

# VALUE-ADDED STEREOLITHOGRAPHY SOLUTION PROVIDER



PILOT Commercial Series



RSPRO Production Series

**UnionTech**  
Create your Imagination

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## About us

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For nearly 20 years, Uniontech stereolithography (SL) 3D printing equipment has been developed and manufactured in an environment of intense regional competition. The Uniontech products offered for the international market of today reflect the experience of a global leader in stereolithography. Our equipment is robustly constructed for low cost of ownership from the initial purchase onwards while producing the highest quality parts. Parts produced on Uniontech SL equipment are highly accurate with excellent feature resolution and full density, smooth surfaces. A philosophy of open design relative to material usage demonstrates UnionTech's desire to provide customers with the best available product solutions. Explore the fresh dimension in SL 3D printing that UnionTech makes available in a full line of commercial and production scale machines. UnionTech Create your Imagination



## RSPro Production Series

RSPro 600 / RSPro 800 / RSPro 1400 / RSPro 2100

A New Dimension in Stereolithography 3D Printing

- Cost-effective ownership throughout entire life cycle.
- Freedom to collaborate and innovate: open design for materials and machine access.
- Printed parts demonstrate excellent sidewall quality and fine detail, contributing to lower post-finishing requirements.

## System Features

- Key components are of international top brands, Panasonic of Japan, Optowave /Germany, Scanlab of Germany.
- Automatic control of surface level and processing parameters.
- Convenient assembly and disassembly of platform.
- Granite recoater frame for enhanced recoating stability.
- Closed loop control strategy for: Platform movement/Laser power/Material level/Temperature/Vacuum.
- CE certification.

## Versatile Application Range · High Accuracy · Excellent Surface Aesthetics



## Technical Data

	RSPro 600	RSPro 800
Build Envelope Capacity	23.6 × 23.6 × 19.7 in (600 × 600 × 500 mm)	31.5 × 31.5 × 21.7 in (800 × 800 × 550 mm)
Accuracy <small>*Accuracy may vary depending on parameters, part geometry and size, pre-processing or post-processing methods, materials and environment.</small>	Part size < 3.9 in (100 mm): ±0.004 in (±0.1 mm) Part size ≥ 3.9 in (100 mm): ±0.1% × L	Part size < 3.9 in (100 mm): ±0.006 in (±0.15 mm) Part size ≥ 3.9 in (100 mm): ±0.15% × L
Beam Size	Nominal 0.005 -0.008 in (0.12 - 0.20mm)	Nominal 0.005 - 0.008 in (0.12 - 0.20 mm)
Layer Thickness	0.002 in (0.05 mm) minimum; 0.01 in (0.25 mm) maximum	0.003 in (0.07 mm) minimum; 0.01 in (0.25 mm) maximum
Weight	3968 lb (1,800 kg)	4409 lb (2000 kg)
Machine Size (WxDxH)	62.9 × 63.5 × 83.5 in (1598 × 1612 × 2137 mm)	70.8 × 63.1 × 83.4 in (1798 × 1602 × 2196 mm)
	RSPro 1400	RSPro 2100
Build Envelope Capacity	55.1 × 27.6 × 19.7 in (1400 × 700 × 500 mm)	82.6 × 27.6 × 31.5 in (2100 × 700 × 800 mm)
Accuracy <small>*Accuracy may vary depending on parameters, part geometry and size, pre-processing or post-processing methods, materials and environment.</small>	L < 100 mm: ±0.2mm, L≥100 mm: ±0.2% × L	L < 100 mm: ±0.2 mm, L≥100 mm: ±0.2% × L
Beam Size	Nominal 0.005 -0.008 in (0.12 - 0.2 mm)	0.0039 - 0.0055 in, 0.0295 - 0.0334 in (0.1-0.14 mm, 0.75-0.85mm)
Layer Thickness	0.004 in (0.1 mm) minimum; 0.01 in (0.25 mm) maximum	0.004 in (0.1 mm) minimum; 0.01 in (0.25 mm) maximum
Weight	6277 lb (2,847 kg)	11133 lb (5,050 kg)
Machine Size (WxDxH)	113.5 × 6.9 × 94.3 in (2882 × 1952 × 2395 mm)	163 × 107 × 109 in (4130 × 2720 × 2770 mm)
Optical System	2 laser and 2 galvanometer	3 laser and 3 galvanometer

## RSPro 600 / RSPro 800 / RSPro 1400 / RSPro 2100

Laser	Solid-state frequency tripled Nd: YVO <sub>4</sub>
Wavelength	355 nm
Input Data File Format	STL
Recoater Frame	Granite
Systems Control	Closed-loop
Temperature Range	72–79 °F (22–26 °C)
Maximum Change Rate	1 °C/hour
Relative Humidity	< 40 % non-condensing
Platform Change Carts	Manual offload cart (optional)
Processing and Finishing	Post-Curing Unit (optional)
System Warranty	One-year warranty (under UnionTech's Purchase Terms and Conditions)

\* Specifications are subject to change; consult with your sales representative for confirmation of current offering.



## PILOT Commercial Series

### A New Dimension in Stereolithography 3D Printing

- Lower operation & maintenance costs with excellent stability throughout entire life cycle.
- Tailored for exquisite parts with open design for materials and machine access.
- Printed parts demonstrate excellent sidewall quality and fine detail.

## System Features

- Key components from international top brands.
- Automatic control of surface level and processing parameters.
- Granite recoater frame for enhanced recoating stability.
- CE certification.
- Convenient assembly and disassembly of platform.

### Versatile Application Range · High Accuracy · Excellent Surface Aesthetics



## Technical Data

	PILOT 250	PILOT 450
<b>Build Envelope Capacity</b>	9.8 x 9.8 x 9.8 in (250 x 250 x 250 mm)	17.7 x 17.7 x 15.7 in (450 x 450 x 400 mm)
<b>Accuracy</b> <small>* Accuracy may vary depending on parameters, part geometry and size, pre-processing or post-processing methods, materials and environment.</small>	Part size < 1 in (25.4 mm): ±0.001 in (±0.025 mm) Part size ≥ 1 in (25.4 mm): ±0.1% x L	Part size < 3.9 in (100 mm): ±0.004 in (±0.1 mm) Part size ≥ 3.9 in (100 mm): ±0.1% x L
<b>Beam Size</b>	Standard Beam (0.12 – 0.20 mm) or Small Beam ( 0.06 – 0.08 mm ) ,optional	Nominal 0.003 -0.005 in (0.08 -0.12 mm)
<b>Layer Thickness</b>	0.002 in (0.05 mm) minimum; 0.01 in (0.25 mm) maximum	0.002 in (0.05 mm) minimum; 0.01 in (0.25 mm) maximum
<b>Weight</b>	1696 lb (769 kg) (with 94.8 lb (43 kg) initial fill inside)	2428 lb (1101 kg) (with 344 lb (156 kg) initial fill inside)
<b>Machine Size (WxDxH)</b>	43.5 x 41.3 x 77.1 in (1105x1060x1977 mm)	52.4 x 53.4 x 84.4 in (1331x1370x2163 mm)

### PILOT 250 / 450

<b>Laser</b>	Solid-state frequency tripled Nd: YVO <sub>4</sub>
<b>Wavelength</b>	355 nm
<b>Controller</b>	UnionTech™ RSCON
<b>Part Preparation</b>	PolyDevs or Materialise Magics
<b>Operating Systems</b>	Windows 7, Windows 10*
<b>Input Data File Format</b>	STL
<b>Network Type and Protocol</b>	Ethernet, IEEE 802.3 using TCP/IP and NFS
<b>Electrical Requirements</b>	200 - 240 VAC, 50/60 Hz, single phase
<b>Laser Warranty</b>	5,000 hours or 15 months (whichever comes first)
<b>Recoater Frame</b>	Granite
<b>Systems Control</b>	Closed-loop
<b>Power (nominal)</b>	Typically 250 ~ 350 mW on the target surface of the material under nominal optical path condition

#### Operating Environment:

<b>Temperature Range</b>	72–79 °F (22–26 °C)
<b>Maximum Change Rate</b>	1 °C/hour
<b>Relative Humidity</b>	< 40 % non-condensing

#### Accessories :

<b>Additional Resin Vat</b>	Optional
<b>Processing and Finishing</b>	Post-Curing Unit (optional)
<b>System Warranty</b>	One-year warranty (under UnionTech's Purchase Terms and Conditions)

\* Specifications are subject to change; consult with your sales representative for confirmation of current offering.

# Cute 380

The industrial grade 4K DLP optomechanical machine enables 3D printing of dental molds with fast speed, large and high surface quality, making it ideal for orthodontic mass production.



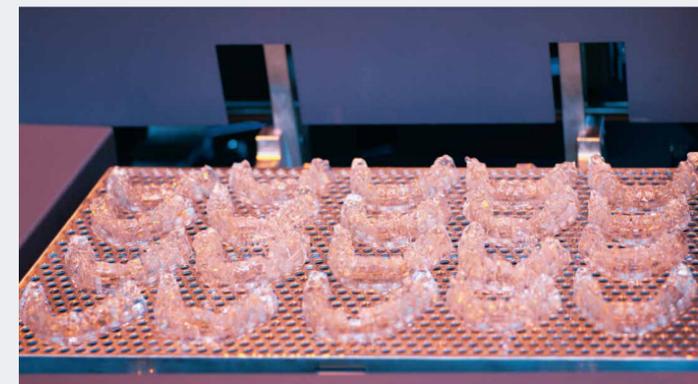
## Technical Data

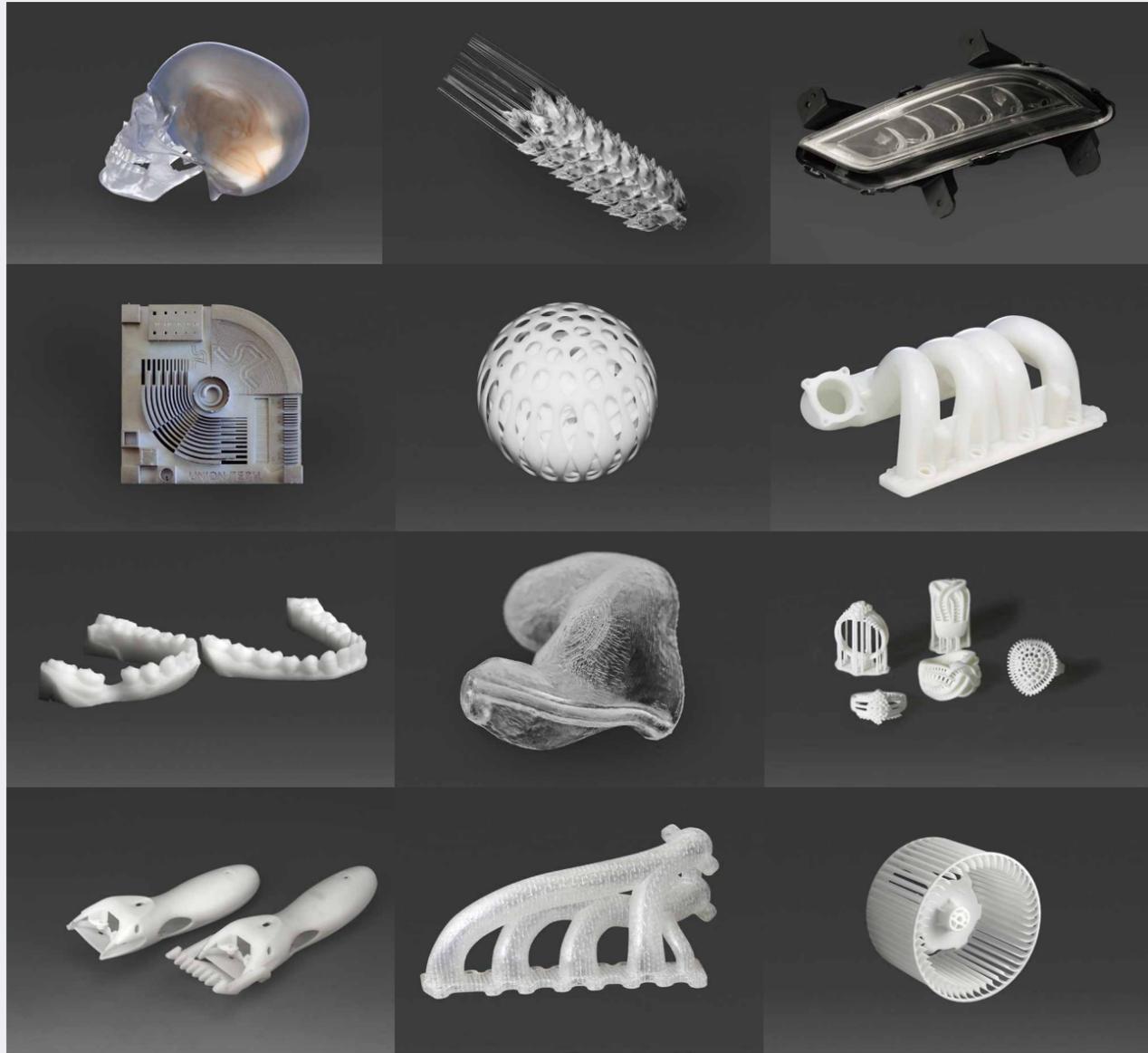
### Cute 380

Build Envelope Capacity	15.12x 8.5 x9.84 in (384X216X250 mm) (Full Vat)
Weight	946 lb (430 kg)
Accuracy	Standard deviation of OrthoModel ≤0.06mm <small>* Accuracy may vary depending on parameters, part geometry and size, pre-processing or post-processing methods, materials and environment.</small>
Elevator Positioning Accuracy	≤±8 μm
Liquid Level Positioning Accuracy	≤±0.02 mm
Layer Thickness	0.05mm - 0.2mm
DMD	DLP660TE
Machine Size (WxDxH)	29.2 x 33.1 x 75.2 in (742 x 842x 1910 mm)
Pixel	0.1mm/pix
Wavelength	405 nm
Controller	UnionTech™DSCON
Part Preparation	Polydevs Pro, BPC
Operating Systems	Windows 10
Input Data File Format	UTK
Network Type and Protocol	Ethernet, IEEE 802.3 using TCP/IP and NFS
Electrical Requirements	200-240 VAC, 50/60 Hz, single-phase
Optical Engine Warranty	12 months
Recoater Frame	Steel
Systems Control	Closed-loop
Power (nominal)	4000mW ( maximum total )
Accessories	Post-curing unit(optional)、 Platform change cart(optional)
Temperature Range	72–79°F (22–26°C)
Maximum Change Rate	1 °C/hour
Relative Humidity	< 40% non-condensing

- Industrial DMD
- DLP 4k Optical Engine
- Automatic control of surface level and processing parameters.
- Granite recoater frame for enhanced recoating stability.
- Closed loop control strategy for: Platform movement/Optical Engine power/Material level/Temperature/Vacuum.
- CE certification.
- Convenient assembly and disassembly of platform.

\* Specifications are subject to change; consult with your sales representative for confirmation of current offering.





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