intend to use the net proceeds from this offering to use the net proceeds from this offering to increase our holdings in our subsidiary, Micronet Ltd., and/or for working capital and general corporate purposes, which may include repayment of certain existing debts. We have not yet determined the amount of net proceeds to be used specifically for any of the foregoing purposes. Accordingly, our management will have significant discretion and flexibility in applying the net proceeds from this offering.

Description of Securities We Are Offering

Common Stock

The material terms and provisions of our common stock are described under the caption “Description of Common Stock” starting on page 3 of the accompanying prospectus.

PLAN OF DISTRIBUTION

On June 30, 2016, we entered into the SEDA with YA II. The SEDA provides that, upon the terms and subject to the conditions set forth therein, YA II is committed to purchase up to \$2,390,000 of shares of our common stock over a three-year commitment period. From time to time, and at our sole discretion, we may present YA II with advance notices to purchase shares of our common stock. For each share of common stock purchased under the SEDA, YA II will pay 98.5% of the VWAP during the five consecutive trading days after the date of the advance notice. Except for our initial advance, each such advance may be for an amount not to exceed the greater of (i) 20% of the aggregate daily value traded (meaning the product obtained by multiplying the daily trading volume of our common stock for that day on the principal market by the VWAP for such day) during the five trading days immediately prior to the date we submit an advance notice, but not to exceed \$750,000, (ii) \$25,000, or (iii) such other amount as may be agreed by us and YA II. Pursuant to the terms of the SEDA, our initial advance may be up to \$400,000 in the aggregate.

Delivery of the shares against payment therefor in respect of each advance notice shall be settled on the second trading day following each sale pursuant to the SEDA, or on such earlier date as we and YA II may mutually agree. There is no arrangement for funds to be received in an escrow, trust, or similar arrangement. In connection with any advance notice, if any portion of an advance would cause the beneficial ownership of our then outstanding common stock by YA II to exceed 4.99%, then such portion shall automatically be deemed to be withdrawn by us with no further action required by us. We may terminate the SEDA upon fifteen trading days of prior notice to YA II, provided that there are no advances outstanding and we have paid to YA II all amounts then due.

In addition to our issuance of common stock to YA II pursuant to the SEDA, this prospectus supplement also covers the resale of those shares from time to time by YA II to the public. In connection with YA II's sale of our common stock, YA II is deemed to be an “underwriter” within the meaning of the Securities Act and the compensation paid to YA II may be deemed to be underwriting commissions or discounts. We have agreed in the SEDA to provide customary indemnification to YA II.

YA II has informed us that it will use an unaffiliated broker-dealer to effectuate any sales of common stock that it may purchase from us pursuant to the SEDA. Such sales will be made on the Nasdaq Capital Market or otherwise at prices and at terms then prevailing or at prices related to the then current market price. Each such unaffiliated broker-dealer may be an underwriter within the meaning of Section 2(a)(11) of the Securities Act. YA II has informed us that each such broker-dealer will receive commissions from YA II which will not exceed customary brokerage commissions.

Shares of our common stock may be sold in one or more of the following manners:

- ordinary brokerage transactions and transactions in which the broker solicits purchasers;
- a block trade in which the broker or dealer so engaged will attempt to sell the shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction;
- to a broker-dealer as principal and resale by the broker-dealer for its account; or
- a combination of any such methods of sale.

YA II has agreed that, during the term of the SEDA, neither YA II or its affiliates will engage in any short sales or hedging transactions with respect to our common stock, provided that upon receipt of an advance notice YA II may sell shares that it is obligated to purchase under such advance notice prior to taking possession of such shares.

YA II and any unaffiliated broker-dealer will be subject to liability under the federal securities laws and must comply with the requirements of the Securities Act and the Exchange Act of 1934, as amended, or the Exchange Act, including without limitation, Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of common stock by YA II or any unaffiliated broker-dealer. Under these rules and regulations, YA II and any unaffiliated broker-dealer:

· may not engage in any stabilization activity in connection with our securities;

· must furnish each broker which offers shares of our common stock covered by the prospectus supplement and accompanying prospectus that are a part of our Registration Statement with the number of copies of such prospectus supplement and accompanying prospectus which are required by each broker; and

· may not bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities other than as permitted under the Exchange Act.

These restrictions may affect the marketability of the common shares by YA II and any unaffiliated broker-dealer.

In accordance with the SEDA, we paid \$100,000 to YA Global II SPV, Ltd., as designee of YA II, as a commitment fee. In addition, we have agreed to pay an additional commitment fee equal to 22% of the final amount paid to us from our initial advance, or the Initial Advance Fee, which shall be due and payable within 120 days after the closing date of the initial advance, or the Initial Advance Fee Payment Date. The Initial Advance Fee shall be discharged either in cash, or by the issuance of such number of shares of our common stock as is equal to the Initial Advance Fee divided by the purchase price of our common stock in the initial advance, provided however, the Initial Advance Fee shall be forgiven if the closing price of our common stock on the Initial Advance Fee Payment Date is greater than or equal to the purchase price of our common stock in the initial advance.

On June 30, 2016, we and our subsidiary Enertec Electronics Ltd., collectively the Borrowers, entered into a Note Purchase Agreement with YA II, or the Note Purchase Agreement, whereby YA II will purchase \$600,000 of notes from the Borrowers, or the Notes. The outstanding principal balance of the Notes shall bear interest at 7% per annum. On a quarterly basis commencing on October 10, 2016, the Borrowers shall make payments of \$150,000 of principal plus accrued interest. All amounts payable are due on July 10, 2017. Upon the occurrence of an Event of Default under the Notes, all amounts payable may be due immediately. In connection with the Note Purchase Agreement, we agreed to grant to YA II a five-year warrant to purchase 66,000 shares of our common stock at an exercise price of \$4.30 per share.

LEGAL MATTERS

The validity of the common stock offered hereby will be passed upon for us by Zysman, Aharoni, Gayer and Sullivan & Worcester LLP, New York, New York.

EXPERTS

The consolidated financial statements of the Company as of and for the years ended December 31, 2015 and 2014, incorporated in this prospectus supplement and accompanying prospectus by reference to our Annual Report, have been audited by Ziv Haft, BDO member firm, an independent registered public accounting firm, as stated in their report incorporated by reference herein, and have been so incorporated in reliance upon such report and upon the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the reporting and information requirements of the Exchange Act and as a result file periodic reports and other information with the SEC. These periodic reports and other information will be available for inspection and copying at the SEC's public reference room and the website of the SEC referred to below. We also make available on our website under "IR," free of charge, our proxy statements, annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports as soon as reasonably practicable after we electronically file such materials with or furnish them to the SEC. Our website address is www.micronet-enertec.com. This reference to our website is an inactive textual reference only, and is not a hyperlink. The contents of our website are not part of this prospectus supplement, and you should not consider the contents of our website in making an investment decision with respect to the common stock.

We have filed a registration statement on Form S-3 under the Securities Act with the SEC with respect to the shares of common stock offered through this prospectus supplement. This prospectus supplement and the accompany prospectus are filed as a part of that registration statement and do not contain all of the information contained in the registration statement and exhibits. We refer you to our registration statement and each exhibit attached to it for a more complete description of matters involving us, and the statements we have made in this prospectus supplement and the accompanying prospectus are qualified in their entirety by reference to these additional materials.

You may read and copy the registration statement, reports and other information we file with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Washington D.C. 20549, on official business days during the hours of 10:00 am to 3:00 pm. You may also obtain copies of this information by mail from the public reference section of the SEC, 100 F Street, N.E., Washington, D.C. 20549, at prescribed rates. You may obtain information regarding the operation of the public reference room by calling the SEC at 1 (800) SEC-0330. The SEC also maintains a website that contains reports and other information about issuers, like us, who file electronically with the SEC. The address of that website is <http://www.sec.gov>. This reference to the SEC's website is an inactive textual reference only, and is not a hyperlink.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

We are “incorporating by reference” certain documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents. The information in the documents incorporated by reference is considered to be part of this prospectus supplement and the accompanying prospectus. Statements contained in documents that we file with the SEC and that are incorporated by reference in this prospectus supplement and the accompanying prospectus will automatically update and supersede information contained in this prospectus supplement and the accompanying prospectus, including information in previously filed documents or reports that have been incorporated by reference in this prospectus supplement and the accompanying prospectus, to the extent the new information differs from or is inconsistent with the old information.

All documents filed by us pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act until all of the common stock to which this prospectus supplement relates has been sold or the offering is otherwise terminated, except in each case for information contained in any such filing where we indicate that such information is being furnished and is not to be considered “filed” under the Exchange Act, will be deemed to be incorporated by reference in this prospectus supplement and the accompanying prospectus and to be a part hereof and thereof from the date of filing of such documents.

In addition to the documents listed under “Incorporation of Documents by Reference” in the accompanying prospectus, we incorporate by reference the documents listed below which we filed with the SEC under the Exchange Act:

- (1) Our Annual Report on Form 10-K for the fiscal year ended December 31, 2015, filed with the SEC on April 14, 2016;
- (2) Our Quarterly Report on Form 10-Q for the quarter ended March 30, 2016, filed with the SEC on May 16, 2016;
- (3) Our Current Reports on Form 8-K filed with the SEC on February 22, 2016, April 12, 2016 and July 1, 2016; and
- (4) The description of our common stock contained in our Registration Statement on Form 8-A filed with the SEC on March 27, 2013, including any amendments and reports filed for the purpose of updating such description.

We will provide a copy of the documents we incorporate by reference, at no cost, to any person who receives this prospectus supplement and the accompanying prospectus. To request a copy of any or all of these documents, you should write or telephone us at 28 West Grand Avenue, suite 3 Montvale New Jersey , 07645, Attention: Ms. Tali Dinar, CFO, Micronet Enertec Technologies, Inc. (int'l) + 972 (52) 338-4033 E-mail: tali@micronet-enertec.com

S-11

PROSPECTUS

\$30,000,000

COMMON STOCK

WARRANTS
UNITS

We may from time to time sell common stock, warrants to purchase common stock, and units of such securities, in one or more offerings for an aggregate initial offering price of \$30,000,000. We refer to the common stock, the warrants to purchase common stock and the units collectively as the securities. This prospectus describes the general manner in which our securities may be offered using this prospectus. We may sell these securities to or through underwriters or dealers, directly to purchasers or through agents. We will set forth the names of any underwriters, dealers or agents in an accompanying prospectus supplement. You should carefully read this prospectus and any accompanying supplements before you decide to invest in any of these securities.

Our common stock is traded on the Nasdaq Capital Market, or Nasdaq, under the symbol "MICT."

As of July 7, 2014, the aggregate market value of the our common stock held by non-affiliates was approximately \$14,552,884 based on a per share price of \$4.4999, the price at which shares of our common stock were last sold on July 7, 2014. We have not offered and sold any securities in a primary offering pursuant to Instruction I.B.6 of the General Instructions to Form S-3 during the period of 12 calendar months immediately prior to and including the date of this prospectus.

Investing in the securities involves risks. See "Risk Factors" beginning on page 2 of this prospectus.

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

The date of this prospectus is August 4, 2014.

TABLE OF CONTENTS

	Page
<u>About This Prospectus</u>	1
<u>Our Company</u>	1
<u>Risk Factors</u>	2
<u>Cautionary Statement Regarding Forward-Looking Statements</u>	2
<u>Use of Proceeds</u>	2
<u>The Securities We May Offer</u>	3
<u>Description of Capital Stock</u>	3
<u>Description of Warrants</u>	6
<u>Description of Units</u>	9
<u>Plan of Distribution</u>	10
<u>Legal Matters</u>	12
<u>Experts</u>	12
<u>Where You Can Find More Information</u>	12
<u>Incorporation of Documents by Reference</u>	13

You should rely only on the information contained in this prospectus, any prospectus supplement and the documents incorporated by reference, or to which we have referred you. We have not authorized anyone to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus and any prospectus supplement does not constitute an offer to sell, or a solicitation of an offer to purchase, the securities offered by this prospectus and any prospectus supplement in any jurisdiction to or from any person to whom or from whom it is unlawful to make such offer or solicitation of an offer in such jurisdiction. You should not assume that the information contained in this prospectus, any prospectus supplement or any document incorporated by reference is accurate as of any date other than the date on the front cover of the applicable document.

Neither the delivery of this prospectus nor any distribution of securities pursuant to this prospectus shall, under any circumstances, create any implication that there has been no change in the information set forth or incorporated by reference into this prospectus or in our affairs since the date of this prospectus. Our business, financial condition, results of operations and prospects may have changed since such date.

As used in this prospectus, the terms the “Company”, “we”, “us” and “our” mean Micronet Enertec Technologies, Inc., unless otherwise indicated.

All dollar amounts refer to U.S. dollars unless otherwise indicated.

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or the SEC, using a “shelf” registration process. Under this shelf registration process, we may, from time to time, sell any combination of the securities described in this prospectus in one or more offerings up to a total dollar amount of \$30,000,000. This prospectus describes the securities we may offer and the general manner in which our securities may be offered by this prospectus. Each time we sell securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering. We may also add, update or change in the prospectus supplement any of the information contained in this prospectus. To the extent there is a conflict between the information contained in this prospectus and the prospectus supplement, you should rely on the information in the prospectus supplement, provided that if any statement in one of these documents is inconsistent with a statement in another document having a later date—for example, a document incorporated by reference in this prospectus or any prospectus supplement—the statement in the document having the later date modifies or supersedes the earlier statement.

OUR COMPANY

This summary highlights information contained in the documents incorporated herein by reference. Before making an investment decision, you should read the entire prospectus, and our other filings with the SEC, including those filings incorporated herein by reference, carefully, including the sections entitled “Risk Factors” and “Cautionary Statement Regarding Forward-Looking Statements.”

We operate through two Israeli-based subsidiaries, Enertec Systems 2001 Ltd, or Enertec, our wholly-owned subsidiary, and Micronet Ltd, or Micronet, of which we currently own 62.5% of its outstanding share capital. Enertec and Micronet develop, manufacture, integrate and globally market rugged computers, tablets and computer-based systems and instruments for the commercial, defense and aerospace markets. Our products, solutions and services are designed to perform in severe environments and battlefield conditions.

Micronet operates in the commercial Mobile Resource Management, or MRM, market. It designs, develops, manufactures and sells rugged mobile computing devices that provide fleet operators and field workforces with computing solutions in challenging work environments. Micronet’s vehicle cabin installed and portable tablets are designed to increase workforce productivity, enhance corporate efficiency and customer service by offering computing power and communication capabilities. Its products provide fleet operators with visibility into vehicle location, fuel usage, speed and mileage and allow the installation of software applications and communication integration enabling the users to manage the drivers in various aspects such as: driver identification, hours working report, customer/organization working procedures and protocols, rout management and navigation based on tasks and time schedule. End users may also receive real time messages for various services such as pickup and delivery, repair and maintenance, status reports, alerts, notices relating to start and ending of work, digital forms, issuing and printing of invoices and payments.

Enertec operates in the Defense and Aerospace markets and designs, develops, manufactures and supplies various customized military computer-based systems, simulators, automatic test equipment and electronic instruments. Enertec’s solutions and systems are designed according to major aerospace integrators’ requirements and market technological needs and are integrated by them into critical systems such as command and control, missile fire control, maintenance of military aircraft and missiles for use by the Israeli Air Force, Israeli Navy and by non-Israeli defense entities.

Our Corporate Information

Our executive offices in the United States are located at 28 West Grand Avenue, Suite 3, Montvale, NJ 07645. Our telephone number is (201) 225-0190. Our executive offices in Israel are located at 27 Hamezuda Street, Azur 5800171, Israel, P.O. Box 193, 5810101. Our telephone number in Israel is 972 (3) 533-5126.

RISK FACTORS

An investment in our securities involves significant risks. You should carefully consider the risk factors contained in any prospectus supplement and in our filings with the SEC, including our Annual Report on Form 10-K for the fiscal year ended December 31, 2013, as well as all of the information contained in this prospectus, any prospectus supplement and the documents incorporated by reference herein or therein, before you decide to invest in our securities. Our business, prospects, financial condition and results of operations may be materially and adversely affected as a result of any of such risks. The value of our securities could decline as a result of any of these risks. You could lose all or part of your investment in our securities. Some of our statements in sections entitled “Risk Factors” are forward-looking statements. The risks and uncertainties we have described are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business, prospects, financial condition and results of operations.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, any prospectus supplement and the documents we incorporate by reference contain forward-looking statements within the meaning of the federal securities laws regarding our business, financial condition, expenditures, results of operations and prospects. Words such as “expects,” “anticipates,” “intends,” “plans,” “planned expenditures,” “believes,” “seeks,” “estimates”, “may”, “will”, “should” or the negative thereof or other similar expressions or variations of such words are intended to identify forward-looking statements, but are not deemed to represent an all-inclusive means of identifying forward-looking statements as denoted in this prospectus, any prospectus supplement and the documents we incorporate by reference. Additionally, statements concerning future matters are forward-looking statements.

Although forward-looking statements in this prospectus, any prospectus supplement and the documents we incorporate by reference reflect the good faith judgment of our management, such statements can only be based on facts and factors known by us as of such date. Consequently, forward-looking statements are inherently subject to risks and uncertainties and actual results and outcomes may differ materially from the results and outcomes discussed in or anticipated by the forward-looking statements. Factors that could cause or contribute to such differences in results and outcomes include, without limitation, those specifically addressed under the heading “Risk Factors” herein and in the documents we incorporate by reference, as well as those discussed elsewhere in this prospectus and any prospectus supplement. Readers are urged not to place undue reliance on these forward-looking statements, which speak only as of the date of this prospectus, any prospectus supplement or the respective documents incorporated by reference, as applicable. Except as required bylaw, we undertake no obligation to revise or update any forward-looking statements in order to reflect any event or circumstance that may arise after the date of such forward-looking statements. Readers are urged to carefully review and consider the various disclosures made throughout the entirety of this prospectus, any prospectus supplement and the documents incorporated by reference, which attempt to advise interested parties of the risks and factors that may affect our business, financial condition, results of operations and prospects.

USE OF PROCEEDS

Unless we otherwise indicate in the applicable prospectus supplement, we currently intend to use the net proceeds from the sale of the securities for working capital and general corporate purposes, which may include repayment of loans, expanding our sales and marketing efforts and increasing our product offerings, including through potential acquisitions or purchases of relevant licenses. We may also from time to time seek to increase our holdings in our subsidiaries.

We may set forth additional information on the use of net proceeds from the sale of securities we offer under this prospectus in a prospectus supplement relating to the specific offering. Pending the application of the net proceeds, we

intend to invest the net proceeds in a combination of short-term bank deposits or interest-bearing, investment-grade securities, subject to any investment policies our management may determine from time to time.

2

THE SECURITIES WE MAY OFFER

The descriptions of the securities contained in this prospectus, together with any applicable prospectus supplement, summarize the material terms and provisions of the various types of securities that we may offer. We will describe in any applicable prospectus supplement relating to any securities the particular terms of the securities offered by that prospectus supplement. If we so indicate in any applicable prospectus supplement, the terms of the securities may differ from the terms we have summarized below. We may also include in any prospectus supplement information, where applicable, about material U.S. federal income tax consequences relating to the securities, and the securities exchange or market, if any, on which the securities will be listed.

We may sell from time to time, in one or more offerings, one or more of the following securities:

- common stock;
- warrants to purchase common stock; and
- units of the securities mentioned above.

The total initial offering price of all securities that we may issue in these offerings will not exceed \$30,000,000.

DESCRIPTION OF CAPITAL STOCK

The following summary is a description of the material terms of our share capital. We encourage you to read our certificate of incorporation, as amended, and amended and restated bylaws which have been filed with the SEC, as well as the provisions of the General Corporation Law of the State of Delaware, or DGCL.

General

As of the date of this prospectus, our authorized capital stock consisted of 100,000,000 shares of common stock, \$0.001 par value per share, and 5,000,000 shares of preferred stock, \$0.001 par value per share. Our board of directors may establish the rights and preferences of the preferred stock from time to time, none of which is currently outstanding. As of June 30, 2014, there were 5,831,246 shares of our common stock issued and outstanding.

Common Stock

Holders of our common stock are entitled to one vote per share. Our certificate of incorporation, as amended, does not provide for cumulative voting. Holders of our common stock are entitled to receive ratably such dividends, if any, as may be declared by our board of directors out of legally available funds. Upon liquidation, dissolution or winding-up, the holders of our common stock are entitled to share ratably in all of our assets which are legally available for distribution, after payment of or provision for all liabilities and the liquidation preference of any outstanding preferred stock. The holders of our common stock have no preemptive, subscription, redemption or conversion rights.

Preferred Stock

Our certificate of incorporation, as amended, provides that our board of directors is authorized to provide for the issuance of shares of preferred stock in one or more series and, by filing a certificate of designations pursuant to the applicable law of the State of Delaware, to establish from time to time for each such series the number of shares to be included in each such series and to fix the designations, powers, rights and preferences of the shares of each such series, and the qualifications, limitations and restrictions thereof. The authority of the board of directors with respect to each series of preferred stock includes, but is not limited to, determination of the following:

- the distinctive designation of such class or series and the number of shares to constitute such class or series;
- the rate at which dividends on the shares of such class or series shall be declared and paid or set aside for payment, whether dividends at the rate so determined shall be cumulative or accruing, and whether the shares of such class or series shall be entitled to any participating or other dividends in addition to dividends at the rate so determined, and if so, on what terms;

- the right or obligation, if any, of the Company to redeem shares of the particular class or series of preferred stock and, if redeemable, the price, terms and manner of such redemption;
- the special and relative rights and preferences, if any, and the amount or amounts per share, which the shares of such class or series of preferred stock shall be entitled to receive upon any voluntary or involuntary liquidation, dissolution or winding up of the Company;
- the terms and conditions, if any, upon which shares of such class or series shall be convertible into, or exchangeable for, shares of capital stock of any other class or series, including the price or prices or the rate or rates of conversion or exchange and the terms of adjustment, if any;
- the obligation, if any, of the Company to retire, redeem or purchase shares of such class or series pursuant to a sinking fund or fund of a similar nature or otherwise, and the terms and conditions of such obligations;
- voting rights, if any, on the issuance of additional shares of such class or series or any shares of any other class or series of preferred stock;
- limitations, if any, on the issuance of additional shares of such class or series or any shares of any other class or series of preferred stock; and
- such other preferences, powers, qualifications, special or relative rights and privileges as the board of directors may deem advisable and are not inconsistent with the law and the provisions of our certificate of incorporation, as amended.

Anti-Takeover Provisions

Delaware Law

We are subject to Section 203 of the DGCL, or Section 203. This provision generally prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years following the date the stockholder became an interested stockholder, unless:

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

Section 203 defines a business combination to include:

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

In general, Section 203 defines an “interested stockholder” as any entity or person beneficially owning 15% or more of the outstanding voting stock of a corporation, or an affiliate or associate of the corporation and was the owner of 15% or more of the outstanding voting stock of a corporation at any time within three years prior to the time of determination of interested stockholder status; and any entity or person affiliated with or controlling or controlled by such entity or person.

The provisions of Section 203 may encourage persons interested in acquiring us to negotiate in advance with our board of directors, since the stockholder approval requirement would be avoided if a majority of the directors then in office approves either the business combination or the transaction which results in any such person becoming an interested stockholder. Such provisions also may have the effect of preventing changes in our management.

Since we have not elected to be exempt from the restrictions imposed under Section 203, we are subject to Section 203 because our shares of common stock are listed on a national securities exchange as of our listing on Nasdaq on April 29, 2013. Unless we adopt an amendment to our certificate of incorporation, as amended, by action of our stockholders expressly electing not to be governed by Section 203, we are generally subject to Section 203, except that the restrictions contained in Section 203 would not apply if the business combination is with an interested stockholder who became an interested stockholder before the time that we listed on Nasdaq.

Section 214 of the DGCL provides that stockholders are denied the right to cumulate votes in the election of directors unless our certificate of incorporation, as amended, provides otherwise. Our certificate of incorporation, as amended, does not provide for cumulative voting. These statutory provisions could delay or frustrate the removal of incumbent directors or a change in control of our Company. They could also discourage, impede, or prevent a merger, tender offer, or proxy contest, even if such event would be favorable to the interests of our stockholders.

Authorized but Unissued Shares

Our authorized but unissued shares of common stock will be available for future issuance without stockholder approval. We may use additional shares of common stock for a variety of purposes, including future offerings to raise additional capital or as compensation to third party service providers. The existence of authorized but unissued shares of common stock could render more difficult or discourage an attempt to obtain control of us by means of a proxy contest, tender offer, merger or otherwise.

Certificate of Incorporation and Amended and Restated Bylaw Provisions

Our certificate of incorporation, as amended, and amended and restated bylaws contain provisions that could have the effect of discouraging potential acquisition proposals or making a tender offer or delaying or preventing a change in control, including changes a stockholder might consider favorable. In particular, the certificate of incorporation, as amended, and amended and restated bylaws, as applicable, among other things:

- provide our board of directors with the ability to issue up to 5,000,000 shares of undesignated preferred stock and to determine the rights, preferences and privileges of such shares, without stockholder approval;
- provide our board of directors with the ability, in certain circumstances, to alter our bylaws without stockholder approval;
- provide our board of directors with the exclusive authority to fix the number of directors constituting the whole board; and
- provide that vacancies on our board of directors may be filled by a majority of directors in office, although less than a quorum.

Such provisions may have the effect of discouraging a third-party from acquiring us, even if doing so would be beneficial to our stockholders. These provisions are intended to enhance the likelihood of continuity and stability in the composition of our board of directors and in its policies, and to discourage some types of transactions that may involve an actual or threatened change in control of our Company. These provisions are designed to reduce our vulnerability to an unsolicited acquisition proposal and to discourage some tactics that may be used in proxy fights. We believe that the benefits of increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure our Company outweigh the disadvantages of discouraging such proposals because, among other things, negotiation of such proposals could result in an improvement of their terms. However, these provisions could have the effect of discouraging others from making tender offers for our shares that could result from actual or rumored takeover attempts. These provisions also may have the effect of preventing changes in our management.

Transfer Agent and Registrar for Common Stock

The current transfer agent and registrar for our common stock is Transfer Online LLC.

Listing

Our common stock is listed on The NASDAQ Capital Market under the symbol "MICT".

DESCRIPTION OF WARRANTS

The following description, together with the additional information we may include in any applicable prospectus supplement, summarizes the material terms and provisions of the warrants that we may offer under this prospectus and the related warrant agreements and warrant certificates. While the terms summarized below will apply generally to any warrants that we may offer, we will describe the particular terms of any series of warrants in more detail in the applicable prospectus supplement. If we so indicate in a prospectus supplement, the terms of any warrants offered under that prospectus supplement may differ from the terms we describe below. Specific warrant agreements will contain additional important terms and provisions and will be incorporated by reference as an exhibit to the

registration statement of which this prospectus forms a part. In addition, we currently have outstanding warrants to acquire 1,012,500 shares of our common stock, as described below under “Outstanding Warrants”.

General

We may issue warrants for the purchase of common stock in one or more series. We may issue warrants independently or together with common stock, and the warrants may be attached to or separate from the common stock.

We will evidence each series of warrants by warrant certificates that we will issue under a separate agreement or by warrant agreements that we will enter into directly with the purchasers of the warrants. If we evidence warrants by warrant certificates, we will enter into a warrant agreement with a warrant agent. We will indicate the name and address of the warrant agent, if any, in the applicable prospectus supplement relating to a particular series of warrants.

We will describe in the applicable prospectus supplement the terms of the series of warrants, including:

- the offering price and aggregate number of warrants offered;
- the currency for which the warrants may be purchased or exercised;
- if applicable, the terms of the common stock with which the warrants are issued and the number of warrants issued with such common stock;
- if applicable, the date on and after which the warrants and the related common stock will be separately transferable;
- the number of shares of common stock purchasable upon the exercise of one warrant and the price at which these shares may be purchased upon such exercise;
 - the manner in which the warrants may be exercised, which may include by cashless exercise;
- the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreement and the warrants;
 - the terms of any rights to redeem or call the warrants;
- any provisions for changes to or adjustments in the exercise price or number of shares of common stock issuable upon exercise of the warrants;
 - the dates on which the right to exercise the warrants will commence and expire;
 - the manner in which the warrant agreement and warrants may be modified;
 - the material U.S. federal income tax consequences of holding or exercising the warrants;
 - the terms of the common stock issuable upon exercise of the warrants; and
 - any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

Before exercising their warrants, holders of warrants will not have any of the rights of holders of the common stock purchasable upon such exercise, including the right to receive dividends, if any, or payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any.

Exercise of Warrants

Each warrant will entitle the holder to purchase the number of shares of common stock that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to 5:00 P.M., Eastern U.S. time, on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Holders of the warrants may exercise the warrants by delivering to the warrant agent or us the warrant certificate or warrant agreement representing the warrants to be exercised together with specified information, and by paying the required amount to the warrant agent or us in immediately available funds, as provided in the applicable prospectus

supplement. We will set forth on the reverse side of the warrant certificate or in the warrant agreement and in the applicable prospectus supplement the information that the holder of the warrant will be required to deliver to the warrant agent or us in connection with such exercise.

Upon receipt of the required payment and the warrant certificate or the warrant agreement, as applicable, properly completed and duly executed at the corporate trust office of the warrant agent, if any, at our offices or at any other office indicated in the applicable prospectus supplement, we will issue and deliver the common stock purchasable upon such exercise. If fewer than all of the warrants represented by the warrant certificate or warrant agreement are exercised, then we will issue a new warrant certificate or warrant agreement for the remaining amount of warrants.

Enforceability of Rights by Holders of Warrants

If we appoint a warrant agent, any warrant agent will act solely as our agent under the applicable warrant agreement and will not assume any obligation or relationship of agency or trust with any holder of any warrant. A single bank or trust company may act as warrant agent for more than one issue of warrants. A warrant agent will have no duty or responsibility in case of any default by us under the applicable warrant agreement or warrant, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a warrant may, without the consent of the related warrant agent or the holder of any other warrant, enforce by appropriate legal action its right to exercise, and receive the securities purchasable upon exercise of, its warrants.

Outstanding Warrants

We issued in the past warrants to purchase shares of our common stock. The following is a summary of certain terms and provisions of the Warrants and is not complete and is subject to, and qualified in its entirety by the provisions of the form of the Warrant, which was previously filed with the SEC by the Company.

Exercisability. The Warrants are exercisable immediately and at any time up to April 23, 2018. The Warrants are exercisable, at the option of each holder, in whole or in part by delivering to us a duly executed exercise notice accompanied by payment in full for the number of shares of our common stock purchased upon such exercise (except in the case of a cashless exercise as discussed below). The holder will not have the right to exercise any portion of the warrant if the holder (together with its affiliates) would beneficially own in excess of 4.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the Warrants.

Cashless Exercise. In the event that a registration statement covering shares of common stock underlying the Warrants, or an exemption from registration, is not available for the resale of such shares of common stock underlying the Warrants, the holder may, in its sole discretion, exercise the Warrant in whole or in part and, in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, elect instead to receive upon such exercise the net number of shares of common stock determined according to the formula set forth in the Warrant. In no event shall we be required to make any cash payments or net cash settlement to the registered holder in lieu of issuance of common stock underlying the Warrants. A registration statement is currently effective that covers the shares underlying the warrants.

Exercise Price. The initial exercise price per share of common stock purchasable upon exercise of the Warrants is \$6.25. The exercise price is subject to appropriate adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our common stock and also upon any distributions of assets, including cash, stock or other property to our stockholders.

Fundamental Transaction. If, at any time while the warrants are outstanding, (1) we consolidate or merge with or into another corporation and we are not the surviving corporation, (2) we sell, lease, license, assign, transfer, convey or otherwise dispose of all or substantially all of our assets, (3) any purchase offer, tender offer or exchange offer (whether by us or another individual or entity) is completed pursuant to which holders of our shares of common stock are permitted to sell, tender or exchange their shares of common stock for other securities, cash or property and has been accepted by the holders of 50% or more of our outstanding shares of common stock, (4) we effect any reclassification or recapitalization of our shares of common stock or any compulsory share exchange pursuant to which our shares of common stock are converted into or exchanged for other securities, cash or property, or (5) we consummate a stock or share purchase agreement or other business combination with another person or entity whereby such other person or entity acquires more than 50% of our outstanding shares of common stock, each, a Fundamental Transaction, then upon any subsequent exercise of the Warrants, the holders thereof will have the right to receive the same amount and kind of securities, cash or property as it would have been entitled to receive upon the occurrence of such Fundamental Transaction if it had been, immediately prior to such Fundamental Transaction, the holder of the number of Warrant shares then issuable upon exercise of the Warrant, and any additional consideration payable as part of the Fundamental Transaction.

Rights as a Stockholder. Except as otherwise provided in the Warrants or by virtue of such holder's ownership of shares of our common stock, the holder of a Warrant does not have the rights or privileges of a holder of our common stock, including any voting rights, until the holder exercises the warrant.

Transfer Agent and Registrar for Warrants

The current transfer agent and registrar for the outstanding Warrants is Continental Stock Transfer & Trust Company.

Listing

Our Warrants are listed on NASDAQ Capital Market under the symbol “MICTW”.

8

DESCRIPTION OF UNITS

We may issue, in one or more series, units consisting of common stock and warrants for the purchase of common stock. While the terms we have summarized below will apply generally to any units that we may offer under this prospectus, we will describe the particular terms of any series of units in more detail in the applicable prospectus supplement. The terms of any units offered under a prospectus supplement may differ from the terms described below.

We will file as exhibits to the registration statement of which this prospectus forms a part, or will incorporate by reference from reports that we file with the SEC, the form of unit agreement that describes the terms of the series of units we are offering, and any supplemental agreements, before the issuance of the related series of units. The following summary of material terms and provisions of the units is subject to, and qualified in its entirety by reference to, all the provisions of the unit agreement and any supplemental agreements applicable to a particular series of units. We urge you to read the applicable prospectus supplement related to the particular series of units that we may offer under this prospectus and the complete unit agreement and any supplemental agreements that contain the terms of the units.

Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date.

We will describe in the applicable prospectus supplement the terms of the series of units, including:

- the designation and terms of the units, including whether and under what circumstances the securities comprising the units may be held or transferred separately;
 - any provisions of the governing unit agreement that differ from those described herein; and
- any provisions for the issuance, payment, settlement, transfer or exchange of the units or the securities comprising the units.

The provisions described in this section, as well as those described under “Description of Capital Stock” and “Description of Warrants,” will apply to each unit and to any common stock or warrant included in each unit, respectively.

We may issue units in such amounts and in such distinct series as we determine.

PLAN OF DISTRIBUTION

We may sell the securities being offered hereby in one or more of the following ways from time to time:

- through agents to the public or to investors;
- to one or more underwriters for resale to the public or to investors;
- to the extent we are eligible, in “at the market offerings,” within the meaning of Rule 415(a)(4) of the Securities Act of 1933, as amended, or the Securities Act, to or through a market maker or into an existing trading market, on an exchange or otherwise;
- directly to investors in privately negotiated transactions;
- directly to a purchaser pursuant to what is known as an “equity line of credit” as described below; or
- through a combination of these methods of sale.

The securities that we distribute by any of these methods may be sold, in one or more transactions, at:

- a fixed price or prices, which may be changed;
- market prices prevailing at the time of sale;
- prices related to prevailing market prices; or
- negotiated prices.

The accompanying prospectus supplement will describe the terms of the offering of our securities, including:

- the name or names of any agents or underwriters;
- any securities exchange or market on which the common stock may be listed;
- the purchase price and commission, if any, to be paid in connection with the sale of the securities being offered and the proceeds we will receive from the sale;
- any options pursuant to which underwriters may purchase additional securities from us;
- any underwriting discounts or agency fees and other items constituting underwriters’ or agents’ compensation;
- any public offering price; and
- any discounts or concessions allowed or reallocated or paid to dealers.

If underwriters are used in the sale, they will acquire the securities for their own account and may resell the securities from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of the sale. The obligations of the underwriters to purchase the securities will be subject to the conditions set forth in the applicable underwriting agreement. We may offer the securities to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate.

Subject to certain conditions, the underwriters will be obligated to purchase all the securities offered by the prospectus supplement. We may change from time to time the public offering price and any discounts or concessions allowed or reallocated or paid to dealers.

If we use a dealer in the sale of the securities being offered pursuant to this prospectus or any prospectus supplement, we will sell the securities to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale. The names of the dealers and the terms of the transaction will be specified in a prospectus supplement.

We may sell the securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, any agent will act on a best-efforts basis for the period of its appointment.

We may also sell securities pursuant to an “equity line of credit”. In such event, we will enter into a common stock purchase agreement with the purchaser to be named therein, which will be described in a Current Report on Form 8-K that we will file with the SEC. In that Form 8-K, we will describe the total amount of securities that we may require the purchaser to purchase under the purchase agreement and the other terms of purchase, and any rights that the purchaser is granted to purchase securities from us. In addition to our issuance of shares of common stock to the equity line purchaser pursuant to the purchase agreement, this prospectus (and the applicable prospectus supplement or post-effective amendment to the registration statement of which this prospectus forms a part) also covers the resale of those shares from time to time by the equity line purchaser to the public. The equity line purchaser will be considered an “underwriter” within the meaning of Section 2(a)(11) of the Securities Act. Its resales may be effected through a number of methods, including without limitation, ordinary brokerage transactions and transactions in which the broker solicits purchasers and block trades in which the broker or dealer so engaged will attempt to sell the shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction. The equity line purchaser will be bound by various anti-manipulation rules of the SEC and may not, for example, engage in any stabilization activity in connection with its resales of our securities and may not bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities other than as permitted under the Securities Exchange Act of 1934, as amended, or the Exchange Act.

We may sell our securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of our common stock, and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, our agent will act on a best-efforts basis for the period of its appointment.

We may provide underwriters and agents with indemnification against civil liabilities related to offerings pursuant to this prospectus, including liabilities under the Securities Act, or contribution with respect to payments that the underwriters or agents may make with respect to these liabilities. Underwriters and agents may engage in transactions with, or perform services for, us in the ordinary course of business. We will describe such relationships in the prospectus supplement naming the underwriter or agent and the nature of any such relationship.

Rules of the SEC may limit the ability of any underwriters to bid for or purchase securities before the distribution of the shares of common stock is completed. However, underwriters may engage in the following activities in accordance with the rules:

- Stabilizing transactions — Underwriters may make bids or purchases for the purpose of pegging, fixing or maintaining the price of the shares, so long as stabilizing bids do not exceed a specified maximum.
- Options to purchase additional stock and syndicate covering transactions — Underwriters may sell more shares of our common stock than the number of shares that they have committed to purchase in any underwritten offering. This creates a short position for the underwriters. This short position may involve either “covered” short sales or “naked” short sales. Covered short sales are short sales made in an amount not greater than the underwriters’ option to purchase additional shares in any underwritten offering. The underwriters may close out any covered short position either by exercising their option or by purchasing shares in the open market. To determine how they will close the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market, as compared to the price at which they may purchase shares through their option. Naked short sales are short sales in excess of the option. The underwriters must close out any naked position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that, in the open market after pricing, there may be downward pressure on the price of the shares that could adversely affect investors who purchase shares in the offering.

•

Penalty bids — If underwriters purchase shares in the open market in a stabilizing transaction or syndicate covering transaction, they may reclaim a selling concession from other underwriters and selling group members who sold those shares as part of the offering.

Similar to other purchase transactions, an underwriter's purchases to cover the syndicate short sales or to stabilize the market price of our common stock may have the effect of raising or maintaining the market price of our common stock or preventing or mitigating a decline in the market price of our common stock. As a result, the price of the shares of our common stock may be higher than the price that might otherwise exist in the open market. The imposition of a penalty bid might also have an effect on the price of shares if it discourages resales of the shares.

If commenced, the underwriters may discontinue any of these activities at any time.

Our common stock is traded on Nasdaq. One or more underwriters may make a market in our common stock, but the underwriters will not be obligated to do so and may discontinue market making at any time without notice. We cannot give any assurance as to liquidity of the trading market for our common stock.

Any underwriters who are qualified market makers on Nasdaq may engage in passive market making transactions in that market in the common stock in accordance with Rule 103 of Regulation M, during the business day prior to the pricing of the offering, before the commencement of offers or sales of the common stock. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded.

In compliance with guidelines of the Financial Industry Regulatory Authority, or FINRA, the maximum commission or discount to be received by any FINRA member or independent broker dealer may not exceed 8% of the aggregate amount of the securities offered pursuant to this prospectus and any applicable prospectus supplement.

LEGAL MATTERS

Zysman, Aharoni, Gayer and Sullivan & Worcester LLP, New York, New York, will pass upon the validity of the securities offered pursuant to this prospectus.

EXPERTS

The consolidated financial statements of the Company as of and for the year ended December 31, 2013, incorporated in this prospectus by reference to our annual report on Form 10-K for the fiscal year ended December 31, 2013, have been audited by Ziv Haft, BDO member firm, an independent registered public accounting firm, as stated in their report incorporated by reference herein, and have been so incorporated in reliance upon such report and upon the authority of such firm as experts in accounting and auditing.

The carve-out financial statements of the U.S. vehicle business and operations business of Beijer Electronics Inc. for the year ended December 31, 2013 incorporated in this prospectus by reference from the Company's Current Report on Form 8-K/A filed with the SEC on July 18, 2014 have been audited by Ziv Haft, BDO member firm, an independent registered public accounting firm, as stated in their report incorporated by reference herein, and have been so incorporated in reliance upon such report and upon the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the reporting and information requirements of the Exchange Act and as a result file periodic reports and other information with the SEC. These periodic reports and other information will be available for inspection and copying at the SEC's public reference room and the website of the SEC referred to below. We also make available on our website under "IR", free of charge, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports as soon as reasonably practicable after we electronically file such materials with or furnish them to the SEC. Our website address is <http://micronet-enertec.com>. This reference to our website is an inactive textual reference only, and is not a hyperlink. The contents of our website are not part of this prospectus, and you should not consider the contents of our website in making an investment decision with respect to the securities.

We have filed a registration statement on Form S-3 under the Securities Act with the SEC with respect to the shares of our common stock, warrants and units offered through this prospectus. This prospectus is filed as a part of that

registration statement and does not contain all of the information contained in the registration statement and exhibits. We refer you to our registration statement and each exhibit attached to it for a more complete description of matters involving us, and the statements we have made in this prospectus are qualified in their entirety by reference to these additional materials.

You may read and copy the reports and other information we file with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Washington D.C. 20549, on official business days during the hours of 10:00 am to 3:00 pm. You may also obtain copies of this information by mail from the public reference section of the SEC, 100 F Street, N.E., Washington, D.C. 20549, at prescribed rates. You may obtain information regarding the operation of the public reference room by calling the SEC at 1 (800) SEC-0330. The SEC also maintains a website that contains reports and other information about issuers, like us, who file electronically with the SEC. The address of that website is <http://www.sec.gov>. This reference to the SEC's website is an inactive textual reference only, and is not a hyperlink.

INCORPORATION OF DOCUMENTS BY REFERENCE

We are “incorporating by reference” certain documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents. The information in the documents incorporated by reference is considered to be part of this prospectus. Statements contained in documents that we file with the SEC and that are incorporated by reference in this prospectus will automatically update and supersede information contained in this prospectus, including information in previously filed documents or reports that have been incorporated by reference in this prospectus, to the extent the new information differs from or is inconsistent with the old information.

We have filed or may file the following documents with the SEC. These documents are incorporated herein by reference as of their respective dates of filing:

- (1) Our Annual Report on Form 10-K for the fiscal year ended December 31, 2013, as filed with the SEC on March 19, 2014;
- (2) Our Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2014, as filed with the SEC on May 15, 2014;
- (3) Our Current Reports on Form 8-K, as filed with the SEC on January 6, 2014, May 7, 2014, June 6, 2014, June 11, 2014, July 2, 2014, and July 7, 2014 and our Current Report on Form 8-K/A, as filed with the SEC on July 18, 2014; and
- (4) The description of our common stock contained in our Registration Statement on Form 8-A filed with the SEC on March 27, 2013, including any amendments and reports filed for the purpose of updating such description.

All documents filed by us pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act (1) after the date of the filing of the registration statement of which this prospectus forms a part and prior to its effectiveness and (2) until all of the securities to which this prospectus relates has been sold or the offering is otherwise terminated, except in each case for information contained in any such filing where we indicate that such information is being furnished and is not to be considered “filed” under the Exchange Act, will be deemed to be incorporated by reference in this prospectus and any accompanying prospectus supplement and to be a part hereof from the date of filing of such documents.

We will provide a copy of the documents we incorporate by reference, at no cost, to any person who receives this prospectus. To request a copy of any or all of these documents, you should write or telephone us at 28 West Grand Avenue, suite 3 Montvale New Jersey , 07645, Attention: Mrs. Tali Dinar, CFO Micronet Enertec Technologies, Inc. (int'l) + 972 (52) 338-4033 E-mail: tali@micronet-enertec.com.

