

PROSPECTUS SUPPLEMENT
(to Prospectus Supplement dated June 30, 2025)
(to Prospectus dated May 29, 2025)

Up to \$1,400,000
Common Stock



NAUTICUS ROBOTICS, INC.

This prospectus supplement is being filed to update, amend, and supplement certain information in the prospectus dated May 29, 2025 as supplemented by the prospectus supplement dated June 30, 2025.

We previously entered into an At The Market Offering Agreement (the Sales Agreement), with H.C. Wainwright & Co., LLC, or Wainwright, relating to shares of our common stock, \$0.0001 par value per share offered by this prospectus supplement and the accompanying prospectus. In accordance with the terms of the Sales Agreement, we may now offer and sell shares of our common stock having an aggregate offering price of up to \$1,400,000 from time to time through or to Wainwright, acting as agent or principal. From June 30, 2025 through the date hereof, the Company issued and sold 640,127 shares under this offering for gross proceeds of approximately \$0.64 million and net proceeds of approximately \$0.62 million, after deducting commissions and offering expenses. You should read this prospectus supplement as well as the prospectus supplement dated June 30, 2025, as well as the documents incorporated or deemed to be incorporated by reference herein or therein, before you invest

Our common stock is traded on the Nasdaq Capital Market under the symbol "KITT." On July 16, 2025, the last reported sale price of our common stock was \$1.14 per share

Sales of our common stock, if any, under this prospectus supplement may be made in sales deemed to be an "at the market offering" as defined in Rule 415(a)(4) promulgated under the Securities Act of 1933, as amended, or the Securities Act), including sales made directly on or through the Nasdaq Capital Market, the existing trading market for our common stock, sales made to or through a market maker other than on an exchange or otherwise, directly to Wainwright as principal, in negotiated transactions at market prices prevailing at the time of sale or at prices related to such prevailing market prices, and/or in any other method permitted by applicable law. Wainwright is not required to sell any specific number or dollar amount of securities but will act as a sales agent using commercially reasonable efforts consistent with its normal trading and sales practices, on mutually agreed terms between Wainwright and us. There is no arrangement for funds to be received in any escrow, trust, or similar arrangement

The compensation to Wainwright for sales of common stock sold pursuant to the Sales Agreement will be at a fixed commission rate of 3.0% of the gross proceeds of any shares of common stock sold under the Sales Agreement. In connection with the sale of the common stock on our behalf, Wainwright will be deemed to be an "underwriter" within the meaning of the Securities Act and the compensation of Wainwright will be deemed to be

underwriting commissions or discounts. We have also agreed to provide indemnification and contribution to Wainwright with respect to certain liabilities, including liabilities under the Securities Act or the Securities Exchange Act of 1934, as amended, or the Exchange Act.

The aggregate market value of the outstanding shares of our common stock held by non-affiliates is approximately \$44,615,129, which was calculated in accordance with General Instruction I.B.6 of Form S-3 and is based on 39,136,078 shares outstanding held by non-affiliates, and a price per share of \$1.14, which was the last reported sale price of our common stock on the Nasdaq Capital Market on July 16, 2025. Pursuant to General Instruction I.B.6 of Form S-3, in no event will the aggregate market value of securities sold by us or on our behalf in a primary offering pursuant to the registration statement of which this prospectus forms a part during any 12-calendar-month period exceed one-third of the aggregate market value of our common stock held by non-affiliates, so long as the aggregate market value of our common stock held by non-affiliates is less than \$75.0 million. During the 12 calendar months prior to and including the date of this prospectus, we have offered and sold common stock with gross proceeds of \$13,466,981, pursuant to General Instruction I.B.6 of Form S-3. If our public float increases such that we may sell additional amounts under the Sales Agreement and the prospectus, of which the prospectus supplement is a part, we will file an amendment to the prospectus supplement prior to making additional sales.

We are an emerging growth company and a smaller reporting company as defined under federal securities laws and, as such, may elect to comply with certain reduced public company reporting requirements for future filings. Investing in our securities involves certain risks. See “Risk Factors” on page S-3 of the prospectus supplement and on page 1 of the accompanying prospectus, and in the documents incorporated by reference herein and therein, for a discussion of the factors you should carefully consider before deciding to purchase our common stock.

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.

H.C. Wainwright & Co.

The date of this prospectus supplement is July 18, 2025.

THE OFFERING

Common stock offered by us	Shares of our common stock having an offering price of up to \$1,400,000 or up to 1,228,074 shares, assuming the sale price of \$1.14 per share, which was the closing price of our common stock on the Nasdaq on the Nasdaq on July 16, 2025. The actual number of shares issued will vary depending on the sales price under this offering. From June 30, 2025 through the date hereof, the Company issued and sold 640,127 shares under this offering for gross proceeds of approximately \$0.64 million and net proceeds of approximately \$0.62 million, after deducting commissions and offering expenses.
Shares Available	As of July 16, 2025, shares of our common stock with an aggregate offering price of up to approximately \$1,404,728 is available for sale.
Common stock to be outstanding immediately after the offering	<p>Up to 39,136,078 shares, assuming sales of 1,228,074 shares at a price of \$1.14 per share, which was the closing price of our common stock on the Nasdaq Capital Market on July 16, 2025, and excludes as of such date:</p> <ul style="list-style-type: none">• 16,916 shares of common stock issuable upon exercise of stock options outstanding under our equity incentive plans, with a weighted-average exercise price of \$72.51 per share;• 545,419 shares of common stock issuable upon exercise of outstanding warrants, with a weighted average exercise price of \$9.25 per share;• 2,097,561 shares of common stock issuable upon conversion of outstanding convertible debentures.• 5,672,022 shares of common stock issuable upon conversion of outstanding convertible term loans;• 17,849,756 shares of common stock issuable upon conversion of outstanding preferred equity; and• 2,379,987 shares of common stock available for future issuance under our 2022 Omnibus Incentive Plan.
Plan of Distribution	“At the market offering” that may be made from time to time through or to Wainwright, as sales agent or principal. See “Plan of Distribution” in this prospectus supplement.
Use of Proceeds	We intend to use the net proceeds, if any, from this offering for working capital and general corporate purposes. See “Use of Proceeds” beginning on page S-10 of the prospectus supplement dated June 30, 2025.

Risk Factors

Investing in our common stock involves significant risks. Please read the information contained in and incorporated by reference under the heading “Risk Factors” on page S-3 of this prospectus supplement and under similar headings in the other documents that are filed after the date hereof and incorporated by reference into this prospectus supplement, together with the other information included in or incorporated by reference into this prospectus supplement, before deciding whether to invest in our common stock.

The Nasdaq Capital Market Symbol

KITT

RISK FACTORS

Investing in our common stock involves significant risks. Please see the risk factors under the heading “Risk Factors” in any prospectus supplement as well as in our most recent Annual Report on Form 10-K and in our Quarterly Reports on Form 10-Q filed subsequent to the Annual Report on Form 10-K, which are on file with the Securities and Exchange Commission, or the SEC, and are incorporated by reference in this prospectus supplement and the accompanying base prospectus in their entirety, as the same may be amended, supplemented, or superseded from time to time by our filings under the Securities Exchange Act of 1934, as amended, or the Exchange Act. Before making an investment decision, you should carefully consider these risks as well as other information we include or incorporate by reference in this prospectus supplement and the accompanying prospectus. The risks and uncertainties we have described are not the only ones we are facing. These risks, and additional risks not known to us or that we currently believe are immaterial, could materially and adversely affect our business, operating results, cash flows, financial condition, or prospects, and the common stock offered by means of this prospectus supplement, and could result in a partial or complete loss of your investment. Please also read “Cautionary Note Regarding Forward-Looking Statements” in the prospectus supplement.

If we do not regain compliance with or continue to satisfy the Nasdaq Capital Market continued listing requirements, our common stock could be delisted from the Nasdaq.

The listing of our common stock on the Nasdaq Capital Market is contingent on our compliance with the Nasdaq Capital Market’s conditions for continued listing. On August 14, 2024, the Company received a determination letter from Nasdaq notifying the Company that it had not regained compliance with the minimum \$35 million market value of listed securities requirement for continued listing on The Nasdaq Capital Market as set forth in Listing Rule 5550(b)(2) (the “MVLS Requirement”) or any of the alternative requirements in Listing Rule 5550(b), and that the additional delinquency may serve as a separate basis for the delisting of the Company’s securities from Nasdaq. The Company timely requested a hearing before the Nasdaq hearings panel. On September 18, 2024, the hearings panel granted the Company an exception until December 31, 2024 to demonstrate compliance with the Nasdaq listing rules. On January 6, 2025, the hearings panel further extended the deadline to demonstrate compliance with the listing rules to February 10, 2025. On February 18, 2025, the Company received a letter from Nasdaq confirming that the Company has demonstrated compliance with the Nasdaq Capital Market’s continued listing requirements as confirmed by the staff on February 10, 2025.

The Company remains subject to a discretionary panel monitor through February 18, 2026. In the future, if the Company is not able to meet the continued listing requirements of the Nasdaq, which require, among other things, that the minimum bid price of the Company’s Common Stock must be \$1.00 or more for ten consecutive business days in the 180 day cure period from the date of a deficiency notice and either minimum stockholders’ equity of at least \$2.5 million, market value of listed securities of at least \$35 million, or net income from continuing operations of \$500,000 in the most recent fiscal year or in two of the last three fiscal years, the Company’s Common Stock may be delisted. A delisting of the Company’s Common Stock could negatively impact the Company by, among other things, reduce the liquidity and market price of its Common Stock; reduce the number of investors willing to hold or acquire the Company’s Common Stock, which could negatively impact its ability to raise equity financing; decrease the amount of news and analyst coverage of the Company; and limit the Company’s ability to issue additional securities or obtain additional financing in future. In addition, delisting from the Nasdaq might negatively impact the Company’s reputation and, as a consequence, its business, operating results, cash flows, financial condition or securities.

Purchasers in this offering may experience immediate and substantial dilution in the book value of their investment.

The offering price per share in this offering may exceed the net tangible book value per share of our common stock outstanding prior to this offering. Assuming that an aggregate 1,232,218 shares of our common stock are sold at a price of \$1.14 per share pursuant to this prospectus supplement and the accompanying prospectus, which was the last reported sale price of our common stock on the Nasdaq on July 16, 2025, for aggregate gross proceeds of \$1,404,728, after deducting commissions and estimated aggregate offering expenses payable by us, you would experience immediate dilution of \$1.07 per share, representing the difference between our as adjusted pro forma net tangible book value per share as of March 31, 2025 after giving effect to this offering and the assumed offering price. See “Dilution” for a more detailed description of the dilution to new investors in the offering.

We will have broad discretion in how we use the net proceeds of this offering. We may not use these proceeds effectively, which could affect our results of operations and cause our stock price to decline.

Although we currently intend to use the net proceeds from this offering in the manner described in the section entitled “Use of Proceeds” in the prospectus supplement dated June 30, 2025, we will have considerable discretion in the application of the net proceeds of this offering. We may use the net proceeds for purposes that do not yield a significant return or any return at all for our stockholders. In addition, pending their use, we may invest the net proceeds from this offering in a manner that does not produce income or that loses value. If we do not invest or apply the net proceeds from this offering in ways that enhance stockholder value, we may fail to achieve expected financial results, which could cause our stock price to decline.

If we raise additional capital through the sale of shares of our common stock, equity-linked securities, convertible securities, or debt in the future, your ownership in us could be diluted and restrictions could be imposed on our business.

In addition to this offering, we may issue shares of our common stock, equity-linked securities, or securities convertible into our common stock to raise additional capital in the future. To the extent we issue such securities, our stockholders may experience substantial dilution and the trading price of our common stock could decline. If we obtain funds through a credit facility or through the issuance of debt or preferred securities, such debt or preferred securities could have rights senior to your rights as a common stock holder, which could impair the value of our common stock.

We have not paid dividends in the past and do not expect to pay dividends in the future, and, as a result, any return on investment may be limited to the value of our stock.

We have never paid dividends and do not anticipate paying dividends in the foreseeable future. The payment of dividends will depend on our operating results, capital requirements, financial condition, prospects, and other factors our board of directors may deem relevant. If we do not pay dividends, our stock may be less valuable because a return on your investment will only occur if our stock price appreciates and you sell our common stock thereafter.

Sales of a substantial number of shares of our common stock in the public market or raising additional funds through debt or equity financing could cause our stock price to fall.

To the extent that we raise additional capital through the sale of equity, equity-linked securities, or convertible debt securities, your ownership interest may be diluted, and the terms of these securities may include liquidation or

other preferences that adversely affect your rights as a stockholder. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take certain actions, such as incurring debt, making capital expenditures, or declaring dividends. If we raise additional funds through collaborations, strategic collaborations, or partnerships, or marketing, distribution, or licensing arrangements with third parties, we may be required to limit valuable rights to our intellectual property, technologies, or future revenue streams, or grant licenses or other rights on terms that are not favorable to us. Furthermore, any additional fundraising efforts may divert our management from their day-to-day activities, which may adversely affect our ability to develop and commercialize our technologies.

Sales of a substantial number of shares of our common stock in the public market or the perception that these sales might occur, could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. We are unable to predict the effect that sales may have on the prevailing market price of our common stock. A substantial number of shares of common stock are being offered by this prospectus supplement. We cannot predict the number of these shares that might be sold nor the effect that future sales of the shares of our common stock would have on the market price of our common stock.

The actual number of shares we will issue under the Sales Agreement, at any one time or in total, is uncertain.

Subject to certain limitations in the Sales Agreement and compliance with applicable law, we have the discretion to deliver a placement notice to a Wainwright at any time throughout the term of the Sales Agreement. The number of shares that are sold by Wainwright after delivering a placement notice will fluctuate based on the market price of our common stock during the sales period and limits we set with Wainwright. Because the price per share of each share sold will fluctuate based on the market price of our common stock during the sales period, it is not possible at this stage to predict the number of shares that will be ultimately issued.

The common stock offered hereby will be sold in “at the market offerings,” and investors who buy shares at different times will likely pay different prices.

Investors who purchase shares of our common stock in this offering at different times will likely pay different prices, and accordingly may experience different levels of dilution and different outcomes in their investment results. We will have discretion, subject to market demand and the terms of the Sales Agreement, to vary the timing, prices, and number of shares of common stock sold in this offering. In addition, subject to the final determination by our board of directors or any restrictions we may place in any applicable placement notice, there is no minimum or maximum sales price for shares to be sold in this offering. Investors may experience a decline in the value of the shares they purchase in this offering as a result of sales made at prices lower than the prices they paid.

Outstanding options and warrants are exercisable for shares of our common stock. Additionally, we have previously issued preferred convertible stock, convertible debentures and convertible term loans. Any future exercise of such options or warrants, or conversion of such preferred convertible stock, convertible debentures or convertible term loans, would increase the number of shares of our common stock eligible for future resale in the public market and result in dilution to our stockholders.

We have outstanding options (currently, with 16,916 underlying shares) and warrants (currently, with 545,419 underlying shares), we have previously issued preferred convertible stock (currently, with 17,849,756 underlying shares), convertible debentures (currently, with 2,097,561 underlying shares) and convertible term loans (currently, with 5,672,022 underlying shares). Any future exercise, conversion, or release of such securities would increase the

number of shares of our common stock eligible for future resale in the public market and result in dilution to our stockholders. Sales of substantial numbers of shares of our common stock in the public market could materially and adversely affect the market price of our common stock. Certain of our securities also contain anti-dilution and similar provisions that in the future may have the effect of increasing the amount of issued and outstanding shares of our common stock.

DILUTION

If you invest in our common stock, your interest will be diluted immediately to the extent of the difference between the public offering price per share of our common stock and the net tangible book value per share of our common stock after this offering.

The net tangible book value of our common stock as of March 31, 2025 was approximately \$1,521,502, or approximately \$0.04 per share of our common stock. Net tangible book value per share represents the quotient calculated by dividing (i) our total tangible assets less total liabilities by (ii) the total number of shares of our common stock outstanding as of March 31, 2025.

After giving effect the conversion of preferred stock to common stock resulting in the issuance of 2,145,150 shares, and the issuance and sale of 640,127 shares of common stock in this offering from the prospectus supplement dated June 30, 2025 resulting in net proceeds of approximately \$0.62 million, our pro forma net tangible book value on March 31, 2025, would have been approximately \$1,521,502, or \$0.04 per share.

After giving further effect to the sale of 1,228,074 shares of common stock in this offering at an assumed public offering price of \$1.14 per share, the last reported sale price of our common stock on the Nasdaq Capital Market on July 16, 2025, and after deducting commissions and estimated aggregate offering expenses payable by us, our as adjusted pro forma net tangible book value as of March 31, 2025 would have been approximately \$2,879,506 or approximately \$0.07 per share. This represents an immediate increase in net tangible book value of approximately \$0.03 per share to our existing stockholders and an immediate dilution in as adjusted pro forma net tangible book value of approximately \$1.07 per share to investors participating in this offering, as illustrated by the following table:

Assumed public offering price per share of our common stock	\$1.14
Net tangible book value per share of our common stock as of March 31, 2025	\$0.04
Pro forma net tangible book value per share after giving effect to the conversion of preferred stock and issuances pursuant to prospectus supplement date June 30, 2025	\$0.04
Increase in net tangible book value per share of our common stock attributable to investors participating in this offering	\$0.03
As adjusted pro forma net tangible book value per share of our common stock as of March 31, 2025 after giving effect to this offering	\$0.07
Dilution in as adjusted pro forma net tangible book value per share of our common stock to investors in this offering	\$1.07

The table above assumes for illustrative purposes that an aggregate of 1,228,074 shares of our common stock are sold at a price of \$1.14 per share, the closing price of our common stock on the Nasdaq Capital Market on July 16, 2025, for aggregate gross proceeds of approximately \$1,400,000. The shares sold in this offering, if any, will be sold from time to time at various prices.

The above discussion and table are based on 37,404,948 actual shares of common stock outstanding as of March 31, 2025 and 38,637,166 shares of common stock outstanding on a pro forma basis after giving effect to the subsequent conversion of preferred stock and sale of shares of common stock in this offering as described above, and excludes in each case:

- 16,916 shares of common stock issuable upon exercise of stock options outstanding under our equity incentive plans, with a weighted-average exercise price of \$72.51 per share;
- 545,419 shares of common stock issuable upon exercise of outstanding warrants, with a weighted average exercise price of \$9.25 per share;
- 2,097,561 shares of common stock issuable upon conversion of outstanding convertible debentures;
- 5,672,022 shares of common stock issuable upon conversion of outstanding convertible term loans;
- 17,849,756 shares of common stock issuable upon conversion of outstanding preferred equity; and
- 2,379,987 shares of common stock available for future issuance under our 2022 Omnibus Incentive Plan.

To the extent that any of these outstanding securities are exercised or converted or we issue additional securities under our equity incentive plans, there will be further dilution to new investors. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity, equity-linked securities, or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

PLAN OF DISTRIBUTION

We have entered into an At The Market Offering Agreement (the Sales Agreement) with Wainwright under which we may issue and sell shares of our common stock having an aggregate gross sales price of up to \$1,400,000 from time to time through or to Wainwright acting as agent or principal.

Upon delivery of a placement notice and subject to the terms and conditions of the Sales Agreement, Wainwright may sell our common stock by any method permitted by law deemed to be an “at the market offering” as defined in Rule 415(a)(4) promulgated under the Securities Act), including sales made directly on or through the Nasdaq Capital Market, the existing trading market for our common stock, sales made to or through a market maker other than on an exchange or otherwise, directly to Wainwright as principal, in negotiated transactions at market prices prevailing at the time of sale, or at prices related to such prevailing market prices, and/or in any other method permitted by applicable law. We may instruct Wainwright not to sell common stock if the sales cannot be effected at or above the price designated by us from time to time. We or Wainwright may suspend the offering of common stock upon notice and subject to other conditions.

We will pay Wainwright commissions, in cash, for its services in acting as agent in the sale of our common stock. Wainwright will be entitled to compensation at a fixed commission rate of 3.0% of the gross sales price per share sold. Because there is no minimum offering amount required as a condition of this offering, the actual total public offering amount, commissions, and proceeds to us, if any, are not determinable at this time. We have also agreed to reimburse Wainwright for certain specified expenses, including the fees and disbursements of its legal counsel, in an amount not to exceed \$50,000, up to \$2,500 per calendar quarter and \$25,000 for due diligence expenses in connection with this prospectus supplement. We estimate that the total expenses for the offering, excluding compensation and reimbursement payable to Wainwright under the terms of the Sales Agreement, will be approximately \$275,000.

Settlement for sales of common stock will occur on the first trading day following the date on which any sales are made (or any such shorter settlement cycle as may be in effect under Exchange Act Rule 15c6-1 from time to time), or on some other date that is agreed upon by us and Wainwright, in return for payment of the net proceeds to us. Sales of our common stock as contemplated in this prospectus will be settled through the facilities of The Depository Trust Company or by such other means as we and Wainwright may agree upon. There is no arrangement for funds to be received in an escrow, trust, or similar arrangement.

Wainwright will use its commercially reasonable efforts, consistent with its sales and trading practices, to solicit offers to purchase the common stock shares under the terms and subject to the conditions set forth in the Sales Agreement. In connection with the sale of the common stock on our behalf, Wainwright will be deemed to be an “underwriter” within the meaning of the Securities Act and the compensation of Wainwright will be deemed to be underwriting commissions or discounts. We have agreed to provide indemnification and contribution to Wainwright against certain civil liabilities, including liabilities under the Securities Act.

The offering of our common stock pursuant to the Sales Agreement will terminate upon the earlier of the sale of all of the shares of our common stock provided for in this prospectus supplement or the termination of the Sales Agreement as permitted therein.

To the extent required by Regulation M, Wainwright will not engage in any market making activities involving our common stock while the offering is ongoing under this prospectus in violation of Regulation M. Wainwright and

its affiliates may provide various investment banking, commercial banking, and other financial services for us and our affiliates, for which services they may in the future receive customary fees.

The At The Market Offering Agreement has been filed as an exhibit to a Current Report on Form 8-K on May 20, 2024. This prospectus supplement in electronic format may be made available on a website maintained by Wainwright, and Wainwright may distribute this prospectus supplement electronically.