

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

FORM S-3

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

Ideal Power Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

14-1999058
(I.R.S. Employer
Identification Number)

**5508 Highway 290 West, Suite 120
Austin, Texas, 78735
(512) 264-1542**

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

**R. Daniel Brdar
President and Chief Executive Officer
Ideal Power Inc.
5508 Highway 290 West, Suite 120
Austin, Texas, 78735
(512) 264-1542**

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

Copies to:

**Ned A. Prusse
Perkins Coie LLP
1900 Sixteenth Street, Suite 1400
Denver, Colorado 80202
(303) 291-2300**

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this Registration Statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box:

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box:

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If 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 securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate 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	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of Securities Act.

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

SUBJECT TO COMPLETION, DATED DECEMBER 29, 2022

PROSPECTUS



Ideal Power

**\$50,000,000
Common Stock
Preferred Stock
Warrants
Units**

We may, from time to time in one or more offerings, offer and sell up to \$50,000,000 in the aggregate of common stock, preferred stock, warrants and units, in any combination. The specific terms of the securities, including their offering prices, will be contained in one or more supplements to this prospectus. You should read this prospectus and any prospectus supplement carefully before you invest. The securities may be sold to or through one or more underwriters, dealers or agents, or directly to investors, on a continuous or delayed basis. See “Plan of Distribution.”

Our common stock is listed on the Nasdaq Capital Market (“Nasdaq”) under the symbol “IPWR.” On December 28, 2022, the last reported sale price of our common stock on Nasdaq was \$10.11 per share.

As of November 16, 2022, the aggregate market value of our outstanding common stock held by non-affiliates, or public float, was approximately \$81.1 million, based on the closing price of our common stock as reported on Nasdaq on November 16, 2022, as calculated in accordance with General Instruction I.B.6 of Form S-3.

Investing in our securities involves risks. See “Risk Factors” on page 4 of this prospectus, and in the documents which are incorporated by reference herein, and contained in the applicable prospectus supplement and any related free writing prospectus.

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

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

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 under the Securities Act of 1933, as amended (the “Securities Act”), that we filed with the Securities and Exchange Commission (the “SEC”) using the “shelf” registration process. Under this shelf registration process, we may offer and sell any combination of the securities described in this prospectus in one or more offerings, up to a total dollar amount of \$50,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we offer the securities described in this prospectus, we will provide you with a prospectus supplement that will describe the specific amounts, prices and terms of the securities being offered. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. The prospectus supplement or free writing prospectus may also add, update or change information contained in or incorporated by reference into this prospectus with respect to that offering. If there is any inconsistency between the information in this prospectus and the applicable prospectus supplement or free writing prospectus, you should rely on the prospectus supplement or free writing prospectus, as applicable. This prospectus does not contain all the information provided in the registration statement filed with the SEC. You should carefully read both this prospectus and any prospectus supplement (and any applicable free writing prospectuses), together with the additional information described below under “Where You Can Find More Information” and “Information Incorporated By Reference” before you make an investment decision.

We have not authorized anyone to provide any information other than that contained or incorporated by reference in this prospectus or in any prospectus supplement or free writing prospectus prepared by or on behalf of us or to which we have referred you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you.

You should assume that the information appearing in this prospectus and the applicable prospectus supplement to this prospectus is accurate as of the date on its respective cover and that any information incorporated by reference is accurate only as of the date of the document incorporated by reference, unless we indicate otherwise. Our business, financial condition, results of operations and prospects may have changed since those dates. Any statement made in this prospectus or in a document incorporated or deemed to be incorporated by reference in this prospectus will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in a prospectus supplement or in any other subsequently filed document that is also incorporated or deemed to be incorporated by reference in this prospectus modifies or supersedes that statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus. See “Information Incorporated By Reference.”

This prospectus and any accompanying prospectus supplements may include trademarks, service marks and trade names owned by us or other companies. All trademarks, service marks and trade names included in this prospectus or any accompanying prospectus supplement are the property of their respective owners.

Unless the context otherwise indicates, references in this prospectus to “we,” “us,” “our,” “Ideal Power” and the “Company” are to Ideal Power Inc. The term “you” refers to a prospective investor.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, any applicable prospectus supplement and the documents incorporated by reference herein and therein contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 and the provisions of Section 27A of the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). These statements include, but are not limited to, statements regarding our future financial performance, business condition and results of operations and pursuing additional government funding. Forward-looking statements give our current expectations or forecasts of future events. You can identify these statements by the fact that they do not relate strictly to historical or current facts. You can find many (but not all) of these statements by looking for words such as “approximates,” “believes,” “hopes,” “expects,” “anticipates,” “estimates,” “projects,” “intends,” “plans,” “would,” “should,” “could,” “may” or other similar expressions in this prospectus, any applicable prospectus supplement and the documents incorporated by reference herein and therein. In particular, these include statements relating to future actions, prospective products, applications, customers, technologies, future performance or results of anticipated products, expenses, and financial results. These forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from our historical experience and our present expectations or projections. Factors that could cause actual results to differ from those discussed in the forward-looking statements include, but are not limited to:

- our history of losses;
- our ability to generate revenue;
- our limited operating history;
- the size and growth of markets for our technology;
- regulatory developments that may affect our business;
- our ability to successfully develop new technologies, particularly our bidirectional bipolar junction transistor, or B-TRAN™;
- our expectations regarding the timing of prototype and commercial fabrication of B-TRAN™ devices;
- our expectations regarding the performance of our B-TRAN™ and the consistency of that performance with initial prototypes as well as internal and third-party simulations;
- the expected performance of future products incorporating our B-TRAN™;
- the performance of third-party consultants and service providers whom we have and will continue to rely on to assist us in development of our B-TRAN™ and related drive circuitry;
- the rate and degree of market acceptance for our B-TRAN™;
- the time required for third parties to redesign, test and certify their products incorporating our B-TRAN™;
- our ability to successfully commercialize our B-TRAN™ technology;
- our ability to secure strategic partnerships with semiconductor fabricators and others related to our B-TRAN™ technology;
- our ability to obtain, maintain, defend and enforce intellectual property rights protecting our technology;
- the success of our efforts to manage cash spending, particularly prior to the commercialization of our B-TRAN™ technology;
- general economic conditions and events, including inflation, and the impact they may have on us and our potential partners and licensees;
- our ability to obtain adequate financing in the future, if and when we need it;
- the impact of the novel coronavirus (COVID-19) on our business, financial condition and results of operations;

- our success at managing the risks involved in the foregoing items; and
- other factors discussed in this prospectus, our [Annual Report on Form 10-K for the year ended December 31, 2021, filed with the SEC on March 25, 2022](#), which is incorporated by reference herein, and our other filings with the SEC.

The forward-looking statements are based upon management's beliefs and assumptions and are made as of the date made. We undertake no obligation to publicly update or revise any forward-looking statements included or incorporated by reference in this prospectus, any applicable prospectus supplement and the documents incorporated by reference herein and therein. You should not place undue reliance on these forward-looking statements.

RISK FACTORS

An investment in our securities involves risks. You should carefully consider the risks described in the sections entitled “Risk Factors” in any prospectus supplement and those set forth in documents incorporated by reference in this prospectus and any applicable prospectus supplement, as well as other information in this prospectus and any applicable prospectus supplement, before purchasing any of our securities. Each of the risks described in these sections and documents could materially and adversely affect our business, financial condition, results of operations and prospects, and could result in a loss of your investment. Additional risks and uncertainties not known to us or that we deem immaterial may also impair our business, financial condition, results of operations and prospects.

OUR COMPANY

Ideal Power was formed in Texas on May 17, 2007 and converted to a Delaware corporation on July 15, 2013.

We are solely focused on the further development and commercialization of our B-TRAN™ solid-state switch technology.

Our principal executive offices are located at 5508 Highway 290 West, Suite 120, Austin, Texas 78735 and our telephone number is (512) 264-1542. Our website address is www.idealpower.com. The foregoing website address is provided as an inactive textual reference only. The information provided on our website (or any other website referred to in this prospectus) is not part of this this prospectus and is not incorporated by reference as part of this prospectus.

USE OF PROCEEDS

Unless otherwise indicated in the applicable prospectus supplement, we intend to use the net proceeds from the sale of any securities offered by us under this prospectus for general corporate purposes, which may include, among other things, repayment or refinancing of debt, acquisitions, working capital, capital expenditures, and repurchases or redemptions of securities. We will retain broad discretion over the allocation of net proceeds from the sale of any securities offered by us.

DESCRIPTION OF CAPITAL STOCK

The following description of our capital stock is intended as a summary only. This description is based upon, and is qualified by reference to, our certificate of incorporation, as amended to date (our “certificate of incorporation”), our certificate of designation of preferences, rights and limitations of Series A convertible preferred stock (our “certificate of designation”), our bylaws, as amended to date (our “bylaws”), and applicable provisions of the General Corporation Law of the State of Delaware (the “DGCL”). This summary is not complete. You should read our certificate of incorporation (including the certificate of amendment thereto), our certificate of designation and our bylaws, which are incorporated by reference as exhibits to the registration statement of which this prospectus forms a part, for the provisions that are important to you.

Authorized and Outstanding Capital Stock

Our certificate of incorporation provides that we may issue up to 50,000,000 shares of common stock, par value \$0.001 per share, and 10,000,000 shares of preferred stock, par value \$0.001 per share. 3,000,000 shares of our authorized preferred stock have been designated as Series A Convertible Preferred Stock, par value \$0.001 per share (the “Series A Preferred Stock”). As of December 28, 2022, we had outstanding 5,926,001 shares of common stock and no shares of preferred stock.

Common Stock

Each holder of our common stock is entitled to one vote for each such share outstanding in the holder’s name. No holder of common stock is entitled to cumulate votes in voting for directors, which means that the holders of a majority of the outstanding shares of our common stock will be entitled to elect all of the directors standing for election.

Holders of our common stock are entitled to such dividends as may be declared by our board of directors (our “Board”) out of funds legally available for such purpose, subject to any preferential dividend rights of any then outstanding preferred stock.

In the event of our liquidation, dissolution or winding up, the holders of our common stock are entitled to receive pro rata our assets, which are legally available for distribution, after payments of all debts and other liabilities and subject to the prior rights of any holders of preferred stock then outstanding.

The shares of common stock are neither redeemable nor convertible. Holders of common stock have no preemptive or subscription rights to purchase any of our securities. The shares of common stock are not subject to further calls or assessment by us. There are no redemption or sinking fund provisions applicable to the common stock. All of the outstanding shares of our common stock are fully paid and non-assessable.

Preferred Stock

General

Our certificate of incorporation provides that our Board has the authority, without any further action by our stockholders, to designate and issue up to 10,000,000 shares of preferred stock in one or more classes or series and to fix the powers, rights, preferences, and privileges of each class or series of preferred stock, including dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences and the number of shares constituting any class or series, which may be greater than the rights of the holders of the common stock.

The purpose of authorizing our Board to issue preferred stock and determine its rights and preferences is to eliminate delays associated with a shareholder vote on specific issuances. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions, future financings and other corporate purposes, could have the effect of making it more difficult for a third party to acquire, or could discourage a third party from seeking to acquire, a majority of our outstanding voting stock. Additionally, the issuance of preferred stock may adversely affect the holders of our common stock by restricting dividends on our common stock, diluting the voting power of our common stock or subordinating the liquidation rights of our common stock. As a result of these or other factors, the issuance of preferred stock could have an adverse impact on the market price of our common stock.

Series A Preferred Stock

On February 23, 2017, we filed our certificate of designation with the Secretary of State of the State of Delaware creating our Series A Preferred Stock and establishing the designations, preferences, and other rights of the Series A Preferred Stock, which became effective upon filing. Our Series A Preferred Stock ranks senior to our common stock with respect to dividend rights and rights on liquidation, winding-up and dissolution. Our Series A Preferred Stock has a stated value of \$2.535. Holders of Series A Preferred Stock are entitled to receive dividends declared or paid on our common stock. The holders of the Series A Preferred Stock do not have the right to vote on any matter except to the extent required by Delaware law.

On February 24, 2017, we entered into a purchase agreement with the institutional and other accredited investors identified therein, relating to a private placement of our common stock and warrants to purchase shares of common stock. We also agreed to sell to investors whose purchase of common stock would have resulted in such investor, together with its affiliates and certain related parties, beneficially owning more than 9.99% of our outstanding common stock immediately following the consummation of the offering, an aggregate of 708,430 shares of our Series A Preferred Stock. As a result of the reverse stock split of the outstanding shares of our common stock by a ratio of one-for-ten, which was effected on August 15, 2019 (the “Reverse Stock Split”), each share of Series A Preferred Stock was convertible, subject to certain beneficial ownership limitations described below, into shares of common stock on a ten-for-one basis. The 708,430 shares of Series A Preferred Stock were converted into 70,843 shares of common stock in February 2019.

In addition, on February 24, 2017, we entered into an exchange agreement with certain affiliates of AWM Investment Company (the “Exchanging Stockholders”), pursuant to which we effected the exchange of 810,000 shares of common stock held by the Exchanging Stockholders for 810,000 shares of Series A Preferred Stock. Pursuant to the terms of the Series A Preferred Stock and as a result of the Reverse Stock Split, the Exchanging Stockholders had the right to convert the Series A Preferred Stock into shares of common stock on a ten-for-one basis, subject to adjustment in the event of stock splits, recapitalizations and other similar events; provided, however, that the Series A Preferred Stock could not be converted by the Exchanging Stockholders if, after giving effect thereto, the Exchanging Stockholders would beneficially own more than 9.99% of our common stock (the “Conversion Limitation”). The Conversion Limitation could have been increased or decreased by the Exchanging Stockholders, but in no event would it exceed 9.99%, in each case calculated as provided in the certificate of designation establishing the Series A Preferred Stock.

The 810,000 shares of Series A Preferred Stock were converted into 81,000 shares of common stock in December 2019.

Anti-Takeover Effects of Certain Provisions of Delaware Law and Our Charter Documents

Provisions of Delaware law and our charter documents could have the effect of delaying or preventing a third party from acquiring us, even if the acquisition would benefit our stockholders. These provisions may delay, defer or prevent a tender offer or takeover attempt of our Company that a stockholder might consider in his, her or its best interest, including those attempts that might result in a premium over the market price for the shares held by our stockholders. These provisions are intended to enhance the likelihood of continuity and stability in the composition of our Board and in the policies formulated by the Board and to discourage types of transactions that may involve our actual or threatened change of control. These provisions are designed to reduce our vulnerability to an unsolicited proposal for a takeover that does not contemplate the acquisition of all of our outstanding shares, or an unsolicited proposal for the restructuring or sale of all or part of us.

Effect of Delaware Anti-Takeover Statute. We are subject to Section 203 of the DGCL, an anti-takeover law. In general, Section 203 prohibits a Delaware corporation from engaging in any business combination (as defined below) with any interested stockholder (as defined below) for a period of three years following the date that the stockholder became an interested stockholder, unless:

- prior to that date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;

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

Section 203 defines “business combination” to include the following:

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

In general, Section 203 defines an “interested stockholder” as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation, or who beneficially owns 15% or more of the outstanding voting stock of the corporation at any time within a three-year period immediately prior to the date of determining whether such person is an interested stockholder, and any entity or person affiliated with or controlling or controlled by any of these entities or persons.

Our Charter Documents.

Effects of authorized but unissued common stock and blank check preferred stock. One of the effects of the existence of authorized but unissued common stock and undesignated preferred stock may be to enable our Board to make more difficult or to discourage an attempt to obtain control of our Company by means of a merger, tender offer, proxy contest or otherwise, and thereby to protect the continuity of management. If, in the due exercise of its fiduciary obligations, the Board were to determine that a takeover proposal was not in our best interest, such shares could be issued by the Board without stockholder approval in one or more transactions that might prevent or render more difficult or costly the completion of the takeover transaction by diluting the voting or other rights of the proposed acquirer or insurgent stockholder group, by putting a substantial voting block in institutional or other hands that might undertake to support the position of the incumbent Board, by effecting an acquisition that might complicate or preclude the takeover, or otherwise.

In addition, our certificate of incorporation grants our Board broad power to establish the rights and preferences of authorized and unissued shares of preferred stock. The issuance of additional shares of preferred stock could decrease the amount of earnings and assets available for distribution to holders of shares of common stock. The issuance also may adversely affect the rights and powers, including voting rights, of those holders and may have the effect of delaying, deterring or preventing a change in control of our Company.

Cumulative Voting. Our certificate of incorporation does not provide for cumulative voting in the election of directors, which would allow holders of less than a majority of the stock to elect some directors.

No Stockholder Action by Written Consent. Our certificate of incorporation expressly prohibits stockholders from acting by written consent. This means that stockholders may only act at annual or special meetings.

Vacancies. Our certificate of incorporation provides that all vacancies may be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum.

Special Meeting of Stockholders. A special meeting of stockholders may only be called by the chairman of the Board, the chief executive officer, or the Board at any time and for any purpose or purposes as shall be stated in the notice of the meeting, and shall be called by the secretary upon the written request of the holders of record of at least 25% of the outstanding shares of common stock. This provision could prevent stockholders from calling a special meeting because, unless certain significant stockholders were to join with them, they might not obtain the percentage necessary to request the meeting. Therefore, stockholders holding less than 25% of the issued and outstanding common stock, without the assistance of management, may be unable to propose a vote on any transaction that would delay, defer or prevent a change of control, even if the transaction were in the best interests of our stockholders.

Requirements for Advance Notification of Stockholder Nominations and Proposals. Our certificate of incorporation and bylaws have advance notice procedures with respect to stockholder proposals and nominations of candidates for election as directors, other than nominations made by or at the direction of our Board or a committee of our Board. The business to be conducted at a meeting will be limited to business properly brought before the meeting, in accordance with our certificate of incorporation and bylaws. Failure to follow the procedures set forth in our certificate of incorporation and bylaws will result in the chairman of the meeting disregarding the nomination or declaring that the proposed business will not be transacted.

Exclusive Forum

Under our bylaws, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware (or, if the Court of Chancery of the State of Delaware does not have jurisdiction, the federal district court for the District of Delaware) shall, to the fullest extent permitted by law, be the sole and exclusive forum for: (i) any derivative action or proceeding brought on behalf of our Company; (ii) any action asserting a claim of breach of a fiduciary duty owed by any director, officer, other employee or stockholder of our Company to our Company or our Company's stockholders; (iii) any action asserting a claim arising pursuant to any provision of the DGCL or as to which the DGCL confers jurisdiction on the Court of Chancery of the State of Delaware; or (iv) any action asserting a claim arising pursuant to any provision of our certificate of incorporation or our bylaws or governed by the internal affairs doctrine.

In addition, our bylaws provide that unless we consent in writing to the selection of an alternative forum, the federal district court for the District of Delaware (or if such court does not have jurisdiction over such action, any other federal district court of the United States), to the fullest extent permitted by law, shall be the sole and exclusive forum for the resolution of any claims arising under the Securities Act.

Transfer Agent and Registrar

Our transfer agent and registrar for our common stock is EQ Shareowner Services.

Listing

Our common stock is listed on The Nasdaq Capital Market under the symbol "IPWR."

DESCRIPTION OF WARRANTS

We may, from time to time, issue warrants for the purchase of common stock or preferred stock. Warrants may be issued independently or together with common stock or preferred stock offered by any prospectus supplement and may be attached to or separate from any such offered securities. Each series of warrants will be issued under a separate warrant agreement to be entered into between us and a bank or trust company, as warrant agent, all as will be set forth in the prospectus supplement relating to the particular issue of warrants. The warrant agent will act solely as our agent in connection with the warrants and will not assume any obligation or relationship of agency or trust for or with any holders of warrants or beneficial owners of warrants. The summary of the terms of the warrants contained in this prospectus is not complete and is subject to, and is qualified in its entirety by, all provisions of the applicable warrant agreement.

Reference is made to the prospectus supplement relating to the particular issue of warrants offered pursuant to such prospectus supplement for the terms of and information relating to such warrants, including, where applicable:

- the specific designation and aggregate number of, and the offering price at which we will issue, the warrants;
- the currency or currency units in which the offering price, if any, and the exercise price are payable;
- the date on which the right to exercise the warrants will begin and the date on which that right will expire or, if you may not continuously exercise the warrants throughout that period, the specific date or dates on which you may exercise the warrants;
- whether the warrants are to be sold separately or with other securities as parts of units;
- whether the warrants will be issued in definitive or global form or in any combination of these forms, although, in any case, the form of a warrant included in a unit will correspond to the form of the unit and of any security included in that unit;
- any applicable material U.S. federal income tax consequences;
- the identity of the warrant agent for the warrants and of any other depositaries, execution or paying agents, transfer agents, registrars or other agents;
- the proposed listing, if any, of the warrants or any securities purchasable upon exercise of the warrants on any securities exchange;
- the designation and terms of any equity securities purchasable upon exercise of the warrants;
- if applicable, the designation and terms of preferred stock or common stock with which the warrants are issued and the number of warrants issued with each security;
- if applicable, the date from and after which any warrants issued as part of a unit and the related preferred stock or common stock will be separately transferable;
- the number of shares of preferred stock or the number of shares of common stock purchasable upon exercise of a warrant and the price at which those shares may be purchased;
- if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;
- information with respect to book-entry procedures, if any;
- the antidilution provisions of, and other provisions for changes to or adjustment in the exercise price of, the warrants, if any;
- any redemption or call provisions; and
- any additional terms of the warrants, including terms, procedures and limitations relating to the exchange or exercise of the warrants.

DESCRIPTION OF UNITS

We may, from time to time, issue units comprised of one or more of the other securities that may be offered under this prospectus, in any combination. Each unit may also include debt obligations of third parties, such as U.S. Treasury securities. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately at any time, or at any time before a specified date or other specific circumstances occur. The summary of the terms of the units contained in this prospectus is not complete and is subject to, and is qualified in its entirety by, all provisions of the applicable unit agreements.

Any prospectus supplement related to any particular units will describe, among other things:

- the material terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any material provisions relating to the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units;
- if appropriate, any special U.S. federal income tax considerations applicable to the units; and
- any material provisions of the governing unit agreement that differ from those described above.

The applicable provisions described in this section, as well as those described under “Description of Capital Stock” and “Description of Warrants” will apply to each unit and to each security included in each unit, respectively.

PLAN OF DISTRIBUTION

We may sell the securities being offered hereby:

- directly to one or more purchasers;
- through agents;
- through dealers;
- through underwriters;
- through a combination of any of the above methods of sale; or
- through any other methods described in a prospectus supplement.

We will identify the specific plan of distribution, including any direct purchasers, agents, dealers, underwriters and, if applicable, their compensation, the purchase price, the net proceeds to us, the public offering price, and any discounts or concessions allowed or reallocated or paid to dealers, in a prospectus supplement.

The distribution of securities may be effected, from time to time, in one or more transactions, including block transactions, at-the-market offerings and transactions on Nasdaq or any other organized market where the securities may be traded. The securities may be sold at a fixed price or prices, which may be changed, or at market prices prevailing at the time of sale, at prices relating to the prevailing market prices or at negotiated prices. The consideration may be cash or another form negotiated by the parties. Agents, underwriters or broker-dealers may be paid compensation for offering and selling the securities. That compensation may be in the form of discounts, concessions or commissions to be received from us or from the purchasers of the securities.

Offers to purchase the securities may be solicited directly by us or by agents designated by us from time to time. We will, in the prospectus supplement relating to an offering, name any agent that could be viewed as an underwriter under the Securities Act and describe any commissions we must pay. Any such agent will be acting on a best efforts basis for the period of its appointment or, if indicated in the applicable prospectus supplement, on a firm commitment basis.

If a dealer is utilized in the sale of the securities in respect of which this prospectus is delivered, we will sell the securities to the dealer, as principal. The dealer, which may be deemed to be an underwriter as that term is defined in the Securities Act, may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale. Dealer trading may take place in certain of the securities, including securities not listed on any securities exchange.

If an underwriter or underwriters are utilized in the sale, we will execute an underwriting agreement with the underwriters at the time of sale to them and the names of the underwriters will be set forth in the applicable prospectus supplement, which will be used by the underwriters to make resales of the securities in respect of which this prospectus is delivered to the public. The obligations of underwriters to purchase securities will be subject to certain conditions precedent and the underwriters will be obligated to purchase all of the securities of a series if any are purchased.

We may directly solicit offers to purchase the securities, and we may make sales of securities directly to institutional investors or others. These persons may be deemed to be underwriters within the meaning of the Securities Act with respect to any resale of the securities. To the extent required, the prospectus supplement will describe the terms of any such sales, including the terms of any bidding or auction process, if used.

Underwriters, dealers, agents and other persons may be entitled, under agreements that may be entered into with us, to indemnification against certain civil liabilities, including liabilities under the Securities Act, or to contribution with respect to payments that they may be required to make in respect thereof. Underwriters, dealers and agents may engage in transactions with, or perform services for, us in the ordinary course of business.

Any person participating in the distribution of common stock registered under the registration statement that includes this prospectus will be subject to applicable provisions of the Exchange Act, and the

applicable SEC rules and regulations, including, among others, Regulation M, which may limit the timing of purchases and sales of our common stock by any such person. Furthermore, Regulation M may restrict the ability of any person engaged in the distribution of our common stock to engage in market-making activities with respect to our common stock. These restrictions may affect the marketability of our common stock and the ability of any person or entity to engage in market-making activities with respect to our common stock.

In order to facilitate the offering of the securities, any underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the securities or any other securities the prices of which may be used to determine payments on such securities. Specifically, any underwriters may overallocate in connection with the offering, creating a short position for their own accounts. In addition, to cover overallocations or to stabilize the price of the securities or of any such other securities, the underwriters may bid for, and purchase, the securities or any such other securities in the open market. Finally, in any offering of the securities through a syndicate of underwriters, the underwriting syndicate may reclaim selling concessions allowed to an underwriter or a dealer for distributing the securities in the offering if the syndicate repurchases previously distributed securities in transactions to cover syndicate short positions, in stabilization transactions or otherwise. Any of these activities may stabilize or maintain the market price of the securities above independent market levels. Any such underwriters are not required to engage in these activities and may end any of these activities at any time.

LEGAL MATTERS

Unless otherwise stated in an accompanying prospectus supplement, the validity of the securities being offered by this prospectus will be passed upon for us by Perkins Coie LLP. Counsel representing any underwriters, dealers or agents will be named in the applicable prospectus supplement.

EXPERTS

The audited financial statements of Ideal Power Inc. as of December 31, 2021 and for the year ended December 31, 2021, incorporated in this Registration Statement on Form S-3 by reference to the [Annual Report on Form 10-K for the year ended December 31, 2021](#), have been so incorporated in reliance on the report of BPM LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

The audited financial statements of Ideal Power Inc. as of December 31, 2020 and for the year ended December 31, 2020, incorporated in this Registration Statement on Form S-3 by reference to the [Annual Report on Form 10-K for the year ended December 31, 2020](#), have been so incorporated in reliance on the report of Gumbiner Savett Inc., an independent public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We file with, or furnish to, the SEC reports including our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, proxy statements, and amendments to those reports pursuant to Section 13(a) or 15(d) of the Exchange Act. These reports are available free of charge on our corporate website, www.idealpower.com, as soon as reasonably practicable after they are electronically filed with or furnished to the SEC. Copies of any materials we file with the SEC can be obtained free of charge at www.sec.gov. The foregoing website addresses are provided as inactive textual references only. The information provided on our website (or any other website referred to in this prospectus or any applicable prospectus supplement) is not part of this prospectus or any applicable prospectus supplement and is not incorporated by reference as part of this prospectus or any applicable prospectus supplement.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to “incorporate by reference” the information we file with them, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus and any accompanying prospectus supplement, and later information filed with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below and all documents subsequently filed with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, prior to the termination of the offering under this prospectus and any prospectus supplement (other than information deemed furnished and not filed in accordance with SEC rules, including Items 2.02 and 7.01 of Form 8-K):

- our [Annual Report on Form 10-K for the year ended December 31, 2021, filed with the SEC on March 25, 2022](#);
- our Quarterly Reports on Form 10-Q for the quarterly periods ended March 31, 2022, June 30, 2022 and September 30, 2022 filed with the SEC on [May 16, 2022](#), [August 15, 2022](#) and [November 14, 2022](#), respectively;
- our [Definitive Proxy Statement on Schedule 14A for the 2022 Annual Meeting of Stockholders, filed with the SEC on April 29, 2022](#) (only with respect to information required to be filed by Part III of our [Annual Report on Form 10-K for the year ended December 31, 2021](#));
- our Current Reports on Form 8-K filed with the SEC on [January 14, 2022](#), [March 14, 2022](#), [April 14, 2022](#) and [June 17, 2022](#); and
- [the description of our common filed as Exhibit 4.5 to our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on March 31, 2020](#).

You may request a copy of these filings (other than an exhibit to a filing unless that exhibit is specifically incorporated by reference into that filing) at no cost, by writing to or telephoning us at the following address:

Ideal Power Inc.
5508 Highway 290 West, Suite 120
Austin, Texas, 78735
(512) 264-1542
Attention: Chief Financial Officer

PART II
INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth the expenses payable by us in connection with the issuance and distribution of the securities covered by this Registration Statement, other than underwriting discounts and commissions. All expenses are estimates.

SEC Registration Fee	\$5,510
Printing Expenses	*
Legal Fees and Expenses	*
Accounting Fees and Expenses	*
Transfer Agent and Registrar Fees and Expenses	*
Trustee Fees and Expenses	*
Stock Exchange and Other Listing Fees	*
Miscellaneous	*
Total	\$ *

* These expenses are calculated in part based on the number of issuances and the amount of securities offered and accordingly cannot be estimated at this time.

Item 15. Indemnification of Directors and Officers.

Section 145 of the Delaware General Corporation Law (the “DGCL”) provides, in general, that a corporation may indemnify directors and officers as well as other employees and individuals against expenses (including attorneys’ fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with any threatened, pending or completed actions, suits or proceedings in which such person is made a party by reason of such person being or having been a director, officer, employee or agent to the corporation. In the case of a derivative action, a Delaware corporation may indemnify any such person against expenses (including attorneys’ fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification will be made in respect of any claim, issue or matter as to which such person will have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery of the State of Delaware or any other court in which such action was brought determines such person is fairly and reasonably entitled to indemnity for such expenses. The DGCL provides that Section 145 is not exclusive of other rights to which those seeking indemnification may be entitled under any bylaw, agreement, vote of stockholders or disinterested directors or otherwise.

The registrant’s certificate of incorporation, as amended, and bylaws provide that it will indemnify its directors, officers, employees and agents to the extent and in the manner permitted by the provisions of the DGCL, as amended from time to time, subject to any permissible expansion or limitation of such indemnification, as may be set forth in any stockholders’ or directors’ resolution or by contract. Any repeal or modification of these provisions approved by the registrant’s stockholders will be prospective only and will not adversely affect any limitation on the liability of any of the registrant’s directors or officers existing as of the time of such repeal or modification.

The registrant’s certificate of incorporation, as amended, provides that no director is liable to the registrant or its stockholders for monetary damages for breach of fiduciary duty as a director to the fullest extent permitted by the DGCL, except for liability (i) for any breach of the director’s duty of loyalty to the registrant or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the DGCL, or (iv) for any transaction from which the director derived an improper personal benefit. If the DGCL is amended after the date hereof to authorize corporate action further eliminating or limiting the personal liability of directors, then the

liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the Delaware General Corporation Law, as so amended.

The registrant has also obtained insurance covering its directors and officers for liability arising out of their respective actions.

Any underwriting agreement will provide for indemnification by the underwriters of the registrant and its officers and directors for certain liabilities arising under the Securities Act of 1933, as amended, or otherwise.

Item 16. Exhibits.

The following exhibits are filed as part of this registration statement:

Exhibit No.	Document
1.1*	Form of Underwriting Agreement.
3.1	Delaware Certificate of Conversion including Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to Ideal Power Inc.'s Registration Statement on Form S-1/A, filed on August 6, 2013 (File No. 333-190414)).
3.2	Certificate of Amendment to the Certificate of Incorporation of Ideal Power Inc. (incorporated by reference to Exhibit 3.1 to Ideal Power Inc.'s Current Report on Form 8-K, filed on August 20, 2019 (File No. 001-36216)).
3.3	Second Amended and Restated Bylaws of Ideal Power Inc. (incorporated by reference to Exhibit 3.1 to Ideal Power Inc.'s Quarterly Report on Form 10-Q, filed on August 15, 2022 (File No. 001-36216)).
3.4	Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock of Ideal Power Inc. (incorporated by reference to Exhibit 3.1 to Ideal Power Inc.'s Current Report on Form 8-K, filed on February 27, 2017 (File No. 001-36216)).
4.1	Specimen Common Stock Certificate (incorporated by reference Exhibit 4.5 to Ideal Power Inc.'s Registration Statement on Form S-3 (File No. 333-235500), filed on December 13, 2019).
4.2*	Form of Specimen Preferred Stock Certificate.
4.3*	Form of Certificate of Designation.
4.4*	Form of Warrant Agreement.
4.5*	Form of Unit Agreement.
5.1†	Opinion of Perkins Coie LLP.
23.1†	Consent of BPM LLP, Independent Registered Public Accounting Firm
23.2†	Consent of Gumbiner Savett Inc., Independent Public Accounting Firm
23.3†	Consent of Perkins Coie LLP (included in Exhibit 5.1).
24.1†	Power of Attorney (included on the signature page hereto).
107†	Filing Fee Table.

† Filed herewith.

* To be filed by amendment, as an exhibit to a Current Report on Form 8-K or by other applicable filing with the Securities and Exchange Commission to be incorporated by reference herein.

Item 17. Undertakings.

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

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

provided, however, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) 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 SEC 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.

(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:

- (i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
- (ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by

reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date;

(5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities: the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
- (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act of 1933 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 counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

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 Austin, State of Texas, on December 29, 2022.

IDEAL POWER INC.

By: /s/ R. Daniel Brdar

Name: R. Daniel Brdar

Title: President and Chief Executive Officer

POWER OF ATTORNEY

Each person whose signature appears below hereby constitutes and appoints R. Daniel Brdar and Timothy Burns, and each of them acting individually, as his true and lawful attorneys-in-fact and agents, each with full power of substitution, for him in any and all capacities, to execute any and all amendments to this Registration Statement (including any post-effective amendments, and any new registration statement with respect to the offering contemplated thereby filed pursuant to Rule 462(b) of the Securities Act), and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto such attorneys-in-fact and agents, with full power of each to act alone, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully for all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that such attorneys-in-fact and agents, or his, her or their 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 and power of attorney have been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ R. Daniel Brdar</u> R. Daniel Brdar	President, Chief Executive Officer and Director <i>(Principal Executive Officer)</i>	December 29, 2022
<u>/s/ Timothy W. Burns</u> Timothy W. Burns	Chief Financial Officer, Secretary and Treasurer <i>(Principal Financial and Accounting Officer)</i>	December 29, 2022
<u>/s/ Michael C. Turmelle</u> Michael C. Turmelle	Chairman of the Board	December 29, 2022
<u>/s/ Drue Freeman</u> Drue Freeman	Director	December 29, 2022
<u>/s/ Gregory Knight</u> Gregory Knight	Director	December 29, 2022
<u>/s/ Ted Lesster</u> Ted Lesster	Director	December 29, 2022



1900 Sixteenth Street
Suite 1400
Denver, CO 80202-5255

T +1.303.291.2300
F +1.303.291.2400
perkinscoie.com

December 29, 2022

Ideal Power Inc.
5508 Highway 290 West, Suite 120
Austin, Texas 78735

Re: Registration Statement on Form S-3 Filed by Ideal Power Inc.

Ladies and Gentlemen:

We have acted as counsel to Ideal Power Inc., a Delaware corporation (the "Company"), in connection with the preparation and filing with the Securities and Exchange Commission (the "Commission") pursuant to the Securities Act of 1933, as amended (the "Securities Act"), and the rules and regulations promulgated thereunder, of a registration statement on Form S-3 (the "Registration Statement") for the registration of the sale from time to time of one or more series of the following securities by the Company (collectively, the "Securities"):

- (a) shares of the Company's common stock, par value \$0.001 per share ("Common Stock");
- (b) shares of the Company's preferred stock, par value \$0.001 per share ("Preferred Stock"), which may be issued as part of a series established pursuant to a certificate of designation filed in the office of the Secretary of State of the State of Delaware (the "Secretary of State") in accordance with the applicable provisions of the General Corporation Law of the State of Delaware (a "Certificate of Designation");
- (c) warrants representing rights to purchase Common Stock or Preferred Stock ("Warrants"); and
- (d) units consisting of any combination of the Securities ("Units").

In our capacity as counsel to the Company, we have examined such documents, records and instruments as we have deemed necessary for the purposes of this opinion. As to matters of fact material to the opinions expressed herein, we have relied on (a) information in public authority documents (and all opinions based on public authority documents are as of the date of such public authority documents and not as of the date of this opinion letter), and (b) information provided in certificates of officers of the Company. We have not independently verified the facts so relied on.

In such examination, we have assumed the following without investigation: (a) the authenticity of original documents and the genuineness of all signatures; (b) the conformity to the originals of all documents submitted to us as copies; and (c) the truth, accuracy and completeness of the information, representations and warranties contained in the records, documents, instruments and certificates we have reviewed.

Based upon the foregoing examination and in reliance thereon, and subject to (a) the assumptions stated and in reliance on statements of fact contained in the documents that we have examined and (b) completion of all corporate action required to be taken by the Company to duly authorize each proposed issuance of Securities (including the due reservation of any shares of Common Stock or Preferred Stock for issuance upon conversion or exchange of any other Securities), we are of the opinion that:

1. With respect to the Common Stock, when the shares of Common Stock have been issued and delivered in accordance with the applicable purchase, underwriting or similar agreement against the receipt of requisite consideration therefor provided for therein, such shares of Common Stock will be validly issued, fully paid and non-assessable.
2. With respect to the Preferred Stock, when (a) the applicable Certificate of Designation for the Preferred Stock to be issued has been duly filed with the Secretary of State and (b) the shares of Preferred Stock have been issued and delivered in accordance with the applicable purchase, underwriting or similar agreement against the receipt of requisite consideration therefor provided for therein, such shares of Preferred Stock will be validly issued, fully paid and non-assessable.
3. With respect to the shares of Common Stock or Preferred Stock to be issued upon conversion or exercise, as applicable, of the Preferred Stock or Warrants, when (a) if applicable, the Certificate of Designation for the Preferred Stock to be issued has been duly filed with the Secretary of State and (b) such Common Stock or Preferred Stock, as the case may be, has been issued and delivered in accordance with the terms of the applicable Warrants, as the case may be, such shares of Common Stock or Preferred Stock will be validly issued, fully paid and non-assessable.
4. With respect to the Warrants, when (a) a warrant agreement relating to the Warrants (the "Warrant Agreement") has been duly authorized and validly executed and delivered by the Company and each party thereto, (b) the terms of the Warrants have been established in accordance with the Warrant Agreement and (c) the Warrants have been executed and delivered in accordance with the related Warrant Agreement and the applicable purchase, underwriting or similar agreement against the receipt of requisite consideration therefor provided therein, the Warrants will be legal, valid and binding obligations of the Company.
5. With respect to the Units, when (a) a unit agreement relating to the Units (the "Unit Agreement") has been duly authorized and validly executed and delivered by the Company and each party thereto, (b) the terms of the Units have been established in accordance with the Unit Agreement and (c) the Units have been executed and delivered in accordance with the related Unit Agreement and the applicable purchase, underwriting or similar agreement against the receipt of requisite consideration therefor provided therein, the Units will be legal, valid and binding obligations of the Company.

The foregoing opinions are subject to the following exclusions and qualifications:

- (a) Our opinions are as of the date hereof, and we have no responsibility to update this opinion for events and circumstances occurring after the date hereof or as to facts relating to prior events that are subsequently brought to our attention. This opinion is limited to the laws, including the rules and regulations, as in effect on the date hereof, and we disavow any undertaking to advise you of any changes in law.
-

- (b) We express no opinion as to enforceability of any right or obligation to the extent such right or obligation is subject to and limited by (i) the effect of bankruptcy, insolvency, reorganization, receivership, conservatorship, arrangement, moratorium, fraudulent transfer or other laws affecting or relating to the rights of creditors generally; (ii) rules governing the availability of specific performance, injunctive relief or other equitable remedies and general principles of equity, regardless of whether arising prior to or after the date hereof or considered in a proceeding in equity or at law; or (iii) the effect of federal and state securities laws and principles of public policy on the rights of indemnity and contribution.
- (c) We do not express any opinions herein concerning any laws other than the laws in their current forms of the States of Delaware and New York and the federal securities laws of the United States of America, and we express no opinion with respect to the laws of any other jurisdiction and expressly disclaim responsibility for advising you as to the effect, if any, that the laws of any other jurisdiction may have on the opinions set forth herein.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and any amendments thereto, including any and all post-effective amendments, and to the reference to our firm in the prospectus and any prospectus supplements relating thereto under the heading "Legal Matters." In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or related rules and regulations of the Commission issued thereunder.

Very truly yours,

/s/ PERKINS COIE LLP

Consent of Independent Registered Public Accounting Firm

We hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of our report dated March 25, 2022, relating to the financial statements of Ideal Power Inc., which appears in the Annual Report on Form 10-K of Ideal Power Inc. for the year ended December 31, 2021. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ BPM LLP
San Jose, California
December 29, 2022

CONSENT OF INDEPENDENT PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of our report dated March 26, 2021, relating to the financial statements of Ideal Power Inc., which appears in the Annual Report on Form 10-K of Ideal Power Inc. for the year ended December 31, 2020. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ Gumbiner Savett Inc.
Santa Monica, California
December 29, 2022

Calculation of Filing Fees Table

Form S-3
(Form Type)

Ideal Power Inc.

(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered and Carry Forward Securities

	Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee	Carry Forward Form Type	Carry Forward File Number	Carry Forward Initial effective date	Filing Fee Previously Paid in Connection with Unsold Securities to be Carried Forward
Newly Registered Securities												
Fees to Be Paid	Equity	Common stock, par value \$0.001 per share		(1)	(2)	(2)	—	—	—	—	—	—
	Equity	Preferred stock, par value \$0.001 per share		(1)	(2)	(2)	—	—	—	—	—	—
	Other	Warrants		(1)	(2)	(2)	—	—	—	—	—	—
	Other	Units		(1)	(2)	(2)	—	—	—	—	—	—
	Unallocated (Universal) Shelf	—	457(o)	(1)	(2)	\$50,000,000	\$110.20 per \$1,000,000	\$5,510.00(3)	—	—	—	—
Fees Previously Paid	—	—	—	—	—	—	—	—	—	—	—	
Carry Forward Securities												
Carry Forward Securities	—	—	—	—	—	—	—	—	—	—	—	—
Total Offering Amounts						\$50,000,000	\$0.00011020	\$5,510.00				
Total Fees Previously Paid								\$0.00				
Total Fee Offsets								\$0.00				
Net Fee Due								\$5,510.00				

(1) There are being registered hereunder such indeterminate number of shares of common stock and preferred stock, warrants to purchase common stock and preferred stock, and units comprised of one or more of the other securities that may be offered pursuant hereto to be sold by the registrant from time to time at unspecified prices which shall have an aggregate initial offering price not to exceed \$50,000,000. The securities registered for sale also include such indeterminate number of shares of common stock and preferred stock as may be issued upon conversion of or exchange for preferred stock, upon exercise of warrants or pursuant to the antidilution provisions of any such securities. In addition, pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), the shares being registered hereunder include such indeterminate number of shares of common stock and preferred stock as may be issuable with respect to the shares being registered hereunder as a result of stock splits, stock dividends or similar transactions.

(2) The proposed maximum offering price per share will be determined, from time to time, by the registrant in connection with the issuance by the registrant of the securities registered hereunder and is not specified as to each class of security pursuant to Instruction 2.A.iii.b. to the Calculation of Filing Fee Tables and Related Disclosure on Item 16(b) of Form S-3 under the Securities Act.

(3) The proposed maximum aggregate offering price has been calculated pursuant to Rule 457(o) under the Securities Act.