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

FORM S-3

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

ONDAS HOLDINGS INC.

(Exact name of registrant as specified in its charter)

Nevada

(State or other jurisdiction of incorporation or organization)

47-2615102

(IRS Employer Identification Number)

61 Old South Road, #495 Nantucket, MA 02554 (888) 350-9994

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

Eric A. Brock Chairman and Chief Executive Officer Ondas Holdings Inc. 61 Old South Road, #495, Nantucket, MA 02554 (888) 350-9994

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

With a copy to:
Christina C. Russo, Esq.
Akerman LLP
201 E. Las Olas Boulevard, Suite 1800
Fort Lauderdale, Florida 33301
(954) 463-2700

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this registration statement, as determined by the selling tockholders.						
f the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box:						
f any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than ecurities offered only in connection with dividend or interest reinvestment plans, check the following box:						
	securities for an offering pursuant to Rule 462 or effective registration statement for the same of		he following box and list the Securities Act			
f this Form is a post-effective amendme number of the earlier effective registration	nt filed pursuant to Rule 462(c) under the Sec statement for the same offering. \Box	curities Act, check the following box and l	ist the Securities Act registration statement			
f this Form is a registration statement pursuant to Rule 462(e) under the Securiti	rsuant to General Instruction I.D. or a post-effect es Act, check the following box: \Box	ective amendment thereto that shall become	e effective upon filing with the Commission			
f this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of ecurities pursuant to Rule 413(b) under the Securities Act, check the following box:						
ndicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.						
Large accelerated filer		Accelerated filer				
Non-accelerated filer		Smaller reporting company Emerging growth company	_ ⊠ ⊠			
f an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section $7(a)(2)(B)$ of the Securities Act. \square						

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	Amount to be registered ⁽¹⁾	ma: offeri	oposed ximum ing price unit ⁽²⁾	Proposed maximum aggregate offering price ⁽²⁾	nount of
Common stock, \$0.0001 par value per share	6,749,974	\$	9.15	\$ 61,762,263	\$ 5,726
Common stock, \$0.0001 par value per share underlying the Warrants	1,565,656	\$	9.15	\$ 14,325,753	\$ 1,328

Total 8,315,630 \$ 76,088,016 \$ 7,054

(1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended, this registration statement shall also cover an indeterminate number of additional shares of Common Stock that may become issuable as a result of any stock splits, stock dividends, reclassifications, recapitalizations, combinations or similar transactions.

(2) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(c) under the Securities Act of 1933, as amended.

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

The information in this prospectus is not complete and may be changed. The selling stockholders may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

PRELIMINARY PROSPECTUS SUBJECT TO COMPLETION DATED OCTOBER 22, 2021

PRELIMINARY PROSPECTUS

ONDAS HOLDINGS INC.

6,749,974 Common Stock

1,565,656 Shares of Common Stock underlying Warrants

The selling stockholders may offer and sell from time to time up to an aggregate of 8,315,630 shares of Ondas Holdings Inc. (the "Company") common stock ("Common Stock"), including (i) up to 6,749,974 shares of Common Stock that are outstanding and (ii) up to 1,565,656 shares of Common Stock underlying outstanding warrants at an exercise price of \$7.89 per share (the "Warrants") issued to the selling shareholders. These securities were issued to the American Robotics, Inc. stockholders in connection with the acquisition of American Robotics, Inc. that closed on August 5, 2021. For information concerning the selling stockholders and the manner in which they may offer and sell shares of our Common Stock, see "Selling Stockholders" and "Plan of Distribution" in this prospectus.

We are not selling any securities under this prospectus and we will not receive any proceeds from the sale by the selling stockholders of their shares of Common Stock but will receive proceeds from the exercise of the Warrants if the Warrants are exercised, which proceeds will be used for working capital and other general corporate purposes.

Our Common Stock is traded on the NASDAQ Capital Market (the "Nasdaq"), under the symbol "ONDS." As of October 21, 2021, the last reported sale price of our Common Stock on the Nasdaq was \$9.12.

Investing in our securities involves risks. See "Risk Factors," beginning on page 4 and in any other documents incorporated by reference herein or therein, for factors you should consider before buying any of our securities.

You should rely only on the information contained in this prospectus. We have not authorized any dealer, salesperson or other person to provide you with information concerning us, except for the information contained in this prospectus. The information contained in this prospectus is complete and accurate only as of the date on the front cover page of this prospectus, regardless of the time of delivery of this prospectus or the sale of any Common Stock. This prospectus is not an offer to sell these securities and we are not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

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

The date of this prospectus is , 2021

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission (the "SEC"), using a "shelf" registration process for the delayed offering and sale of securities pursuant to Rule 415 under the Securities Act of 1933, as amended (the "Securities Act"). Under the shelf process, the selling stockholders may, from time to time, sell the offered securities described in this prospectus in one or more offerings. Additionally, under the shelf process, in certain circumstances, we may provide a prospectus supplement that will contain specific information about the terms of a particular offering by one or more of the selling stockholders. We may also provide a prospectus supplement to add information to, or update or change information contained in, this prospectus.

This prospectus does not contain all of the information set forth in the registration statement, portions of which we have omitted as permitted by the rules and regulations of the SEC. Statements contained in this prospectus as to the contents of any contract or other document are not necessarily complete. You should refer to the copy of each contract or document filed as an exhibit to the registration statement for a complete description.

You should rely only on the information contained in or incorporated by reference into this prospectus or any applicable prospectus supplements filed with the SEC. We have not authorized anyone to provide you with different or additional information and, if you are given any information or representation about these matters that is not contained or incorporated by reference in this prospectus or a prospectus supplement, you must not rely on that information. The selling stockholders are offering to sell and seeking offers to buy shares of our Common Stock only in jurisdictions in which offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or any sale of Common Stock.

Unless the context otherwise requires, all references in this prospectus to "Ondas" "Ondas Holdings" the "Company," "we," "us," and "our" refer to Ondas Holdings Inc. and our consolidated subsidiaries, including our wholly-owned subsidiaries, Ondas Networks Inc. and American Robotics, Inc.; unless otherwise specified, references to "Ondas Networks" refers to our wholly-owned subsidiary, Ondas Networks Inc., and references to "American Robotics" refers to our wholly-owned subsidiary, American Robotics, Inc., acquired on August 5, 2021. Unless otherwise stated or indicated by context, the phrase "this prospectus" refers to the prospectus and any applicable prospectus supplement.

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PROSPECTUS SUMMARY

This summary does not contain all of the information that is important to you. You should read the entire prospectus carefully, including the "Risk Factors" section and the consolidated financial statements and related notes included in this prospectus or incorporated by reference into this prospectus, before making an investment decision.

Overview

Ondas Holdings Inc. is a leading provider of private wireless data and automated data solutions through its wholly-owned subsidiaries Ondas Networks Inc. ("Ondas Networks") and American Robotics, Inc. ("American Robotics"). Ondas Networks is a developer of proprietary, software-based wireless broadband technology for large established and emerging industrial markets. Ondas Networks' standards-based (802.16s), multi-patented, software-defined radio FullMAX platform enables Mission-Critical IoT (MC-IoT) applications by overcoming the bandwidth limitations of today's legacy private licensed wireless networks. Ondas Networks' customer end markets include railroads, utilities, oil and gas, transportation, aviation (including drone operators), and government entities whose demands span a wide range of mission-critical applications. American Robotics designs, develops and markets industrial drone solutions for rugged, real-world environments. American Robotics' Scout SystemTM is a highly automated, AI-powered drone system capable of continuous, remote operation and is marketed as a "drone-in-a-box" turnkey data solution service under a Robot-as-a-Service (RAAS) business model. The Scout SystemTM is the first drone system approved by the FAA for automated operation beyond-visual-line-of-sight (BVLOS) without a human operator on-site. Ondas Networks and American Robotics together provide users in rail, agriculture, utilities and critical infrastructure markets with improved connectivity and data collection capabilities.

Recent Developments

On May 17, 2021, the Company entered into an Agreement and Plan of Merger (the "Agreement") with Drone Merger Sub I Inc., a Delaware corporation and a direct wholly-owned subsidiary of the Company ("Merger Sub I"), Drone Merger Sub II Inc., a Delaware corporation and a direct wholly-owned subsidiary of the Company ("Merger Sub II" and, together with Merger Sub I, the "Merger Subs"), American Robotics, and Reese Mozer, solely in his capacity as the representative of American Robotics' stockholders.

On August 5, 2021 (the "Closing Date"), the Company consummated the previously announced Mergers (as defined below). As contemplated by the Agreement and as described in the Company's definitive proxy statement filed with the SEC on July 6, 2021, following a Special Meeting of Stockholders of the Company held on August 5, 2021, American Robotics merged with and into Merger Sub I ("Merger I"), with American Robotics continuing as the surviving entity, and American Robotics then subsequently and immediately merged with and into Merger Sub II ("Merger II" and, together with Merger I, the "Mergers"), with Merger Sub II continuing as the surviving entity and as a direct wholly-owned subsidiary of the Company. Simultaneously with Merger II, Merger Sub II was renamed American Robotics, Inc.

Pursuant to the Agreement, American Robotics stockholders received (i) cash consideration in an amount equal to \$7,500,000, less certain indebtedness, transaction expenses and other expense amounts as described in the Agreement; (ii) 6,750,000 shares of the Company's Common Stock (inclusive of 26 fractional shares paid in cash as set forth in the Agreement); (iii) warrants exercisable for 1,875,000 shares of the Company's common stock (the "Warrants") (inclusive of 24 fractional shares paid in cash and the equivalent of Warrants for 309,320 shares representing the value of options exercisable for 211,038 shares issued under the Company's incentive stock plan and reducing the aggregate amount of Warrants as set forth in the Agreement); and (iv) the cash release from the PPP Loan Escrow Amount (as defined in the Agreement). Each of the Warrants entitle the holder to purchase a number of shares of the Company's Common Stock at an exercise price of \$7.89. Each of the Warrants shall be exercisable in three equal annual installments commencing on the one year anniversary of the Closing Date and shall have a term of ten years.

In connection with the Mergers, on May 17, 2021, the Company entered into a lock-up and registration rights agreement, by and among the Company and the directors and officers of American Robotics (the "Registration Rights Agreement"). Pursuant to the Registration Rights Agreement (i) the Company agreed to file a resale registration statement for the Registrable Securities (as defined in the Registration Rights Agreement) no later than 90 days following the closing of the Mergers, and to use commercially reasonable efforts to cause it to become effective as promptly as practicable following such filing, (ii) the directors and officers and other American Robotics stockholders who sign a joinder to such agreement were granted certain piggyback registration rights with respect to registration statements filed subsequent to the closing of the Mergers, and (iii) the directors and officers of American Robotics agreed, subject to certain customary exceptions, not to sell, transfer or dispose of any Company Common Stock for a period of 180 days from the closing of the Mergers. In connection with the Mergers, the stockholders of American Robotics entered into a Joinder to Lock-Up and Registration Rights Agreement.

We are registering the shares of Common Stock and the shares of Common Stock underlying the Warrants pursuant to the Registration Rights Agreement.

Implications of Being an Emerging Growth Company

We are an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, as amended, or the JOBS Act. We will remain an emerging growth company until the earlier of (1) December 31, 2021, (2) the last day of the fiscal year in which we have total annual gross revenue of at least \$1.07 billion, (3) the last day of the fiscal year in which we are deemed to be a "large accelerated filer" as defined in Rule 12b-2 under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), which would occur if the market value of our common stock held by non-affiliates exceeded \$700.0 million as of the last business day of the second fiscal quarter of such fiscal year or (4) the date on which we have issued more than \$1.0 billion in non-convertible debt securities during the prior three-year period. An emerging growth company may take advantage of specified reduced reporting requirements and is relieved of certain other significant requirements that are otherwise generally applicable to public companies. As an emerging growth company,

- we may present only two years of audited financial statements, plus unaudited condensed financial statements for any interim period, and related management's
 discussion and analysis of financial condition and results of operations in this prospectus;
- we may avail ourselves of the exemption from the requirement to obtain an attestation and report from our auditors on the assessment of our internal control over financial reporting pursuant to the Sarbanes-Oxley Act of 2002, or Sarbanes-Oxley;
- · we may provide reduced disclosure about our executive compensation arrangements; and
- · we may not require stockholder non-binding advisory votes on executive compensation or golden parachute arrangements.

In addition, under the JOBS Act, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have irrevocably elected not to avail ourselves of this extended transition period, and, as a result, we will adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for other public companies.

We are also a "smaller reporting company" as defined in Rule 12b-2 of the Exchange Act and have elected to take advantage of certain of the scaled disclosure available to smaller reporting companies.

Corporate Information

Our principal executive offices are located at 61 Old South Road, #495, Nantucket, Massachusetts 02554 and our telephone number is (888) 350-9994. We maintain a website at www.ondas.com, to which we regularly post copies of our press releases as well as additional information about us. Our filings with the SEC, will be available free of charge through the website as soon as reasonably practicable after being electronically filed with or furnished to the SEC. Information contained on, or accessible through, our website does not constitute a part of this prospectus or our other filings with the SEC, and you should not consider any information contained on, or that can be accessed through, our website as part of this prospectus or in deciding whether to purchase shares of our Common Stock.

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THE OFFERING

Common Stock outstanding prior to the offering: 40,607,723 shares

Common Stock to be issued upon exercise of the Warrants: 1,565,656 shares

Common Stock to be offered by the selling stockholders: 8,315,630 shares (including 1,565,656 shares underlying the Warrants)

Common Stock outstanding immediately following the

offering:

42,173,379 shares (including 1,565,656 shares underlying the Warrants)

Use of proceeds: We will not receive any proceeds from the sale of the shares of Common Stock by the selling stockholders but

will receive proceeds from the exercise of the Warrants if the Warrants are exercised, which proceeds will be

used for working capital and other general corporate purposes. See "Use of Proceeds."

Risk Factors: See "Risk Factors" beginning on page 4 of this prospectus for a discussion of factors you should carefully

consider before deciding to invest in shares of our Common Stock.

Stock Symbol: NASDAQ: ONDS

The number of shares of our common stock to be outstanding after this offering is based on 40,607,723 shares of our common stock outstanding as of October 20, 2021, and assuming the exercise of the Warrants and excluding the following:

- 1,741,865 shares of Common Stock underlying outstanding warrants;
- 383,190 shares of Common Stock reserved for issuance pursuant to future awards under our 2018 Incentive Stock Plan, as amended (the "Incentive Plan"); and
- 2,950,144 shares of Common Stock underlying outstanding options and restricted stock units granted pursuant to the Incentive Plan.

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RISK FACTORS

on Form 8-K that we have filed or will file with the SEC, the definitive proxy statement in connection with the acquisition of American Robotics filed with the SEC on July 6, 2021, and in other documents which are incorporated by reference into this prospectus.

If any of these risks were to occur, our business, affairs, prospects, assets, financial condition, results of operations and cash flow could be materially and adversely affected. If this occurs, the market or trading price of our securities could decline, and you could lose all or part of your investment. In addition, please read "Special Note Regarding Forward-Looking Statements" in this prospectus, where we describe additional uncertainties associated with our business and the forward-looking statements included or incorporated by reference into this prospectus.

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference in this prospectus contain "forward-looking statements" within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. These statements, which in some cases, you can identify by terms such as "may," "will," "should," "could," "would," "expects," "plans," "anticipates," "believes," "believes," "projects," "predicts," "potential" and similar expressions intended to identify forward-looking statements, relate to future events or to our future operating or financial performance and involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from any future results, performances or achievements expressed or implied by the forward-looking statements. These statements include statements regarding our operations, cash flows, financial position and economic performance including, in particular, future sales, competition and the effect of economic conditions. These statements reflect our current views with respect to future events and are based on assumptions and subject to risks and uncertainties.

Although we believe that these statements are based upon reasonable assumptions, these statements expressing opinions about future outcomes and non-historical information are subject to a number of risks and uncertainties, many of which are beyond our control, and reflect future business decisions that are subject to change and, therefore, there is no assurance that the outcomes expressed in these statements will be achieved. Some of the assumptions, future results and levels of performance expressed or implied in the forward-looking statements we have made or may make in the future inevitably will not materialize, and unanticipated events may occur which will affect our results. Investors are cautioned that forward-looking statements are not guarantees of future performance and actual results or developments may differ materially from the expectations expressed in forward-looking statements contained herein. Given these uncertainties, you should not place undue reliance on these forward-looking statements. We discuss many of these risks and uncertainties in greater detail under "Risk Factors" discussed under the caption "Item 1A. Risk Factors" in Part I of our most recent Annual Report on Form 10-K or any updates discussed under the caption "Item 1A. Risk Factors" in Part II of our Quarterly Reports on Form 10-Q, together with all of the other information appearing in or incorporated by reference into this prospectus. You should read this prospectus completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements in this prospectus by these cautionary statements. We undertake no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise, except as may be required under the securities laws of the United States. You are advised, however, to consult any additional disclosures we make in our reports filed with the SEC.

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USE OF PROCEEDS

We will not receive any proceeds from the sale of the shares of Common Stock by the selling stockholders but will receive proceeds from the exercise of the Warrants if the Warrants are exercised, which proceeds will be used for working capital and other general corporate purposes.

SELLING STOCKHOLDERS

The following table provides information about the selling stockholders, listing how many shares of our Common Stock the selling stockholders own on the date of this prospectus, how many shares may be offered by this prospectus, and the number and percentage of outstanding shares the selling stockholders will own after the offering, assuming all shares covered by this prospectus are sold. The information concerning beneficial ownership has been provided by the selling stockholders. Information concerning the selling stockholders may change from time to time, and any changed information will be set forth if and when required in prospectus supplements or other appropriate forms permitted to be used by the SEC.

We do not know when or in what amounts the selling stockholders may offer shares for sale. The selling stockholders may choose not to sell any or all of the shares offered by this prospectus. Because the selling stockholders may offer all or some of the shares, and because there are currently no agreements, arrangements or understandings with respect to the sale of any of the shares, we cannot accurately report the number of the shares that will be held by the selling stockholders after completion of the offering. However, for purposes of this table, we have assumed that, after completion of the offering, all of the shares covered by this prospectus will be sold by the selling stockholders.

The number of shares outstanding, and the percentage of beneficial ownership, post-offering are based on 42,173,379 shares of Common Stock issued and outstanding as of the conclusion of the offering, calculated on the basis of (i) 40,607,723 shares of Common Stock issued and outstanding as of October 20, 2021 prior to the offering and (ii) assuming the exercise and sale by the selling stockholders of the 1,565,656 shares of Common Stock underlying the Warrants. For the purposes of the following table, the number of shares of Common Stock beneficially owned has been determined in accordance with Rule 13d-3 under the Exchange Act, and such information is not necessarily indicative of beneficial ownership for any other purpose. Under Rule 13d-3, beneficial ownership includes any shares as to which the selling stockholders have sole or shared voting power or investment power and also any shares which each selling shareholder, respectively, has the right to acquire within 60 days of the date of this prospectus through the exercise of any stock option, warrant or other rights.

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Selling Stockholder	Shares of Common Stock Owned Before the Offering (1)(3)	Shares of Common Stock to be Offered for the Selling Stockholder's Account (2)(3)	Shares of Common Stock Owned by the Selling Stockholder after the Offering	Percent of Common Stock to be Owned by the Selling Stockholder after the Offering
Adam Rohn	1,866	2,297		-
Albert Chiocca	12,851	15,824	-	-
Andrew Sousa	86,286	106,248	-	-
BRC Innovation LP	73,435	90,424	-	-

Dave and Wendy Morgan Foundation	342,704	421,989	-	-
DAVID W. MORGAN AND WENDY J. MORGAN REVOCABLE TRUST	1,621,733	1,996,926	-	-
Diane Arber	50,241	61,864	-	_
Douglas Rewerts	12,851	15,824	-	-
Eitan Babcock*	257,029	316,493	-	-
Joanne Foley	18,359	22,606	-	-
Kevin Mozer	81,915	100,866	-	-
Mark Halfman	14,560	17,928	-	-
Michael Bitton	18,359	22,606	-	-
MOZER FAMILY PARTNERSHIP I LP	147,806	182,000	-	-
Neil Dubrow	51,805	63,790	-	-
Parkhurst 2019 Family, Trust Dated April 2, 2019	100,522	123,778	-	-
Paul Mozer	73,435	90,424	-	-
Paul Van Valkenburg and John Van Valkenburg as Trustees under the Kathleen R. Van				
Valkenburg Trust F/B/O Paul Van Valkenburg, Dated December 23, 2020	326,154	401,610	-	-
Peter Mozer	238,258	293,379	-	-
Reese Mozer*	1,542,175	1,898,962	-	-
Vijay Somanderpalli*	771,087	949,480	-	-
Diana Benincasa	6,707	8,258	-	-
CLM II, LLC	50,637	62,352	-	-
John Connor	47,544	58,543	-	-
Charles Craig	8,674	10,680	-	-
Aaron Ford	47,310	58,255	-	-
Sanjeev Gupta	51,092	62,912	-	-
Peter Hirsch	26,628	32,788	-	-
Jimenez Trading Inc.	208,196	256,362	-	-
LBIT NP Investor LLC	101,767	125,311	-	-
Parkhurst 2001 GST Exemption Trust	16,593	20,432	-	-
Charles Parkhurst*	13,535	16,666	-	-
Michael Burdick	8,286	10,203	-	-
James Gonzalez	1,285	1,582	-	-
Zachary Harvey	37,077	45,655	-	-
Alex Karantza	24,782	30,515	-	-
Charvak Kondapalli	13,328	16,411	-	-
Jeffrey Peterson	5,737	7,064	-	-
William Silhan	89,451	110,145	-	-
Rob Stevens	12,715	15,656	-	-
Michael Toscano	55,078	67,820	-	-
Oskar Weber	1,285	1,582	-	-
John J. McKenna	43,360	55,616	-	-
George B. Stevens, II	35,476	45,504	-	-

^{*} These individuals agreed, subject to certain customary exceptions, not to sell, transfer or dispose of any Company common stock until February 1, 2022, pursuant to the Registration Rights Agreement, as described above under Prospectus Summary – Recent Developments.

- (1) This column does not include shares of Common Stock issuable upon exercise of the Warrants.
- (2) This column includes shares of Common Stock issuable upon exercise of the Warrants.
- (3) Represents securities issued in connection with the acquisition of American Robotics, described under Prospectus Summary Recent Developments.

None of the selling stockholders have, or within the past three years has had, any position, office or material relationship with us or any of our predecessors or affiliates, except as follows:

Reese Mozer serves as Chief Executive Officer of American Robotics.

Vijay Somanderpalli serves as Chief Technology Officer of American Robotics.

Eitan Babcock serves as Chief Roboticist of American Robotics.

Mr. Mozer received 1,542,175 shares of Common Stock and 356,787 shares of Common Stock underlying the Warrants, Mr. Somanderpalli received 771,087 shares of Common Stock and 178,393 shares of Common Stock underlying the Warrants, and Mr. Babcock received 257,029 shares of Common Stock and 59,464 shares of Common Stock underlying the Warrants, in connection with the acquisition of American Robotics, described under Prospectus Summary – Recent Developments.

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PLAN OF DISTRIBUTION

Selling Stockholders

We are registering the shares of Common Stock to permit the resale of these shares of Common Stock by the holders of the Common Stock from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the selling stockholders of the shares of Common Stock but will receive proceeds from the exercise of the Warrants, if the Warrants are exercised, which proceeds will be used for working capital and other general corporate purposes. We will bear all fees and expenses incident to our obligation to register the shares of Common Stock.

The selling stockholders, which as used herein includes donees, pledgees, transferees or other successors-in-interest selling shares of Common Stock or interests in shares of Common Stock received after the date of this prospectus from a selling stockholder as a gift, pledge, partnership distribution or other transfer, may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of Common Stock or interests in shares of Common Stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices.

The selling stockholders may use any one or more of the following methods when disposing of shares or interests therein:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction;

- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales effected after the date the registration statement of which this Prospectus is a part is declared effective by the SEC;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share; and
- a combination of any such methods of sale.

The selling stockholders may, from time to time, pledge or grant a security interest in some or all of the shares of Common Stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of Common Stock, from time to time, under this prospectus, or under an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer the shares of Common Stock in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

In connection with the sale of our Common Stock or interests therein, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the Common Stock in the course of hedging the positions they assume. The selling stockholders may also sell shares of our Common Stock short and deliver these securities to close out their short positions, or loan or pledge the Common Stock to broker-dealers that in turn may sell these securities. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The aggregate proceeds to the selling stockholders from the sale of the Common Stock offered by them will be the purchase price of the Common Stock less discounts or commissions, if any. Each of the selling stockholders reserves the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of Common Stock to be made directly or through agents.

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The selling stockholders also may resell all or a portion of the shares in open market transactions in reliance upon Rule 144 under the Securities Act, provided that they meet the criteria and conform to the requirements of that rule.

The selling stockholders and any underwriters, broker-dealers or agents that participate in the sale of the Common Stock or interests therein may be "underwriters" within the meaning of Section 2(11) of the Securities Act. Any discounts, commissions, concessions or profit they earn on any resale of the shares may be underwriting discounts and commissions under the Securities Act. Selling stockholders who are "underwriters" within the meaning of Section 2(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act.

To the extent required, the shares of our Common Stock to be sold, the names of the selling stockholders, the respective purchase prices and public offering prices, the names of any agents, dealer or underwriter, any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus.

In order to comply with the securities laws of some states, if applicable, the Common Stock may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the Common Stock may not be sold unless it has been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

We have advised the selling stockholders that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of shares in the market and to the activities of the selling stockholders and their affiliates. In addition, to the extent applicable we will make copies of this prospectus (as it may be supplemented or amended from time to time) available to the selling stockholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act. The selling stockholders may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities Act.

The selling stockholders and any underwriters, brokers, dealers or agents that participate in the distribution of the securities may be deemed to be "underwriters" within the meaning of the Securities Act, and any discounts, concessions, commissions or fees received by them and any profit on the resale of the securities sold by them may be deemed to be underwriting discounts and commissions.

As set forth in the Registration Rights Agreement, we have agreed to register for resale the shares of Common Stock and shares of Common Stock underlying Warrants issued in the acquisition of American Robotics. The Registration Rights Agreement provides for indemnification of the selling stockholders against specific liabilities in connection with the offer and sale of the shares of Common Stock, including liabilities under the Securities Act.

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INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" information into this prospectus, which means that we can disclose important information about us by referring to another document filed separately with the SEC. The information incorporated by reference is considered to be a part of this prospectus. This prospectus incorporates by reference the documents and reports listed below other than portions of these documents that are furnished under Item 2.02 or Item 7.01 of a Current Report on Form 8–K:

- The Annual Report on Form 10-K for the fiscal year ended December 31, 2020, filed on March 8, 2021;
- Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2021, filed with the SEC on May 17, 2021;
- Our Quarterly Report on Form 10-Q for the quarter ended June 30, 2021, filed with the SEC on August 16, 2021;

- The Current Reports on Form 8–K filed on January 20, 2021, January 29, 2021, April 20, 2021, May 17, 2021, May 26, 2021, May 27, 2021, June 8, 2021, June 11, 2021, July 1, 2021, July 6, 2021, July 8, 2021, July 14, 2021, August 5, 2021, August 9, 2021, September 7, 2021, September 24, 2021, September 24, 2021, and October 12, 2021; and
- The description of the Company's common stock contained in the Company's Registration Statement on Form 8-A, filed with the SEC on December 3, 2020, as updated by the description of capital stock contained in <u>Exhibit 4.5</u> to the Annual Report on Form 10-K for the year ended December 31, 2020, filed on March 8, 2021.

In addition, all documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, shall be deemed to be incorporated by reference in this prospectus and to be a part hereof from the date of filing of such documents. In addition, all reports and other documents filed by us pursuant to the Exchange Act after the date of the initial registration statement and prior to effectiveness of the registration statement shall be deemed to be incorporated by reference into this prospectus. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained herein or in any subsequently filed document that also is or is deemed to be incorporated by reference herein, as the case may be, modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

We will provide, without charge, to any person, including any beneficial owner, to whom a copy of this prospectus is delivered, upon oral or written request of such person, a copy of any or all of the documents that have been incorporated by reference in this prospectus but not delivered with the prospectus, including any exhibits to such documents that are specifically incorporated by reference in those documents.

Please make your request by writing or telephoning us at the following address or telephone number:

Ondas Holdings Inc. 61 Old South Road, #495 Nantucket, MA 02554 (888) 350-9994

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WHERE YOU CAN FIND MORE INFORMATION

We are currently subject to the information requirements of the Exchange Act and in accordance therewith file periodic reports, proxy statements and other information with the SEC. Our SEC filings will also be available to you on the SEC's website at http://www.sec.gov. We have filed with the SEC a registration statement on Form S-3 under the Securities Act for the shares of Common Stock being offered by the selling stockholders. This prospectus does not contain all of the information in the registration statement and the exhibits and schedules that were filed with the registration statement. For further information with respect to us and our common stock, we refer you to the registration statement and the exhibits that were filed with the registration statement. Anyone may obtain the registration statement and its exhibits and schedules from the SEC as described above.

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LEGAL MATTERS

The validity of the shares of Common Stock offered through this prospectus has been passed on by Snell & Wilmer L.L.P., Las Vegas, Nevada.

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EXPERTS

Rosenberg Rich Baker Berman, P.A., independent registered public accounting firm, has audited our financial statements at December 31, 2020 and December 31, 2019, and for the years then ended, as set forth in their report. We have included our financial statements in the prospectus and elsewhere in the registration statement in reliance on Rosenberg Rich Baker Berman P.A.'s report, given on their authority as experts in accounting and auditing.

The audited financial statements of American Robotics, Inc. as of December 31, 2020 and December 31, 2019 and for the years then ended incorporated by reference in this prospectus and elsewhere in the registration statement have been so incorporated in reliance upon the report of Turner, Stone & Company, L.L.P., independent public accounting firm, upon the authority of said firm as experts in accounting and auditing.

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PART II

INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

SEC registration fee	\$ 7,504
Legal fees and expenses	\$ 30,000*
Accounting fees and expenses	\$ 10,000*
Miscellaneous expenses	\$ 2,500*

Total \$ 50,004

* All amounts are estimates, other than the SEC's registration fee.

We are paying all expenses of the offering listed above. No portion of these expenses will be borne by the selling stockholders. The selling stockholders, however, will pay all underwriting discounts and selling commissions, if any.

Item 15. Indemnification of Directors and Officers.

Nevada Revised Statutes provide that:

- a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, except an action by or in the right of the corporation, by reason of the fact that he is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses, including attorneys' fees, judgments, fines and amounts paid in settlement actually and reasonably incurred by him in connection with the action, suit or proceeding if he or she acted in good faith and in a manner which he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful;
- a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that he or she is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses, including amounts paid in settlement and attorneys' fees actually and reasonably incurred by him or her in connection with the defense or settlement of the action or suit if he or she acted in good faith and in a manner which he or she reasonably believed to be in or not opposed to the best interests of the corporation. Indemnification may not be made for any claim, issue or matter as to which such a person has been adjudged by a court of competent jurisdiction, after exhaustion of all appeals therefrom, to be liable to the corporation or for amounts paid in settlement to the corporation, unless and only to the extent that the court in which the action or suit was brought or other court of competent jurisdiction determines upon application that in view of all the circumstances of the case, the person is fairly and reasonably entitled to indemnity for such expenses as the court deems proper; and
- to the extent that a director, officer, employee or agent of a corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding, or in defense of any claim, issue or matter therein, the corporation must indemnify him or her against expenses, including attorneys' fees, actually and reasonably incurred by him or her in connection with the defense.

Nevada Revised Statutes provide that we may make any discretionary indemnification only as authorized in the specific case upon a determination that indemnification of the director, officer, employee or agent is proper in the circumstances. The determination must be made:

- by the stockholders;
- by the board of directors by majority vote of a quorum consisting of directors who were not parties to the action, suit or proceeding;

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- if a majority vote of a quorum consisting of directors who were not parties to the action, suit or proceeding so orders, by independent legal counsel in a written opinion;
- if a quorum consisting of directors who were not parties to the action, suit or proceeding cannot be obtained, by independent legal counsel in a written opinion; or
- by court order.

Nevada Revised Statutes provide that a corporation may purchase and maintain insurance or make other financial arrangements on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise for any liability asserted against him and liability and expenses incurred by him in his capacity as a director, officer, employee or agent, or arising out of his status as such, whether or not the corporation has the authority to indemnify him against such liability and expenses.

We also maintain a general liability insurance policy, which covers certain liabilities of directors and officers of our company arising out of claims based on acts or omissions in their capacities as directors or officers.

Exclusive Jurisdiction of Certain Actions

Unless we consent in writing to the selection of an alternative forum, the Eighth Judicial District Court of Clark County of the State of Nevada (the "Court") shall be the sole and exclusive forum for any stockholder (including a beneficial owner) to bring (i) any derivative action or proceeding brought on behalf of the Company, (ii) any action asserting a claim of breach of a fiduciary duty owed by any Director, officer or other employee of the Company to the Company or the Company's stockholders, (iii) any action asserting a claim against the Company, any director or the Company's officers or employees arising pursuant to any provision of the NRS, Chapters 78 or 92A of the NRS or our Amended and Restated Articles of Incorporation or our Bylaws, or (iv) any action asserting a claim against the Company, any director or the Company's officers or employees governed by the internal affairs doctrine. However, each of these clauses (i) through (iv) will not apply to any claim (x) as to which the Court determines that there is an indispensable party not subject to the jurisdiction of the Court (and the indispensable party does not consent to the personal jurisdiction of the Court within ten (10) days following such determination), (y) for which the Court does not have subject matter jurisdiction, or (z) which is vested in the exclusive jurisdiction of a court or forum other than the Court, including pursuant to Section 27 of the Exchange Act, which provides for exclusive federal jurisdiction over suits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder. Furthermore, Section 22 of the Securities Act provides for concurrent jurisdiction clauses set forth above would not apply to such suits

Although we believe these provisions benefit us by providing increased consistency in the application of Nevada law for the specified types of actions and proceedings, the provisions may have the effect of discouraging lawsuits against us or our directors and officers. Any person or entity purchasing or otherwise acquiring any interest in our shares of capital stock shall be deemed to have notice of and consented to this exclusive forum provision, but will not be deemed to have waived our compliance with the federal securities laws and the rules and regulations thereunder.

We have been advised that in the opinion of the SEC, insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers and other persons pursuant to the foregoing provisions, or otherwise, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable. In the event a claim for indemnification against such liabilities (other than payment of expenses incurred or paid by a director or officer in the successful defense

Item 16. Exhibits.

Exhibit

Number	Exhibit Description
2.1*	Agreement and Plan of Merger, dated as of May 17, 2021 (incorporated herein by reference to Exhibit 2.1 to the Company's Current Report of Form 8-K, filed
	by the Company with the SEC on May 17, 2021).
3.1	Amended and Restated Articles of Incorporation of the Registrant, dated September 28, 2018 (incorporated herein by reference to Exhibit 3.1 to the Company's
	Current Report on Form 8-K filed with the SEC on October 4, 2018).
3.2	Amended and Restated Bylaws of the Registrant, dated September 28, 2018 (incorporated herein by reference to Exhibit 3.2 to the Company's Current Report
	on Form 8-K filed with the SEC on October 4, 2018).
3.3	Certificate of Designation (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on August 17, 2020 (File No. 000-
	<u>56004).</u>
3.4	Certificate of Change (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on November 13, 2020 (File No.
	<u>000-56004)).</u>
4.1	Form of Warrant (Incorporated by reference to Exhibit E to Exhibit 2.1 to the Company's Current Report on Form 8-K, filed on with the SEC on May 17,
	<u>2021).</u>
5.1	Opinion of Snell & Wilmer L.L.P.
10.1	Lock-Up and Registration Rights Agreement, dated May 17, 2021 (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form
	8-K, filed by the Company with the SEC on May 17, 2021).
10.2	Form of Joinder to Lock-Up and Registration Rights Agreement (incorporated herein by reference to Exhibit 10.2 to the Company's Current Report on Form 8-
	K filed with the SEC on August 9, 2021).
23.1	Consent of Snell & Wilmer L.L.P. (contained in Exhibit 5.1).
23.2	Consent of Rosenberg Rich Baker Berman, P.A.
23.3	Consent of Turner Stone & Company, L.L.P.
24.1	Power of Attorney (included with signature page on this Form S-3),

^{*} Schedules have been omitted pursuant to Item 601(a)(5) of Regulation S-K. The registrant hereby undertakes to furnish copies of any of the omitted schedules upon request by the SEC.

Item 17. Undertakings.

The undersigned registrant hereby undertakes:

- (a)(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by section 10(a)(3) of the Securities Act of 1933;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in the volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in this registration statement or any material change to such information in the registration statement;

Provided, however, that:

paragraphs (a)(1)(i), (a)(1)(ii), and (a)(1)(iii) of this section do not apply if the registration statement is on Form S-3 or Form F-3 and the information required to be included in a post–effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

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- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post–effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.
- (b) That, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the

Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers, and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer, or controlling person of the registrant in the successful defense of any action, suit, or proceeding) is asserted by such director, officer, or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Nantucket, Massachusetts, on this 22 day of October, 2021.

ONDAS HOLDINGS INC.

By: /s/ Eric A. Brock

Eric A. Brock

Chairman and Chief Executive Officer

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

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Eric A. Brock Eric A. Brock	Chairman, Chief Executive Officer and Director (Principal Executive Officer)	October 22, 2021
/s/ Stewart W. Kantor Stewart W. Kantor	President, Chief Financial Officer, Treasurer, Secretary and Director (Principal Financial Officer and Principal Accounting Officer)	October 22, 2021
/s/ Thomas V. Bushey Thomas V. Bushey	Director	October 22, 2021
/s/ Richard M. Cohen Richard M. Cohen	Director	October 22, 2021
/s/ Derek R. Reisfield Derek R. Reisfield	Director	October 22, 2021
/s/ Randall P. Seidl Randall P. Seidl	Director	October 22, 2021
/s/ Richard H. Silverman Richard H. Silverman	Director	October 22, 2021
/s/ Jaspreet Sood Jaspreet Sood	Director	October 22, 2021
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Snell & Wilmer L.L.P.
3883 Howard Hughes Parkway, Suite 1100
Las Vegas, NV 89169
TELEPHONE: (702) 784-5200
FACSIMILE: (702) 784-5252

October 22, 2021

Ondas Holdings Inc. 61 Old South Road, #495 Nantucket, Massachusetts 02554

Re: Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as Nevada counsel to Ondas Holdings Inc., a Nevada corporation (the "Company"), in connection with the preparation and filing with the Securities and Exchange Commission (the "Commission") of a Registration Statement on Form S-3 on the date hereof (as amended from time to time, the "Registration Statement") under the Securities Act of 1933, as amended (the "Securities Act").

The Registration Statement relates to the registration and sale by the selling securityholders named in the Registration Statement of an aggregate of 8,315,630 shares (the "Shares") of common stock, par value \$0.0001 per share, of the Company (the "Common Stock"), including (i) up to 6,749,974 Shares that are outstanding and (ii) up to 1,565,656 Shares underlying certain outstanding warrants at an exercise price of \$7.89 per share (the "Warrants") issued to certain American Robotics, Inc. ("American Robotics") stockholders pursuant to a certain Agreement and Plan of Merger, dated May 17, 2021, by and between the Company, Drone Merger Sub I Inc., Drone Merger Sub II Inc., American Robotics, and Reese Mozer, solely in his capacity as the representative of American Robotics' stockholders.

This opinion is being furnished in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act in connection with the filing of the Registration Statement. All capitalized terms used herein and not otherwise defined shall have the respective meanings given to them in the Registration Statement.

In connection with this opinion, we have examined originals or copies, certified or otherwise identified to our satisfaction, of (i) the Registration Statement and exhibits thereto, including the prospectus comprising a part thereof; (ii) the Amended and Restated Articles of Incorporation of the Company, as amended, as currently in effect; (iii) the Amended and Restated Bylaws of the Company, as amended, as currently in effect; and (iv) certain resolutions and minutes of meetings of the Board of Directors of the Company relating to (A) the issuance and sale of the Shares and the Warrants, (B) the specimen Common Stock certificate, and (C) other related matters. For the purpose of rendering this opinion, we have made such factual and legal examinations as we deemed necessary under the circumstances, and in connection therewith we have examined, among other things, originals or copies, certified or otherwise identified to our satisfaction, of such documents, corporate records, certificates of public officials, certificates or officers or other representatives of the Company, and other instruments and have made such inquiries as we have deemed appropriate for the purpose of rendering this opinion.

In our examination, we have assumed without independent verification the legal capacity of all natural persons, the genuineness of all signatures, the authenticity of all documents submitted to us as facsimile, electronic, certified, conformed or photostatic copies, and the authenticity of the originals of such copies. In making our examination of executed documents, we have assumed that the parties thereto, other than the Company, had the power, corporate or other, to enter into and perform all obligations thereunder and have also assumed the due authorization by all requisite action, corporate or other, and the execution and delivery by such parties of such documents and the validity and binding effect thereof on such parties. In addition, we have assumed that the Warrants were duly authorized and validly issued. We have also assumed that, upon the issuance of any Shares issuable upon exercise of the Warrants, the total number of shares of Common Stock of the Company issued and outstanding will not exceed the total number of shares of Common Stock that the Company is then authorized to issue under its Amended and Restated Articles of Incorporation, as amended. Our opinions are subject to applicable bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium and similar laws affecting creditors' rights and remedies generally, and subject, as to enforceability, to general principles of equity, including principles of commercial reasonableness, good faith and fair dealing (regardless of whether enforcement is sought in a proceeding at law or in equity). As to any facts material to the opinions expressed herein which were not independently established or verified, we have relied upon oral or written statements and representations of officers or other representatives of the Company and others.

Ondas Holdings Inc. October 22, 2021 Page 2

On the basis of, and in reliance on, the foregoing examination and subject to the assumptions, exceptions, qualifications and limitations contained herein, we are of the opinion that the Shares to be resold by the selling securityholders, have been duly and validly authorized for issuance, and, if and when certificates representing such Shares underlying the Warrants have been duly executed, countersigned, registered and delivered upon exercise of such issued Warrants in accordance with the terms of such Warrants, as described in the Registration Statement, then such Shares will be validly issued, fully paid and non-assessable.

We render this opinion only with respect to the general corporate law of the State of Nevada as set forth in Chapter 78 of the Nevada Revised Statutes. We neither express nor imply any obligation with respect to any other laws or the laws of any other jurisdiction or of the United States. For purposes of this opinion, we assume that the Shares will be issued in compliance with all applicable state securities or blue sky laws.

We assume no obligation to update or supplement this opinion if any applicable laws change after date of this opinion or if we become aware after the date of this opinion of any facts, whether existing before or arising after the date hereof, that might change the opinions expressly so stated. Without limiting the generality of the foregoing, we neither express nor imply any opinion regarding the contents of the Registration Statement, other than as expressly stated herein with respect to the Shares.

We are opining only as to matters expressly set forth herein, and no opinion should be inferred as to any other matters. This opinion is rendered as of the date hereof and is based upon currently existing statutes, rules, regulations and judicial decisions. We disclaim any obligation to advise you of any change in any of these sources of law or subsequent legal or factual developments that affect any matters or opinions set forth herein.

We hereby consent to the filing of this opinion with the Commission as Exhibit 5.1 to the Registration Statement. We also consent to the reference to our firm under the heading "Legal Matters" in the Registration Statement. In giving such consent, we do not thereby concede that we are included in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission promulgated thereunder.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-3 of Ondas Holdings Inc. of our report dated March 8, 2021 on our audits of the financial statements of Ondas Holdings Inc. as of and for the years ended December 31, 2020 and 2019.

We also consent to the reference to our firm under the caption "Experts" in the Registration Statement.

/s/ Rosenberg Rich Baker Berman P.A.

Somerset, New Jersey October 22, 2021

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in this Registration Statements on Form S-3 of Ondas Holdings Inc. (the "Registration Statement") of our report dated May 10, 2021 relating to the financial statements of American Robotics, Inc. as of and for the years ended December 31, 2020 and 2019. We also consent to the reference to our firm under the caption "Experts" in the Registration Statement.

/s/ Turner, Stone & Company, L.L.P.

Dallas, Texas October 22, 2021