



# PRODUCT

Laser Engraver and Cleaner

## BROCHURE

More light brings more power

## TrioSTAR Series

PRO120 PRO220 PRO320



# Backpack

## Laser Engraver And Cleaner



**TrioSTAR Pro120**

# PRODUCT PARAMETERS

TrioSTAR Pro120

| Indicator items                     |                                                  | Parameter values                                                                                                                               |
|-------------------------------------|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Laser                               | Laser type                                       | MOPA pulsed fiber laser                                                                                                                        |
|                                     | Average power                                    | ≥120W                                                                                                                                          |
|                                     | Peak power                                       | ≥8kW                                                                                                                                           |
|                                     | Frequency range                                  | 1kHz-4MHz                                                                                                                                      |
|                                     | Pulse width                                      | 5ns-500ns                                                                                                                                      |
| Output head                         | Field mirror focal length                        | Standard F=254mm (can increase F=160mm, F=330mm)                                                                                               |
|                                     | Marking/deep carving/cleaning format             | ≤120mm × 120mm@F=254mm                                                                                                                         |
|                                     | Clean the spot pattern                           | Cross, rectangle, spiral, circle, ring, 0 ° straight line, 45 ° straight line, 90 ° straight line, 135 ° straight line, straight line rotation |
|                                     | Mark/deep sculpt linearity                       | 99.9%                                                                                                                                          |
|                                     | Marking/deep carving repeat positioning accuracy | 8 μRad                                                                                                                                         |
|                                     | Marking/Deep carving Long Time drift (8h)        | 0.5 mRad or less                                                                                                                               |
|                                     | Output armor length                              | Acuity 1.5 m                                                                                                                                   |
|                                     | Communication control                            | Communication and control: the output head button and visual LCD screen real-time adjustment, or handheld tablet wireless control              |
|                                     | Operation assistance                             | Dual red focus, LED lighting                                                                                                                   |
|                                     | Clean out light control                          | Double button interlock                                                                                                                        |
|                                     | Output head weight                               | 600g (without marking bracket)                                                                                                                 |
|                                     | Marking/deep carving bracket weight              | ≤130g                                                                                                                                          |
|                                     | Supply voltage                                   | 100VAC-240VAC                                                                                                                                  |
| Electric                            | Power supply frequency                           | 50Hz/60Hz                                                                                                                                      |
|                                     | Power supply                                     | ≥500W                                                                                                                                          |
|                                     | Power cord length                                | ≥5m                                                                                                                                            |
|                                     | Lithium battery life                             | ≥50min                                                                                                                                         |
|                                     | Lithium battery full charge time                 | ≤150min                                                                                                                                        |
| External communication of equipment | Control mode                                     | IO/485                                                                                                                                         |
| Device language                     | Output head screen                               | English                                                                                                                                        |
|                                     | APP terminal                                     | Chinese, English, German, French, Japanese, Korean, Russian, Portuguese, Spanish, Arabic, Thai, Vietnamese 12 languages                        |
| Whole machine structure             | Status indicator                                 | Red, Blue, Yellow, and Green Multi-Color Breathing Lights                                                                                      |
|                                     | Safety protection                                | External industrial control equipment security interlock interface                                                                             |
|                                     | Equipment Dimensions                             | 264 ×160×372mm                                                                                                                                 |
|                                     | Equipment weight                                 | < 10kg                                                                                                                                         |
|                                     | Package size                                     | 860×515×265mm                                                                                                                                  |
|                                     | Gross packaging weight                           | < 18kg                                                                                                                                         |

TrioSTAR Pro120

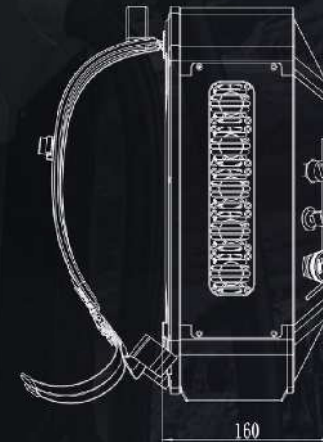
## COMPACT AND LIGHTWEIGHT

Body

9 kg

Output Head

0.6 kg



# EASY TO OPERATE

TrioSTAR Pro120



It can adjust the laser power, pulse width, spot pattern and size, galvanometer speed in real time on the output head or mobile phone, control the focus of red light and LED lighting start and stop, and real-time monitoring equipment operating status information.

TrioSTAR Pro120

# MULTIPLE FUNCTIONS



It is equipped with a fixed focus bracket that can be quickly installed and taken to achieve accurate marking and deep carving.

# SAFETY

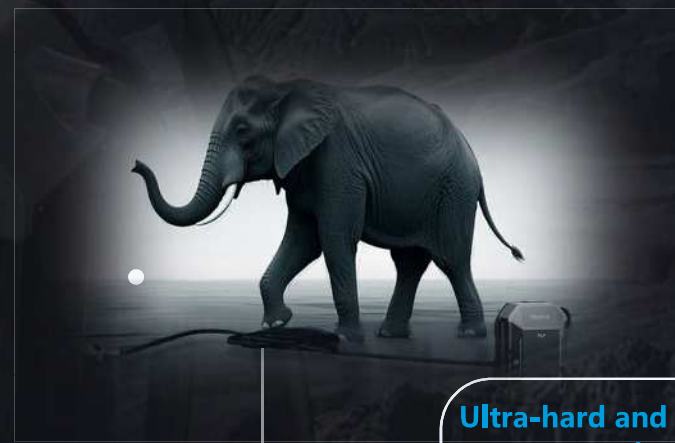
TrioSTAR  
Pro120



External industrial control equipment safety interlock interface, fully cooperate with the external system to ensure safety.



Press the red light button of the output head first, and then continuously hold down the enable switch to emit the laser. If no operation is performed within 2 minutes after the red light is turned on, the red light will automatically turn off and the device will enter the standby state.



Ultra-hard and pressure-resistant, ultra-flexible and easy-to-bend corrugated tube, protecting optical fibers and cables to ensure their safety.

# VERSATILITY

TrioSTAR Pro120

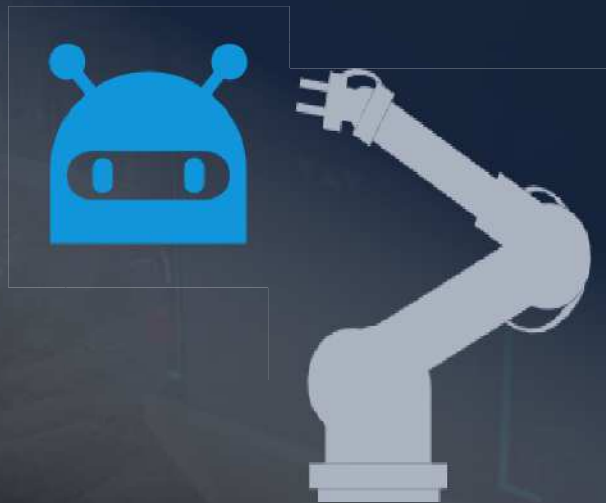
## Language

*Supports 10+ globally recognized languages and flexible configuration across mobile and desktop platforms.*



## External Control Interface

*Supports rapid and simple integration with external industrial control systems via IO/RS-485 interfaces, enabling automated operations.*

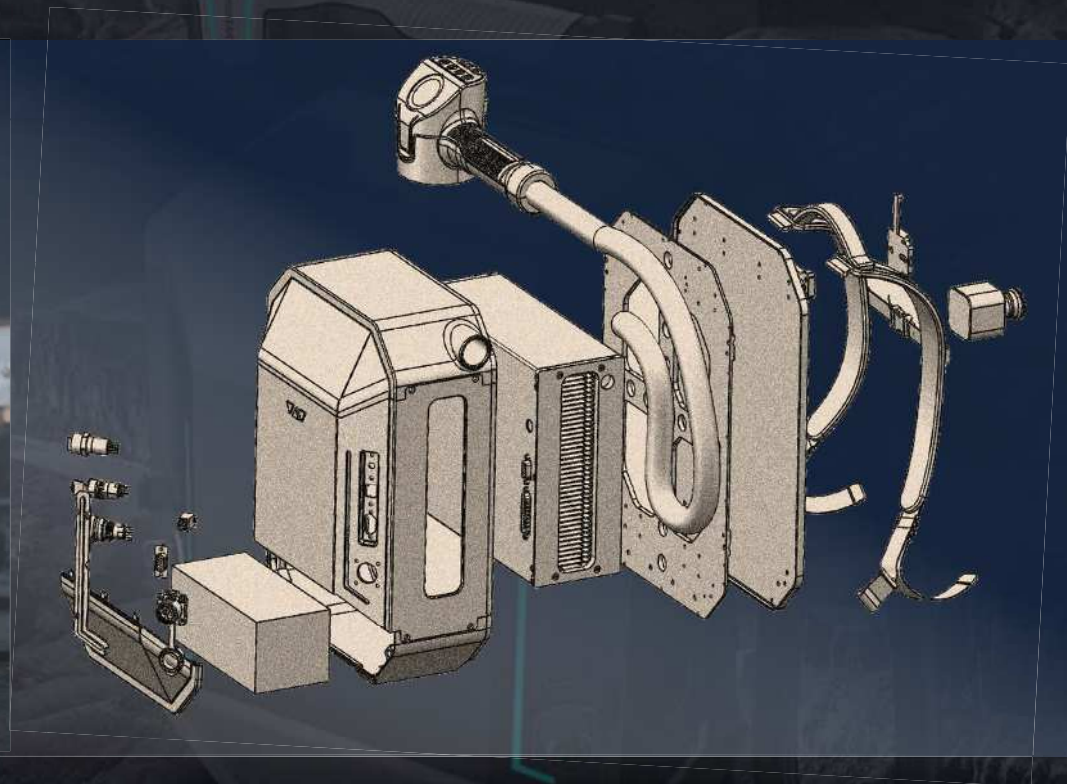


## Voltage

*100-240V AC wide-range input, compatible with standard mains voltages worldwide.*



TrioSTAR Pro120  
**MODULAR**



Super light super hard suitcase, complete machine and spare parts can be easily included.



**TrioSTAR**  
**Pro220**  
**Pro320**

**PORTABLE LASER ENGRAVER AND CLEANER**



光之所及，净意无穷，清刻瞬成

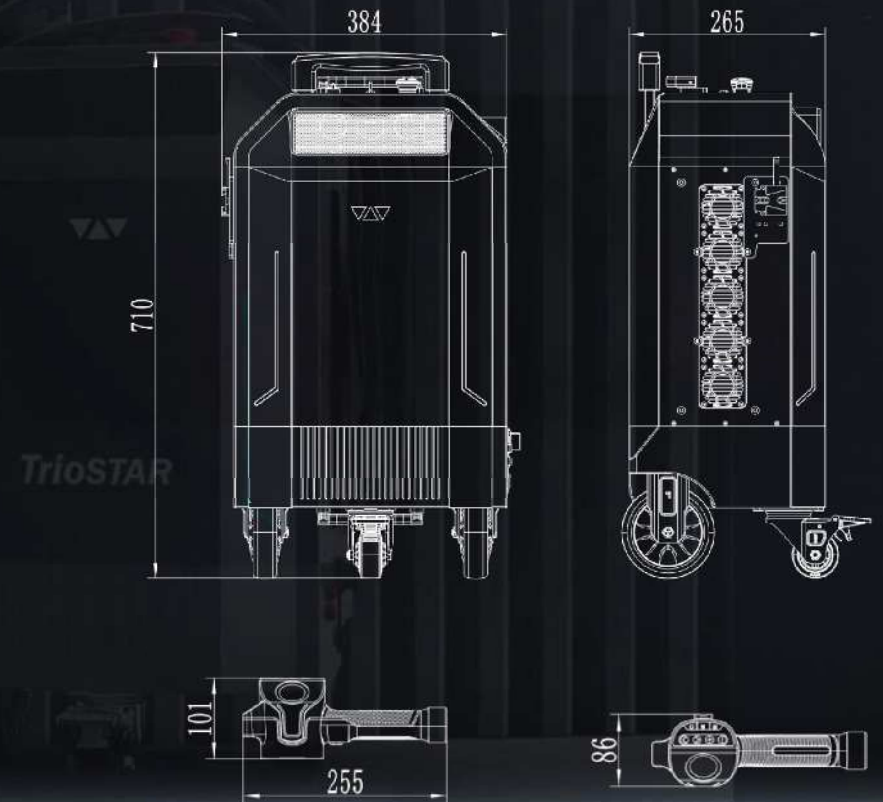
# PRODUCT PARAMETERS

TrioSTAR Pro220/320

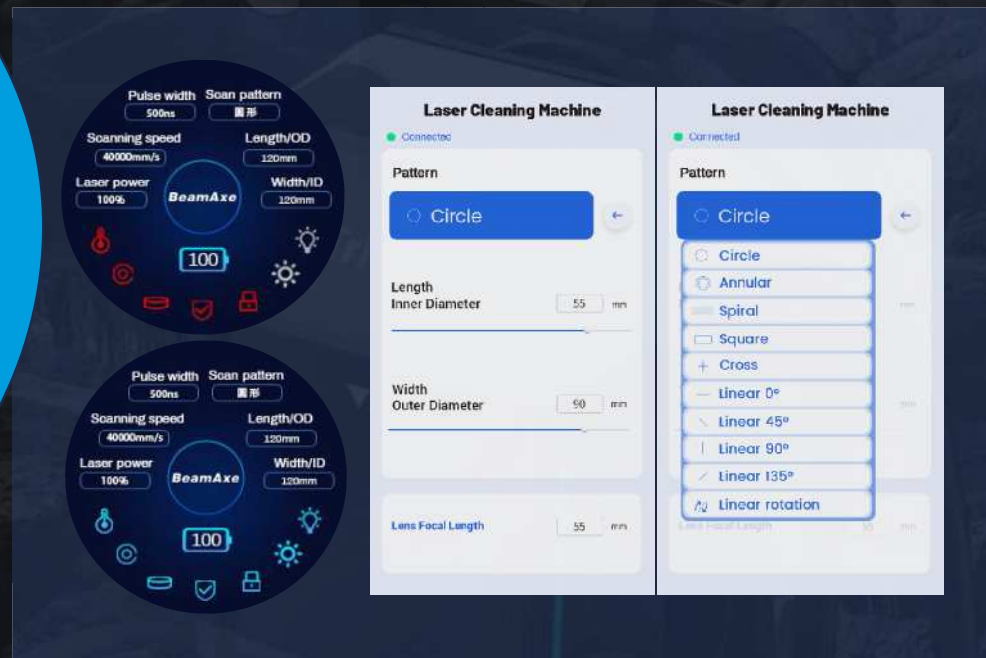
| Indicator items                     |                                                  | Parameter values                                                                                                                               |               |                        |         |
|-------------------------------------|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|---------------|------------------------|---------|
| Laser                               | Product model number                             | Pro220                                                                                                                                         | Pro220M       | Pro320                 | Pro320M |
|                                     | Laser type                                       | MOPA pulsed fiber laser                                                                                                                        |               |                        |         |
|                                     | Average power                                    | ≥220W                                                                                                                                          | ≥220W         | ≥320W                  | ≥320W   |
|                                     | Peak power                                       | ≥8kW                                                                                                                                           | ≥100kW        | ≥8kW                   | ≥100kW  |
|                                     | Frequency range                                  | 1kHz-4MHz                                                                                                                                      |               |                        |         |
|                                     | Pulse energy                                     | ≥2mJ                                                                                                                                           | ≥15mJ         | ≥2mJ                   | ≥15mJ   |
|                                     | Pulse width                                      | 5ns-500ns                                                                                                                                      |               |                        |         |
| Output head                         | Field lens focal length                          | Standard F=254mm (can increase F=160mm, F=330mm)                                                                                               |               |                        |         |
|                                     | Marking/deep carving format                      | ≤120mm × 120mm@F=254mm                                                                                                                         | /             | ≤120mm × 120mm@F=254mm | /       |
|                                     | Wash format                                      | ≤120mm × 120mm@F=254mm                                                                                                                         |               |                        |         |
|                                     | Clean the spot pattern                           | Cross, rectangle, spiral, circle, ring, 0 ° straight line, 45 ° straight line, 90 ° straight line, 135 ° straight line, straight line rotation |               |                        |         |
|                                     | Mark/deep sculpt linearity                       | 99.9%                                                                                                                                          | /             | 99.9%                  | /       |
|                                     | Marking/Deep carving repeat positioning accuracy | 8 μRad                                                                                                                                         | /             | 8 μRad                 | /       |
|                                     | Marking/Deep carving Long drift (8h)             | 0.5 mRad or less                                                                                                                               | /             | 0.5 mRad or less       | /       |
|                                     | Output armor length                              | ≥5m                                                                                                                                            |               |                        |         |
|                                     | Communication control                            | Communication and control: the output head button and visual LCD screen real-time adjustment, or handheld tablet wireless control              |               |                        |         |
|                                     | Operation assistance                             | Dual red focus, LED lighting                                                                                                                   |               |                        |         |
|                                     | Clean out light control                          | Double button interlock                                                                                                                        |               |                        |         |
|                                     | Output head weight                               | 600g (without marking bracket)                                                                                                                 |               |                        |         |
|                                     | Marking/deep carving bracket weight              | ≤130g                                                                                                                                          | /             | ≤130g                  | /       |
|                                     | Electrical                                       | Supply voltage                                                                                                                                 | 100VAC-240VAC |                        |         |
| Power supply frequency              |                                                  | 50Hz/60Hz                                                                                                                                      |               |                        |         |
| Power supply                        |                                                  | ≥1200W                                                                                                                                         |               | ≥1600W                 |         |
| Power cord length                   |                                                  | ≥5m                                                                                                                                            |               |                        |         |
| Lithium battery life                |                                                  | ≥50min                                                                                                                                         |               | ≥30min                 |         |
| Lithium battery full charge time    |                                                  | ≤6h                                                                                                                                            |               |                        |         |
| External communication of equipment | Control mode                                     | IO/485                                                                                                                                         |               |                        |         |
| Device language                     | Output head screen                               | English                                                                                                                                        |               |                        |         |
|                                     | APP terminal                                     | Chinese, English, German, French, Japanese, Korean, Russian, Portuguese, Spanish, Arabic, Thai, Vietnamese 12 languages                        |               |                        |         |
| Whole machine structure             | Status indicator                                 | Red, Blue, Yellow, and Green Multi-Color Breathing Lights                                                                                      |               |                        |         |
|                                     | Bluetooth HiFi system                            | Surround, heavy bass                                                                                                                           |               |                        |         |
|                                     | Safety protection                                | External industrial control equipment security interlock interface                                                                             |               |                        |         |
|                                     | Equipment Dimensions                             | 384×265×710mm                                                                                                                                  |               |                        |         |
|                                     | Equipment weight                                 | < 36kg                                                                                                                                         |               |                        |         |
|                                     | Package size                                     | 1000×650×480mm                                                                                                                                 |               |                        |         |
|                                     | Gross packaging weight                           | < 50kg                                                                                                                                         |               |                        |         |

# TrioSTAR Pro220 / Pro320 **PORTABLE**

Body  
**35kg** | Output Head  
**0.6kg** | Wheel Diameter  
**160mm**



It can adjust the laser power, pulse width, spot pattern and size, galvanometer speed in real time on the output head or mobile phone, control the focus red light and LED lighting start and stop, and monitor the equipment running status information in real time.



## EASY TO OPERATE

TrioSTAR Pro220/320



TrioSTAR Pro220/320

## MULTIPLE FUNCTIONS

Product built-in  
**UPS module**

Pro220 endurance  
**50min**

Pro320 battery life  
**30min**

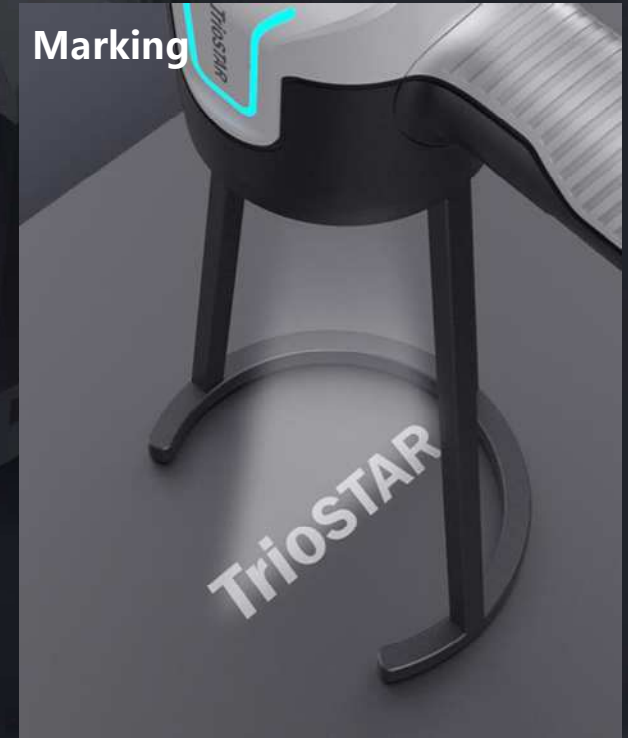
Deep  
Carving



Cleaning



Marking



It is equipped with a fixed focus bracket that can be quickly installed and taken to achieve accurate marking and deep carving.

Multi-mode laser is more suitable for scenes with high requirements on surface non-destructive (such as mold surface cleaning); Not suitable for marking, deep carving.

# SAFETY

TrioSTAR Pro220/320



External industrial control equipment safety interlock interface, and the external system fully cooperate to ensure safety.



Ultra-hard and pressure-resistant, ultra-flexible and easy-to-bend corrugated tube, protecting optical fibers and cables to ensure their safety.



First, press the red light button of the output head, and then keep holding down the enable switch to make the light emit. If there is no operation within 2 minutes after the red light is turned on, the red light will automatically turn off and the device will enter the standby state.

# VERSATILITY

TrioSTAR Pro220/320

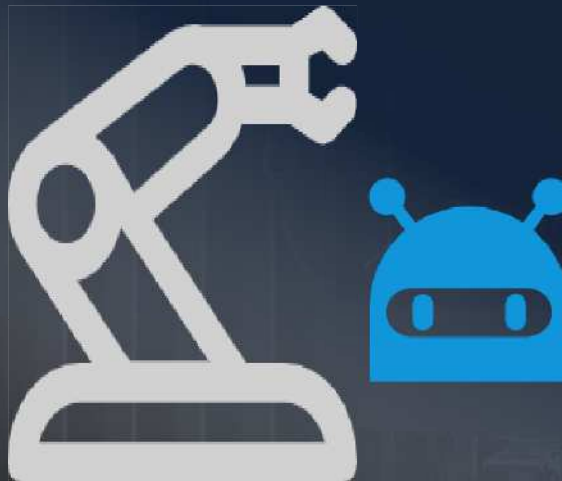
## Language

*Supports 10+ globally recognized languages and flexible configuration across mobile and desktop platforms.*



## External Control Interface

*Supports rapid and simple integration with external industrial control systems via IO/RS-485 interfaces, enabling automated operations.*



## Voltage

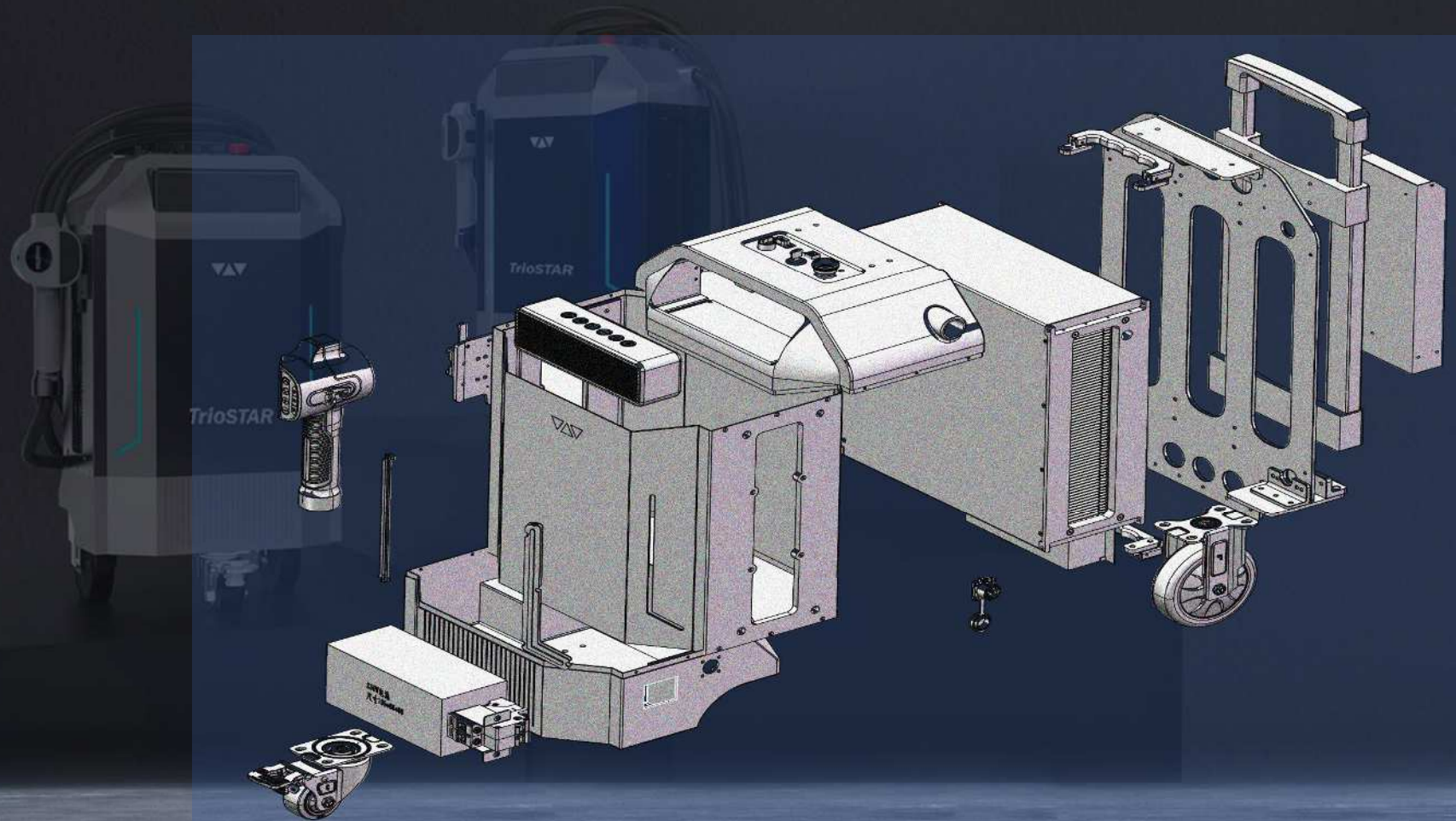
*100-240V AC wide-range input, compatible with standard mains voltages worldwide.*



**MODULAR**

**TrioSTAR  
Pro220  
Pro320**

**Modular design,  
Easy to assemble  
and maintain**



# CARE

Work with the music, and turn the dullness into enjoyment.



300W  
High power



Wireless  
Bluetooth



3 double  
sound effects



IPX6 waterproof  
technology

*Features 3D surround sound to experience multi-frequency audio brilliance, from deep bass to crystal-clear highs. Immerse yourself in your favorite music with powerful dynamic range. IPX6-rated waterproof and dust-resistant design, engineered to withstand industrial dust and harsh environments.*



TrioSTAR Pro220/320

# COMPANY PROFILE

Woofee focuses on environmentally friendly and highly efficient laser application technologies, and its business scope covers aviation and energy security assurance. The company provides solutions for numerous industrial service enterprises and maintains in-depth communication and close cooperation with multiple industries such as aerospace, equipment manufacturing, new energy manufacturing, transportation, energy transmission, environmental protection engineering, cleaning engineering, cultural relic protection, and agricultural production. According to the needs of different fields, Woofee has developed a series of products such as pulsed fiber lasers and laser cleaning and washing systems for marking and cleaning.



# PARTNERS AND USERS



**Precision and meticulousness,  
Refers to the respect and commitment to every detail.  
We are not merely producers of products,  
Rather, we aspire to perfectly integrate technology and art,  
Let every innovation become a classic.**



**Jiangsu Woofee Laser Technology Co., Ltd.**

**Suqian Laser Industrial Park  
Suzhou Digital Cultural and Creative Industrial Park  
[www.woofee-laser.com](http://www.woofee-laser.com) / [www.woofeelaser.com](http://www.woofeelaser.com)  
+(86) 0512-65900199**



**TrioSTAR**

**BeamAxe**