

KINGS 1200/1450PR0 Kings Industrial SLA 3D Printers

23 Innovative Technologies, High Speed SLA 3D Printing Efficient and Cost-Effective Prototyping Bring Your Idea into Reality



KINGS 1200/1450PR0

Overview

The Kings SLA 1200/1450Pro delivers exceptional precision and performance in professional 3D printing. With a robust marble frame, high-grade ball screw rails, and advanced laser technology, it ensures precise, reliable results. Ideal for diverse industrial applications with optimized materials and efficient production capabilities, it meets large size 3D printing needs.

Advantage

Enhanced Printing Efficiency

- ightarrow lntelligent high speed scanning system, 15m/s
- ightarrow Variable laser spot and variable power
- \rightarrow Automatic identifying upskin and downskin with differentiated parameters
- \rightarrow Different Parameter database with different layer thickness

Long-term Printing Stability

- → Key components from international top brand: Optowave laser from the US, Scanlab galvanometer from Germany
- ightarrow Full marble structure for enhanced recoating and scanning stability
- ightarrow High stiffness light recoater to ensure recoating accuracy and efficiency
- → Compensation algorithm for multi-head system, ensuring uniform curing in the printing range

Ideal Applications

| 🖄 Shoe Mold Manufacturing | Directory Prototyping | Architecture | Sculpture | 🛞 Medical | Le Iseanie |
|---------------------------|-----------------------|--------------|--------------|-------------|------------|
| 💮 Dental | 🛞 Military | Automotive | () Animation | Electronics | |



Kings

KINGS 1200/1450PR0

Technical Data

| Max Printing Size1200*1200*650mm1450*800*650mmMachine Size19⊌rm(W)*177cm(D)*230cm(H)222cm(W)*177cm(D)*230cm(H)Rated Power Consumption2.XVA2.XVAMachine Weight2350g2550kgFirst Tank Resin940y1090kgBeam Size (diameter @1/e*)0.08-0.8mm (Variable Beam)0.08-0.8mm (Variable Beam)Max Scanning Speed1.5 m/s1.5 0 m/sLayer Thickness0.5 mm-0.2mm0.05 mm-0.2mmAccuracytti_Lst00mm); ±0.15%±(Ls100mm); ±0.15%±(Ls100m | | Kings 1200Pro | Kings 1450Pro | | |
|--|-----------------------------|---------------------------------------|---|--|--|
| Rated Power Consumption2.2KVAMachine Weight2350kg2550kgFirst Tank Resin940kg1090kgBeam Size (diameter @1/e ²)0.08-0.8mm (Variable Beam)0.08-0.8mm (Variable Beam)Max Scanning Speed15.0 m/s15.0 m/sLayer Thickness0.05mm-0.2mm0.05mm-0.2mmAccuracy±0.15(L≤100mm); ±0.15%±L(L>100mm)±0.15(L≤100mm); ±0.15%±L(L>100mm)Haver SpeedSolid-state frequency tripled Nd: YUV4Wavelength355nmPowerResin Surface Power≥ 300 mWVariable Beam SystemGalvo/Closed-loopMain structureMarble recoater frame, marble elevator holder and marble scanning system baseCoating ModeIntelligent position vacuum recoatingVertical Resolution Ratio0.0005mmRepeat Positioning Accuracy±0.01mmMachine Control SoftwareKINGS 3D control softwareInput Data File FormatSTL/SLCOperating SystemWindows 10Network Type and ProtocolEthernet, TCP/IPElectrical Requirement200-240VAC 50/60Hz, single-phase, 10AAmbient Temperature20-26°C (72-79°F)Relative Humiditys40%, non-condensing | Max Printing Size | 1200*1200*650mm | 1450*800*650mm | | |
| Machine Weight2350kg2550kgFirst Tank Resin940kg1090kgBeam Size (diameter @1/e ²)0.08-0.8mm (Variable Beam)0.08-0.8mm (Variable Beam)Max Scanning Speed15.0 m/s15.0 m/sLayer Thickness0.05mm-0.2mm0.05mm-0.2mmAccuracy±0.15(L≤100mm); ±0.15%*L(L>100mm)±0.15(L≤100mm); ±0.15%*L(L>100mm)KCuracy±0.15(L≤100mm); ±0.15%*L(L>100mm)±0.15(L≤100mm); ±0.15%*L(L>100mm)Varelength355nmVoriable Beam SystemPowerResin Surface Power≥ 300 mWVariable Beam SystemVariable Beam SystemGalvo/Closed-loopMarble recoater frame, marble el=vator holder and marble scanning system baseCoating ModeIntelligent position vacuum recoatingVertical Resolution Ratio0.0005mmRepeat Positioning Accuracy±0.01mmMachine Control SystemClosed-loopMachine Control SystemClosed-loopMachine Control SystemSTL/SLCOperating SystemWindows 10Network Type and ProtocolEthernet, TCP/IPElectrical Requirement200-240VAC 50/60Hz, single-phase,10AAmbient Temperature20-26°C (72-79°F)Relative Humiditys40%, non-condensing | Machine Size | 198cm(W)*177cm(D)*230cm(H) | 222cm(W)*177cm(D)*230cm(H) | | |
| First Tank Resin 940kg 1090kg Beam Size (diameter @1/e ²) 0.08-0.8mm (Variable Beam) 0.08-0.8mm (Variable Beam) Max Scanning Speed 15.0 m/s 15.0 m/s Layer Thickness 0.05mm~0.2mm 0.05mm~0.2mm Accuracy ±0.15(L≤100mm); ±0.15%*L(L>100mm) ±0.15(L≤100mm); ±0.15%*L(L>100mm); ±0.15%*L(L>10mm); ±0.15%*L(L>10mm | Rated Power Consumption | 2.2KVA | 2.2KVA | | |
| Beam Size (diameter @1/e ²) 0.08-0.8mm (Variable Beam) 0.08-0.8mm (Variable Beam) Max Scanning Speed 15.0 m/s 15.0 m/s Layer Thickness 0.05mm-0.2mm 0.05mm-0.2mm Accuracy ±0.15(L≤100mm); ±0.15%*L(L>100mm) ±0.15(L≤100mm); ±0.15%*L(L>100mm); ±0.15%*L(L>100mm) Accuracy ±0.15(L≤100mm); ±0.15%*L(L>100mm) ±0.15(L≤100mm); ±0.15%*L(L>100mm) Variable Type Solid-state frequency tripled Nd: >VV4 Wavelength 355nm Power Resin Surface Power≥ 300 mW Variable Beam System Galvo/Closed-loop Main structure Marble recoater frame, marble elevator holder and marble scanning system base Coating Mode Intelligent position vacuum recoatirg Vertical Resolution Ratio 0.0005mm Repeat Positioning Accuracy ±0.01mm Motion Control System Closed-loop Machine Control Software KINGS 3D control software Input Data File Format STL/SLC Operating System Windows 10 Network Type and Protocol Ethernet, TCP/IP Electrical Requirement 200-240VAC 50/60Hz, single-phase,10A Ambient Temperature 20-26°C (72-79°F) Relative Humidity ≤40%, non-condensing | Machine Weight | 2350kg | 2550kg | | |
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| Accuracy ±0.15(L≤100mm); ±0.15%*L(L>100mm) ±0.15(L≤100mm); ±0.15%*L(L>100mm) Laser Type Solid-state frequency tripled Nd: YV04 Wavelength 355nm Power Resin Surface Power≥ 300 mW Variable Beam System Galvo/Closed-loop Main structure Marble recoater frame, marble elevator holder and marble scanning system base Coating Mode Intelligent position vacuum recoating Vertical Resolution Ratio 0.0005mm Repeat Positioning Accuracy ±0.01mm Motion Control System Closed-loop Machine Control Software KINGS 3D control software Input Data File Format STL/SLC Operating System Windows 10 Network Type and Protocol Ethernet, TCP/IP Electrical Requirement 200-240VAC 50/60Hz, single-phase.10A Ambient Temperature 20-26°C (72-79°F) Relative Humidity s40%, non-condensing | Max Scanning Speed | 15.0 m/s | 15.0 m/s | | |
| Laser TypeSolid-state frequency tripled Nd: YV04Wavelength355nmPowerResin Surface Power≥ 300 mWVariable Beam SystemGalvo/Closed-loopMain structureMarble recoater frame, marble elevator holder and marble scanning system baseCoating ModeIntelligent position vacuum recoatingVertical Resolution Ratio0.0005mmRepeat Positioning Accuracy±0.01mmMotion Control SystemClosed-loopMachine Control SoftwareKINGS 3D control softwareInput Data File FormatSTL/SLCOperating SystemWindows 10Network Type and ProtocolEthernet, TCP/IPElectrical Requirement200-240VAC 50/60Hz, single-phase, 10AAmbient Temperature20-26°C (72-79°F)Relative Humidity≤40%, non-condensing | Layer Thickness | 0.05mm~0.2mm | 0.05mm~0.2mm | | |
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| Main structureMarble recoater frame, marble elevator holder and marble scanning system baseCoating ModeIntelligent position vacuum recoatingVertical Resolution Ratio0.0005mmRepeat Positioning Accuracy±0.01mmMotion Control SystemClosed-loopMachine Control SoftwareKINGS 3D control softwareInput Data File FormatSTL/SLCOperating SystemWindows 10Network Type and ProtocolEthernet, TCP/IPElectrical Requirement200-240VAC 50/60Hz, single-phase,10AAmbient Temperature20-26°C (72-79°F)Relative Humidity≤40%, non-condensing | Power | Resin Surface Power≥ 300 mW | | | |
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| Vertical Resolution Ratio0.0005mmRepeat Positioning Accuracy±0.01mmMotion Control SystemClosed-loopMachine Control SoftwareKINGS 3D control softwareInput Data File FormatSTL/SLCOperating SystemWindows 10Network Type and ProtocolEthernet, TCP/IPElectrical Requirement200-240VAC 50/60Hz, single-phase, 10AAmbient Temperature20-26°C (72-79°F)Relative Humidity≤40%, non-condensing | Main structure | Marble recoater frame, marble el | evator holder and marble scanning system base | | |
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| Operating SystemWindows 10Network Type and ProtocolEthernet, TCP/IPElectrical Requirement200-240VAC 50/60Hz, single-phase,10AAmbient Temperature20-26°C (72-79°F)Relative Humidity≤40%, non-condensing | Machine Control Software | KINGS 3D control software | KINGS 3D control software | | |
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| Electrical Requirement200-240VAC 50/60Hz, single-phase,10AAmbient Temperature20-26°C (72-79°F)Relative Humidity<40%, non-condensing | Operating System | Windows 10 | Windows 10 | | |
| Ambient Temperature20-26°C (72-79°F)Relative Humidity≤40%, non-condensing | Network Type and Protocol | Ethernet, TCP/IP | Ethernet, TCP/IP | | |
| Relative Humidity ≤40%, non-condensing | Electrical Requirement | 200-240VAC 50/60Hz, single-pha | 200-240VAC 50/60Hz, single-phase,10A | | |
| | Ambient Temperature | 20-26°C (72-79°F) | 20-26°C (72-79°F) | | |
| Machine Warranty2 years (including laser) | Relative Humidity | ≤40%, non-condensing | ≤40%, non-condensing | | |
| | Machine Warranty | 2 years (including laser) | 2 years (including laser) | | |



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