



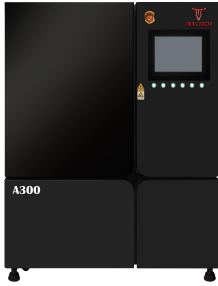
BULLTECH

Additive Manufacturing Solution
SLA Series

Laser makes manufacturing easier



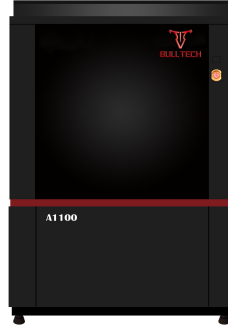
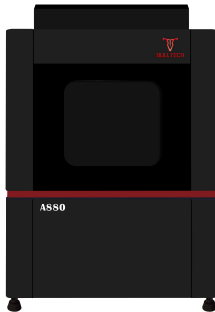
BULL TECH
Laser makes manufacturing easier



	A300	A550	A660
LASER SYSTEM	Advanced Optowave USA Wavelength: 354.7nm Power: 3W	Advanced Optowave USA Wavelength: 354.7nm Power: 3W	Advanced Optowave USA Wavelength: 354.7nm Power: 3W
RECOATING SYSTEM	Process: Intelligent positioning - Vacuum press recoat Normal Build: 0.1mm Quick Build: 0.1~0.15mm Precision Build: 0.05~0.1mm	Process: Intelligent positioning - Vacuum press recoat Normal Build: 0.1mm Quick Build: 0.1~0.15mm Precision Build: 0.05~0.1mm	Process: Intelligent positioning - Vacuum press recoat Normal Build: 0.1mm Quick Build: 0.1~0.15mm Precision Build: 0.05~0.1mm
OPTICAL & SCANNING	Beam (diameter@1/e ²): 0.10~0.50mm Scanning Galvanometer: ScanLab Parts Scanning Speed: 6.0m/s (recommended) Blank Jumping Speed: 10.0m/s (recommended) Reference Building Speed: 30~80g/h	Beam (diameter@1/e ²): 0.10~0.50mm Scanning Galvanometer: ScanLab Parts Scanning Speed: 6.0m/s (recommended) Blank Jumping Speed: 10.0m/s (recommended) Reference Building Speed: 50~140g/h	Beam (diameter@1/e ²): 0.10~0.50mm Scanning Galvanometer: ScanLab Parts Scanning Speed: 6.0m/s (recommended) Blank Jumping Speed: 10.0m/s (recommended) Reference Building Speed: 50~180g/h
ELEVATOR	Position repeatability: ±0.01mm Elevator Motor: Panasonic Japan Servo Motor Benchmark Platform: Marble benchmark platform	Position repeatability: ±0.01mm Elevator Motor: Panasonic Japan Servo Motor Benchmark Platform: Marble benchmark platform	Position repeatability: ±0.01mm Elevator Motor: Panasonic Japan Servo Motor Benchmark Platform: Marble benchmark platform
RESIN VAT	Volume: Approx. 42L@200mm(Z) XY Platform: 300mm(X)×300mm(Y) Z Axis: 200mm(standard)/300mm(customize) Max Weight: 30kg@200mm(Z) Resin heated style: Hot air Photopolymer Resin: 6001 (White) 6005 (Light yellow) 6008 (Clear)	Volume: Approx. 115L@300mm(Z) XY Platform: 500mm(X)×500mm(Y) Z Axis: 300mm(standard)/350/400mm(customize) Max Weight: 60kg@300mm(Z) Resin heated style: Hot air Photopolymer Resin: 6001 (White) 6005 (Light yellow) 6008 (Clear)	Volume: Approx. 160L@300mm(Z) XY Platform: 600mm(X)×600mm(Y) Z Axis: 300mm(standard)/350/400mm(customize) Max Weight: 80kg@300mm(Z) Resin heated style: Hot air Photopolymer Resin: 6001 (White) 6005 (Light yellow) 6008 (Clear)
SOFTWARE	Network: Ethernet, TCP/IP, IEEE802.3 Control Software: ZERO 5.0 Date Preparation Software: 3dLayer Data Interface: CLI file, SLC file, STL file	Network: Ethernet, TCP/IP, IEEE802.3 Control Software: ZERO 5.0 Date Preparation Software: 3dLayer Data Interface: CLI file, SLC file, STL file	Network: Ethernet, TCP/IP, IEEE802.3 Control Software: ZERO 5.0 Date Preparation Software: 3dLayer Data Interface: CLI file, SLC file, STL file
WORKING CONDITION	Power: 200~240VAC 50/60Hz, single phase, 5 / 10Amps Ambient Temperature: 20-26°C Relative Humidity: Less than 40%, non-condensing Size: 1.20m(W)×0.90m(D)×1.70m(H) Weight: Approx. 630kg	Power: 200~240VAC 50/60Hz, single phase, 5 / 10Amps Ambient Temperature: 20-26°C Relative Humidity: Less than 40%, non-condensing Size: 1.45m(W)×1.05m(D)×1.85m(H) Weight: Approx. 820kg	Power: 200~240VAC 50/60Hz, single phase, 5 / 10Amps Ambient Temperature: 20-26°C Relative Humidity: Less than 40%, non-condensing Size: 1.60m(W)×1.30m(D)×1.90m(H) Weight: Approx. 1000kg



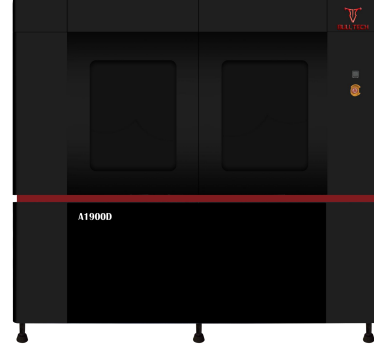
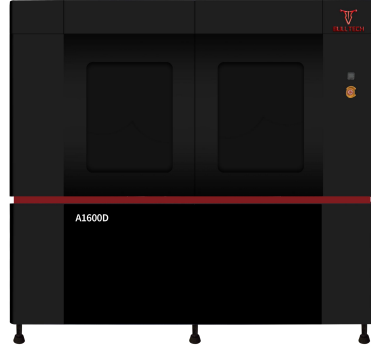
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	A880	A1100	A1400D
LASER SYSTEM	Advanced Optowave USA Wavelength: 354.7nm Power: 3W	Advanced Optowave USA (Dual Laser Optional) Wavelength: 354.7nm Power: 3W	Advanced Optowave USA DualLaser Wavelength: 354.7nm Power: 3W
RECOATING SYSTEM	Process: Intelligent positioning - Vacuum press recoat Normal Build: 0.1mm Quick Build: 0.1~0.15mm Precision Build: 0.05~0.1mm	Process: Intelligent positioning - Vacuum press recoat Normal Build: 0.1mm Quick Build: 0.1~0.15mm Precision Build: 0.05~0.1mm	Process: Intelligent positioning - Vacuum press recoat Normal Build: 0.1mm Quick Build: 0.1~0.15mm Precision Build: 0.05~0.1mm
OPTICAL & SCANNING	Beam (diameter@1/e ²): 0.10~0.16mm(Normal) 0.10~0.50mm(Super) Scanning Galvanometer: ScanLab Parts Scanning Speed: 6.0m/s (recommended) Blank Jumping Speed: 10.0m/s (recommended) Reference Building Speed: 90~220g/h	Beam (diameter@1/e ²): 0.10~0.16mm(Normal) 0.10~0.50mm(Super) Scanning Galvanometer: ScanLab Parts Scanning Speed: 6.0m/s (recommended) Blank Jumping Speed: 10.0m/s (recommended) Reference Building Speed: 100~230g/h(Sole Laser) 150~350g/h(Dual Laser)	Beam (diameter@1/e ²): 0.10~0.16mm(Normal) 0.10~0.50mm(Super) Scanning Galvanometer: ScanLab Parts Scanning Speed: 6.0-20m/s (recommended) Blank Jumping Speed: 20-40m/s (recommended) Reference Building Speed: 150~400g/h
ELEVATOR	Position repeatability: ±0.01mm Elevator Motor: Panasonic Japan Servo Motor Benchmark Platform: Marble benchmark platform	Position repeatability: ±0.01mm Elevator Motor: Panasonic Japan Servo Motor Benchmark Platform: Marble benchmark platform	Position repeatability: ±0.01mm Elevator Motor: Panasonic Japan Servo Motor Benchmark Platform: Marble benchmark platform
RESIN VAT	Volume: Approx. 345L@400mm(Z) XY Platform: 800mm(X)×800mm(Y) Z Axis: 400mm(standard)/550mm(customize) Max Weight: 100kg@400mm(Z) Resin heated style: Hot air Photopolymer Resin: 6001 (White) 6005 (Light yellow) 6008 (Clear)	Volume: Approx. 785L@600mm(Z) XY Platform: 1000mm(X)×1000mm(Y) Z Axis: 600mm(standard)/500/400mm(customize) Max Weight: 120kg@600mm(Z) Resin heated style: Hot air Photopolymer Resin: 6001 (White) 6005 (Light yellow) 6008 (Clear)	Volume: Approx. 880L@600mm(Z) XY Platform: 1400mm(X)×800mm(Y) Z Axis: 600mm(standard)/500/400mm(customize) Max Weight: 150kg@600mm(Z) Resin heated style: Hot air Photopolymer Resin: 6001 (White) 6005 (Light yellow) 6008 (Clear)
SOFTWARE	Network: Ethernet, TCP/IP, IEEE802.3 Control Software: ZERO 5.0 Date Preparation Software: 3dLayer Data Interface: CLI file, SLC file, STL file	Network: Ethernet, TCP/IP, IEEE802.3 Control Software: ZERO 5.0 Date Preparation Software: 3dLayer Data Interface: CLI file, SLC file, STL file	Network: Ethernet, TCP/IP, IEEE802.3 Control Software: ZERO 5.0 Date Preparation Software: 3dLayer Data Interface: CLI file, SLC file, STL file
WORKING CONDITION	Power: 200~240VAC 50/60Hz, single phase, 5 / 10Amps Ambient Temperature: 20-26°C Relative Humidity: Less than 40%, non-condensing Size: 1.50m(W)×1.40m(D)×2.20m(H) (Operating computer is not included) Weight: Approx. 1000kg	Power: 200~240VAC 50/60Hz, single phase, 5 / 10Amps Ambient Temperature: 20-26°C Relative Humidity: Less than 40%, non-condensing Size: 1.60m(W)×1.95m(D)×2.30m(H) (Operating computer is not included) Weight: Approx. 1800kg	Power: 200~240VAC 50/60Hz, single phase, 5 / 10Amps Ambient Temperature: 20-26°C Relative Humidity: Less than 40%, non-condensing Size: 2.10m(W)×1.50m(D)×2.30m(H) (Operating computer is not included) Weight: Approx. 2000kg



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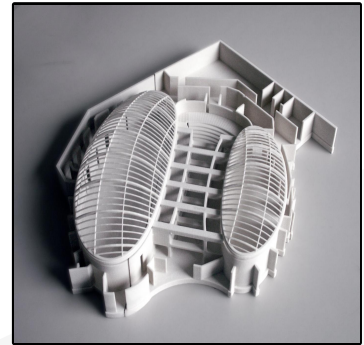


	A1600D	A1900D
LASER SYSTEM	Advanced Optowave USA Dual Laser Wavelength: 354.7nm Power: 3W	Advanced Optowave USA Dual Laser Wavelength: 354.7nm Power: 3W
RECOATING SYSTEM	Process: Intelligent positioning - Vacuum press recoat Normal Build: 0.1mm Quick Build: 0.1~0.15mm Precision Build: 0.05~0.1mm	Process: Intelligent positioning - Vacuum press recoat Normal Build: 0.1mm Quick Build: 0.1~0.15mm Precision Build: 0.05~0.1mm
OPTICAL & SCANNING	Beam (diameter@1/e ²): 0.10~0.16mm(Normal) 0.10~0.50mm(Super) Scanning Galvanometer: ScanLab(Dual galvanometer) Parts Scanning Speed: 6.0-20m/s (recommended) Blank Jumping Speed: 20-40m/s (recommended) Reference Building Speed: 150~450g/h	Beam (diameter@1/e ²): 0.10~0.16mm(Normal) 0.10~0.50mm(Super) Scanning Galvanometer: ScanLab(Dual galvanometer) Parts Scanning Speed: 6.0-20m/s (recommended) Blank Jumping Speed: 20-40m/s (recommended) Reference Building Speed: 150~500g/h
ELEVATOR	Position repeatability: ±0.01mm Elevator Motor: Panasonic Japan Servo Motor Benchmark Platform: Marble benchmark platform	Position repeatability: ±0.01mm Elevator Motor: Panasonic Japan Servo Motor Benchmark Platform: Marble benchmark platform
RESIN VAT	Volume: Approx. 1170L@600mm(Z) XY Platform: 1600mm(X)×800mm(Y) Z Axis: 600mm(standard)/400/500mm(customize) Max Weight: 150kg@600mm(Z) Resin heated style: Hot air Photopolymer Resin: 6001 (White) 6005 (Light yellow) 6008 (Clear)	Volume: Approx. 1825L@600mm(Z) XY Platform: 1900mm(X)×1000mm(Y) Z Axis: 600mm(standard)/500/400mm(customize) Max Weight: 150kg@600mm(Z) Resin heated style: Hot air Photopolymer Resin: 6001 (White) 6005 (Light yellow) 6008 (Clear)
SOFTWARE	Network: Ethernet, TCP/IP, IEEE802.3 Control Software: ZERO 5.0 Date Preparation Software: 3dLayer Data Interface: CLI file, SLC file, STL file	Network: Ethernet, TCP/IP, IEEE802.3 Control Software: ZERO 5.0 Date Preparation Software: 3dLayer Data Interface: CLI file, SLC file, STL file
WORKING CONDITION	Power: 200~240VAC 50/60Hz, single phase, 5 / 10Amps Ambient Temperature: 20-26°C Relative Humidity: Less than 40%, non-condensing SIZE:2.55m(W)×1.60m(D)×2.35m(H) (Operating computer is not included) Weight: Approx. 2500kg	Power: 200~240VAC 50/60Hz, single phase, 5 / 10Amps Ambient Temperature: 20-26°C Relative Humidity: Less than 40%, non-condensing Size: 2.85m(W)×1.60m(D)×2.50m(H) (Operating computer is not included) Weight: Approx. 3500kg

■ Key Features

- » Dynamic focus super fast scanning style
- » Large surface intelligent partitioning scanning
- » Granite integrated Z axis lifting platform
- » Intelligent positioning and vacuum adsorption recoater
- » Damaged parts removal system
- » Bus control system makes the machine faster
- » Remote APP monitoring and Smart pushing information
- » International high standard components, more stable and reliable
- » Self developed and patented control and slicing software, easy to use and cost saving

■ Samples





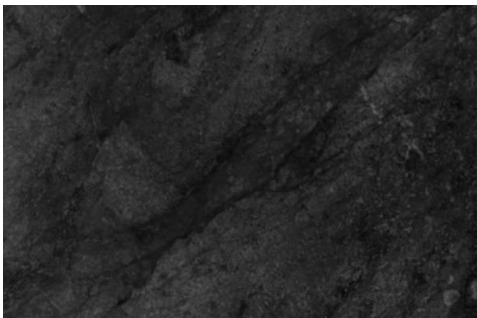
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Major Components



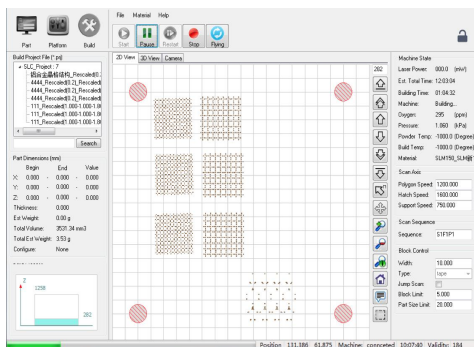
▲ Optical System

Core optical system has been thoroughly developed and designed by German Scanlab. Series of the optical lens group directly determining focal quality is able to amplify the power of laser utilized, to optimize beam mode and quality and thus to further extend laser performance and stability.



▲ Marble Countertop

Marble countertops have the characteristics of low linear expansion coefficient, high hardness, wear resistance, and antimagnetic properties. Ensure the stability of the accuracy of the bed at high speeds, ensure excellent workpiece quality.



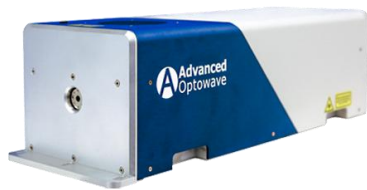
▲ Advanced System

Self-developed high-performance control system can support high speed working performance with high precision. Characterized in simple and easy use, it offers flexibility, stability and reliability



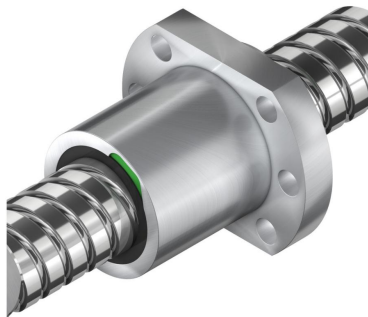
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Major Components



▲ Laser source

Latest research and development of fiber laser by US Aptowave Laser offers high photoelectric converting rate, improved beam quality, wide frequency modulation rate, intensified energy density, extended lifespan, stable performance, carefree maintenance, safety and reliability.



▲ Rail & Guide

HIWIN rail and guide originally from Taiwan, innovative technology with high precision, stable performance, longer service life, more suitable for long-term high-speed applications.

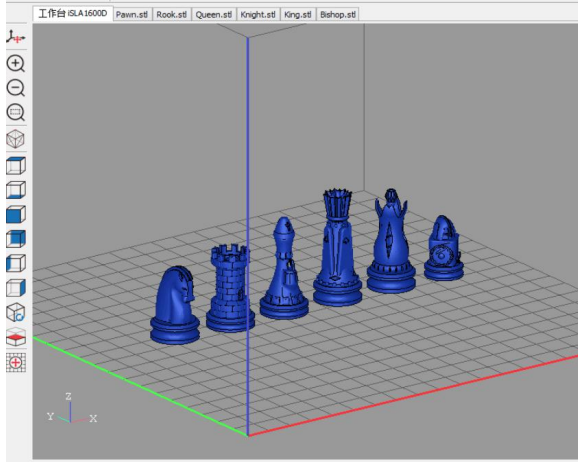


▲ Servo motor

Panasonic Servo motor from Japan, high speed and precision, high feedback and inertia, catering to requirements of high quality and productivity.



3D Model Supporting & Slicing Software



» System Advantages

- Support multiple formats of 3D drawings such as STL / STP(STEP) / IGS(IGES), support to save multiple files as the exclusive project file -- ".3dl" file
- Have excellent 3D visualization effect and flexible and friendly operation, can finish file panning, rotating, zooming, and other operations only via mouse or keyboard.
- Automatically count and display the part's basic information such as the volume, the surface area and the size. And provide a variety of distance measuring tools.
- Auto analyzing of error part and displaying, provides "one key auto fixing" and various of patented fixing modes.
- "Auto placement" and "appointed top/bottom", makes parts placement "one key operating"
- Auto support structure creating and manual support structure editing, handling parts' support structures reliably, conveniently, flexibly and fast.
- Transfer the file format (STEP, IGES, BREP) into STL.
- The CLI / SLC file will be obtained by slicing the part-support system.

The software will be updated continuously. Your feedback and suggestions for the software would be very much appreciated. Please trust our website if your system or security software misjudged our software as an unsafe element.

RECOMMENDED CONFIGURATIONS	<p>Operating System: Windows 7 / 8 / 8.1 (x86 / x64) CPU: Intel i5 (or above) RAM: 4GB GPU: 2GB(Recommend External Graphics Card) Hard disk: 500GB Network: IEEE802.3</p>
INTERFACE OF INPUT	<p>Default file formats: STLfile(*.stl) Supported file formats: STPfile(*.stp/**.step)IGSfile(*.igs/**.iges) Project file formats: 3dmfile(*.3dl)</p>
INTERFACE OF OUTPUT	<p>Common file formats: SLCfile(*.slc)CLIfile(*.cli) Proper file formats: 3dmfile(*.3dl)</p>
MODEL REPAIR	<p>Face normal repair Face crack repair Face hole repair Auto. multi repair</p>
MODEL ARRANGEMENT	<p>Auto. Array Translation Rotate Pointed surface set</p>
MULTI PLATFORM SYSTEM	<p>Multi platform selection Multi platform configuration</p>
AUTOMATIC SUPPORT	<p>Auto. support Support optimization Support edit 3D Printer Adaptation: FDM / SLA / SLS / SLM / FMS</p>



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