

Raise3D DF2 Solution

Beyond Prototyping:
Traceable Workflow from Start to Finish



Raise3D DF2

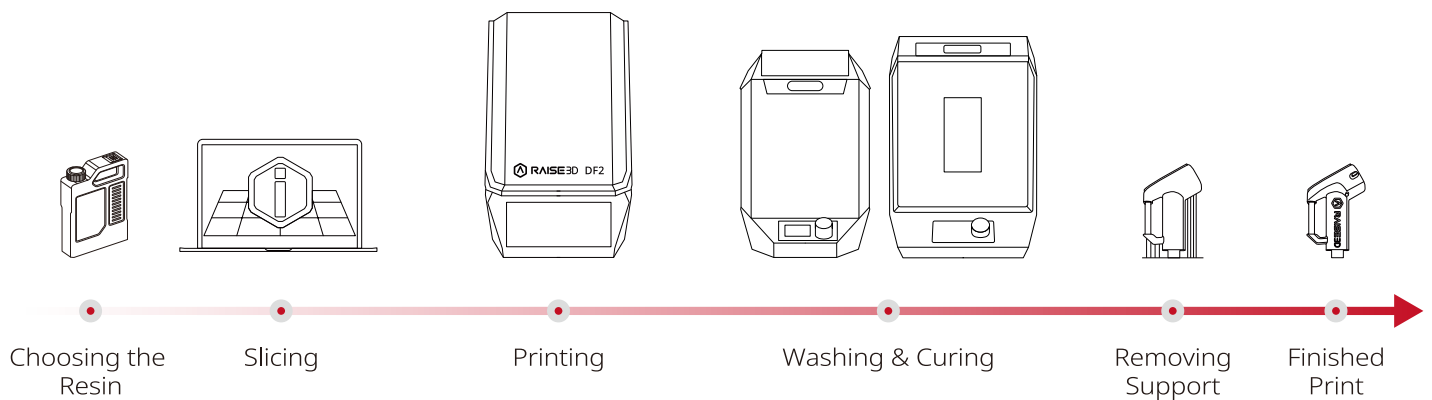
Raise3D DF Wash

Raise3D DF Cure

The Raise3D DF2 solution is a Digital Light Printing (DLP) system offering speed, quality, exceptional reliability and efficient workflow via RFID. It is designed for low-volume production using a wide variety of high-performance resins.



End to End DLP Printing Workflow



Efficient Full-process Workflow

After the Raise3D DF2 printer has completed the printing task, the next step is the washing and curing station. With an RFID-tag-integrated smart build plate and a consistent interface, Raise3D DF Wash and Raise3D DF Cure can effectively save operation time and labor costs. This not only streamlines manual operations but also ensures your printing tasks are always accomplished with the same print results.

Raise3D DF2

A DLP 3D printer designed for small batch production with high precision, repeatability and reliability.



Raise3D DF Wash

Process controllable, efficient, easy maintenance and automatic cleaning solution.

Raise3D DF Cure

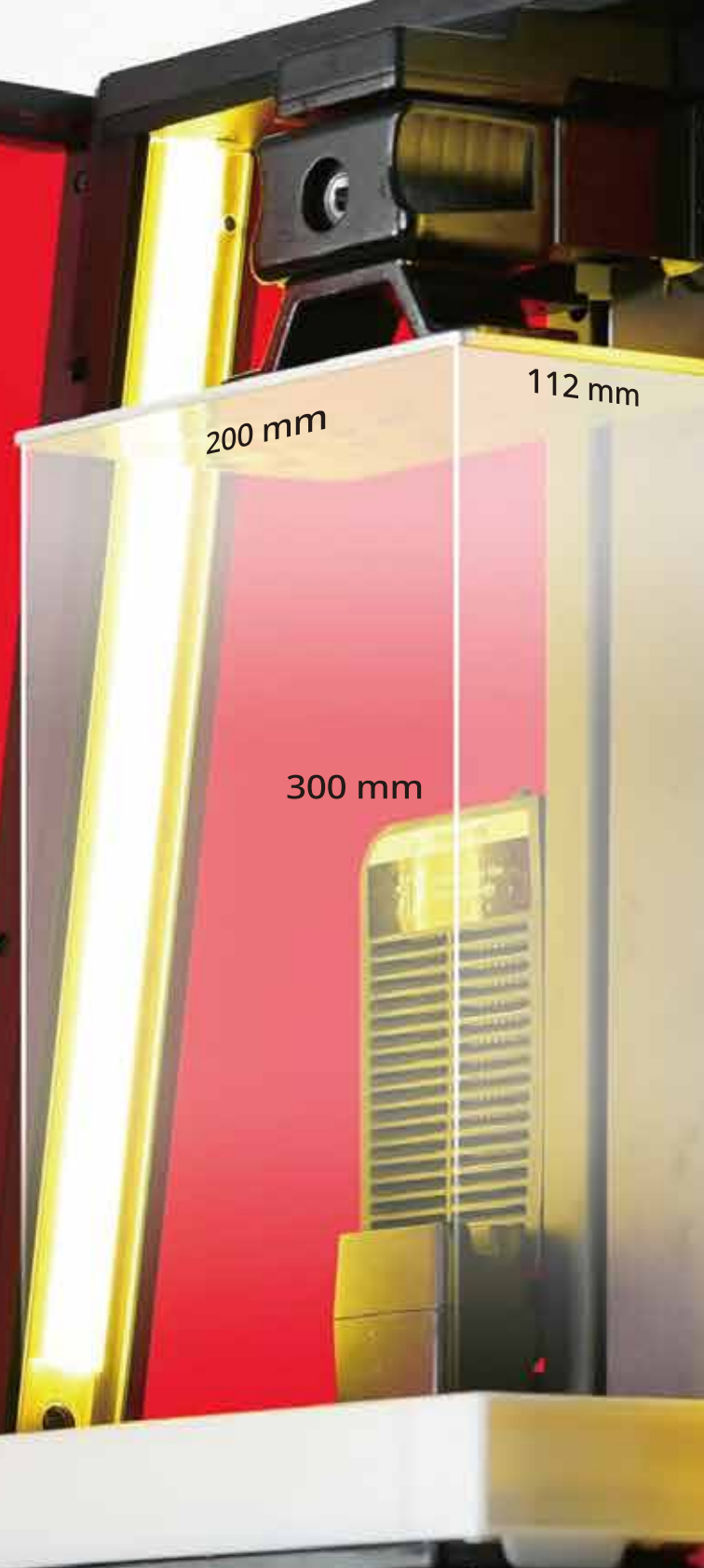
A powerful curing station with multiple, traceable and customizable UV curing and heating profiles.



Larger Size, More Possibilities

Max. Build Volume:
200 x 112 x 300 mm

Max. Weight of Prints:
10 kg





High Precision Printing

XY Resolution: 2560 x 1440

Small Batch Production with Consistent Prints

The Raise3D DF2 adapts effortlessly to the scale of production and maintains consistent quality.



Raise3D High Performance Engineering Resins

Meet demands for customized small batch production of precise prototyping and industrial engineering parts.



ORP (Open Resin Program)

A collaboration between Raise3D and Resin Manufacturers to identify and select top performing resin for Raise3D DF2 Solution.



Standard Resin

Easy-to-print resin for prototyping and design

Advantages

- | Easy-to-print with high accuracy
- | Smooth and precise details
- | Matte surface finish

Applications

- | Prototyping and design
- | Models with small features and intricate details
- | Model for painting and other post-processing



Tough 2K Resin

Tough and durable resin for functional applications

Advantages

- | Tough and strong
- | Excellent toughness and impact resistance
- | Strength and rigidity similar to ABS

Applications

- | Strong and stiff prototypes
- | Jigs and fixtures
- | Manufacturing aids
- | Housings and enclosures



High Clear Resin (Coming soon)

Suitable for applications working with optical or showcasing internal features

High Detail Resin

High-resolution material for detailed models

Advantages

- | Ultra-fine details and high resolution
- | Ready for painting and plating
- | Excellent matte surface finish

Applications

- | Ultra-high resolution and detailed prototypes
- | Complex and intricate models and sculptures
- | Models for painting and plating



Rigid 3K Resin

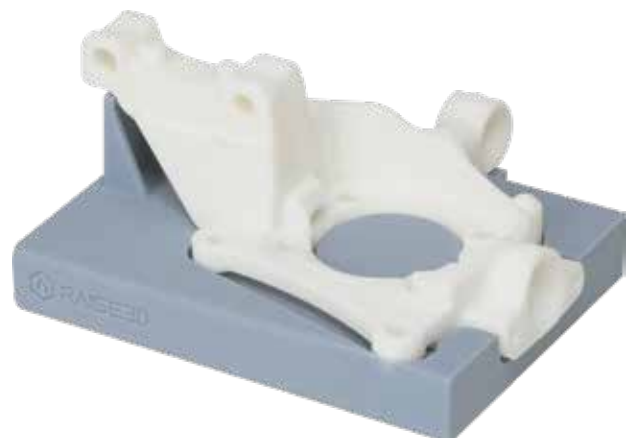
Material with high strength, rigidity and heat-resistance

Advantages

- | High rigidity
- | Excellent part strength
- | Heat resistance
- | Rigidity similar to glass fiber reinforced thermoplastic materials

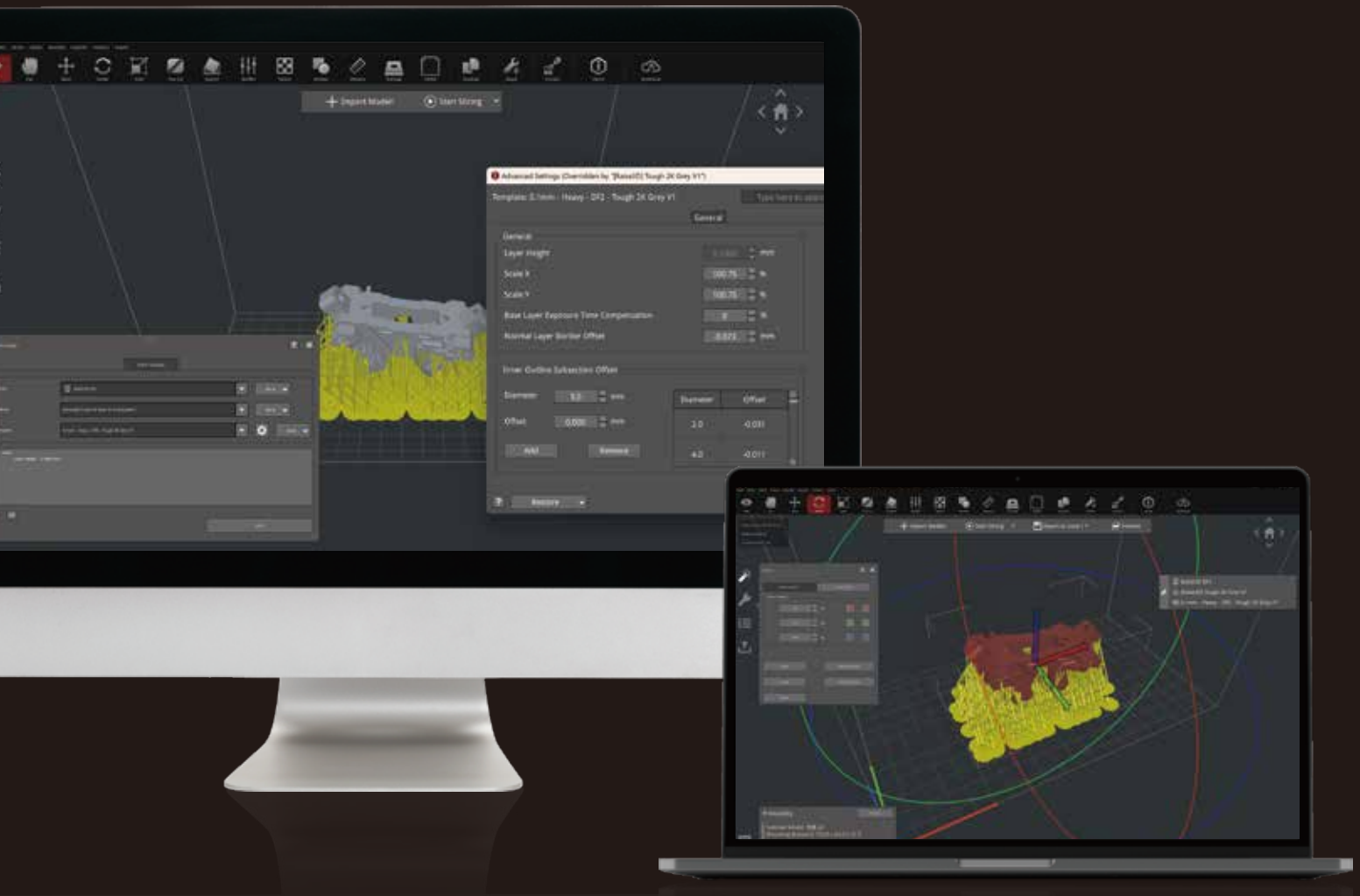
Applications

- | Robust prototypes
- | Thin-wall parts
- | Jigs & fixtures
- | Connectors
- | Mounts and brackets



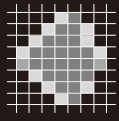
High Temp Resin (Coming soon)

High temperature resistant material for harsh thermal environments

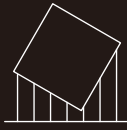


Reliable Success Rate by ideaMaker

ideaMaker has added multiple new features that are compatible with Raise3D DF2 printer, reducing learning curves and improving the success rate of DLP printing.



Antialiasing



Auto Support



Auto Cross Section Analysis



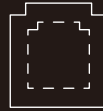
Contour Compensation



Suction Cup Detection



Auto Orientation



Hollow



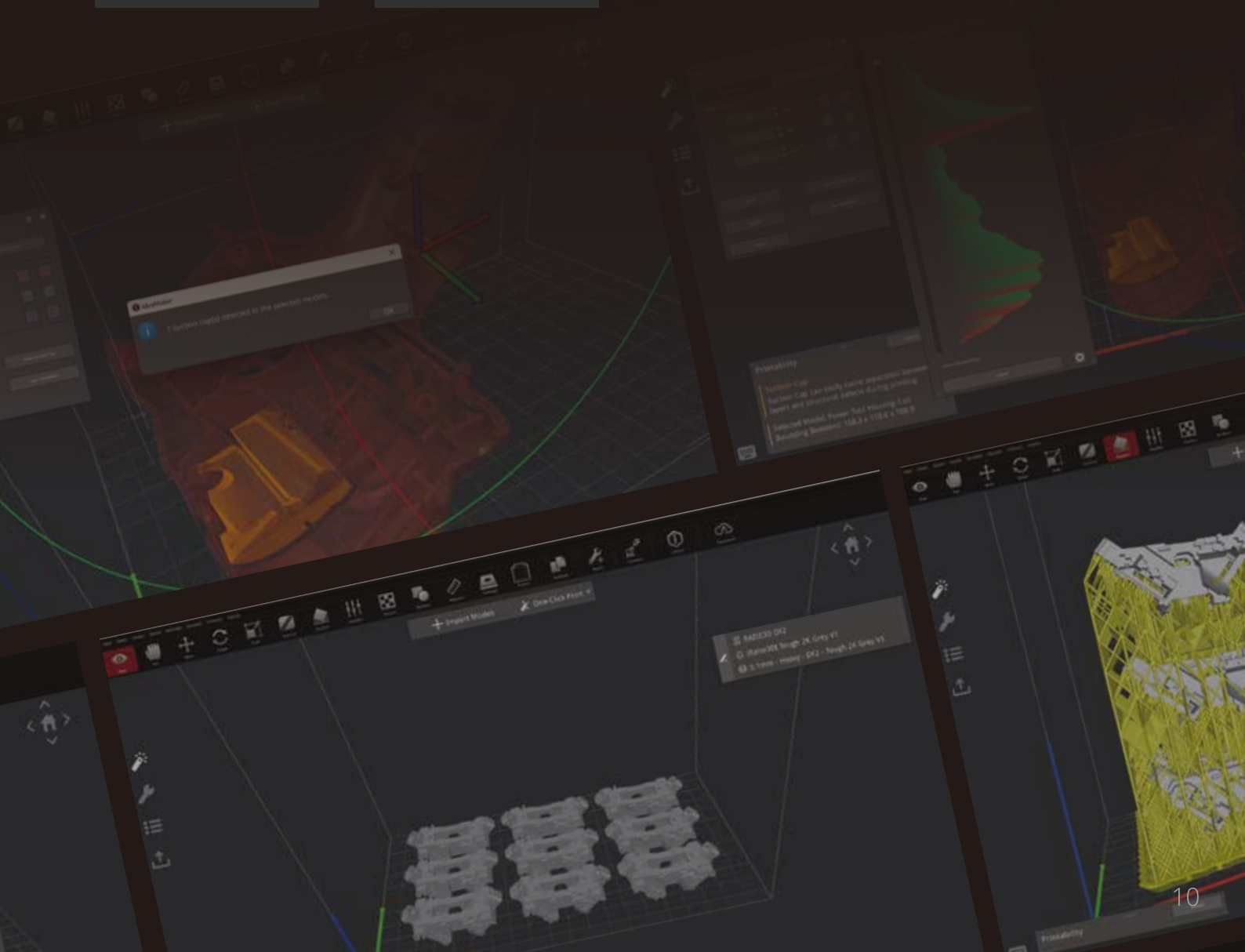
Drainage Hole



Texture Generation



Smaller Gcode Size



Consistently Printing Every Time

■ Z-axis with High Load Capacity

Maximum load capacity of 200 kg for Z-axis. Features no staggered layers and high movement accuracy, ensuring the stability of printing large parts and extended usage.

■ Air-Peel Technology

Air peel design between the resin vat bottom and the highly clear glass reduces the force from 50 kilograms to 12 kilograms, effectively peeling each layer and ensuring successful printing.



High Precision Image Quality

Industrial Grade Optical Components

High-quality optical components are used throughout the entire optical path projection system to reduce loss, eliminate dispersion, ensuring the reproduction of sharp layers.



1 Printing



Traceable Workflow

Smart Build Platform with RFID

The smart build platform automatically saves all the parameters required for the entire workflow, making the entire process easy and fail-safe.

2 Washing



3 Curing





Efficient Material Management

Ultrasonic Liquid Level Detection Module and Automatic Dosing

When the ultrasonic liquid level detects a lack of material, the resin dosing device will automatically replenish the container with material.



Compatible Post-processing

Raise3D DF2 Solution provides compatible post-processing to fulfil requirement of different types resin materials.

- ▮ **Compatible Solvent: IPA, Water* and TPM**
- ▮ **Dual Curing Sources & Multiple Wavelengths (365/385/405 nm)**

*Depend on the selected material





A Cleaner Workflow

Raise3D DF Wash offers a cleaner washing process by less contact with resin contact during operation and automatic drainage module.



Raise3D DF2 Specification

<p>HARDWARE</p>	<p>Print Technology Build Volume (W × D × H) XY Resolution Max Z Workload Layer Height Max Printing Speed Resin Level Detection Auto Resin Refill Control Panel Level Calibration Chamber Heating</p>	<p>DLP 200 × 112 × 300 mm (7.87 × 4.41 × 11.8 inch) 2560 × 1440 10 kg 50-100 micron 25 mm/h (0.1 mm per layer) Yes Yes Touch Screen (1920 × 720, Magic Layout) Calibrated in Factory Yes (Max 40°C)</p>
<p>RESINS (Available Options)</p>	<p>Raise3D Standard Raise3D High Detail Raise3D Tough 2K Raise3D Rigid 3K Raise3D High Clear Raise3D High Temperature Open Resin Program</p>	<p>White Apricot Grey Grey Coming Soon Coming Soon Coming Soon</p>
<p>SOFTWARE & NETWORKS</p>	<p>Connectivity Network Slicing Software Remote Management Software Supported File Types Supported OS</p>	<p>Wi-Fi, LAN, USB port × 2, Live camera Ethernet, Wireless 802.11 b/g/n ideaMaker RaiseCloud STL/ OBJ/ 3MF/ OLTP WINDOWS/ macOS/ LINUX</p>
<p>OPERATION & SHIPPING</p>	<p>Power Supply Input Operating Ambient Temperature Storage Temperature Machine Size (W × D × H) Weight Shipping Dimensions</p>	<p>100-240VAC, 50/60 Hz 230V @ 3.3A 15 - 30°C, 10 - 90% RH Non-Condensing (HOLD) -25 to 55°C, 10 - 90% RH Non-Condensing (HOLD) 450 × 400 × 730 mm (17.7 × 15.7 × 28.7 inch) 40 kg (Net Weight) 59.4 kg (Gross Weight) 710 × 595 × 980 mm (28.0 × 23.4 × 38.6 inch)</p>

Raise3D DF Wash & DF Cure Specification

Raise3D DF Wash		
HARDWARE	Washing Tank Volume Max Washing Volume Compatible Solvent RFID Print Platform Automated Waste Drainage	14 L 200 × 112 × 300 mm (7.87 × 4.41 × 11.8 inch) IPA, Water, TPM Supported Yes
OPERATION & SHIPPING	Power Supply Input Operating Ambient Temperature Storage Temperature Machine Gross Weight Grey Tank Gross Weight Machine Size (W × D × H) Machine Shipping Dimension Grey Tank Shipping Dimension	100-240VAC, 50/60 Hz, 0.55A/230VAC 10-35°C -25 to 55°C, 10 - 90% RH Non-Condensing (HOLD) 45.4 kg 0.65 kg 400 × 410 × 646 mm (15.7 × 16.1 × 25.4 inch) 725 × 585 × 915 mm (28.5 × 23.0 × 36.0 inch) 407 × 247 × 349 mm (16.0 × 9.7 × 13.7 inch)

Raise3D DF Cure		
HARDWARE	Max Curing Size Curing Source	φ 230 x 300 mm (φ 9 x 11.8 inch) LED (365nm, 385nm, 405nm Mixed) Air Heating (Max Temperature 120°C)
OPERATION & SHIPPING	Power Supply Input Operating Ambient Temperature Storage Temperature Net Weight Gross Weight Machine Size (W × D × H) Shipping Dimension (W × D × H)	100-240 V AC, 50/60 Hz, 230 V AC @ 2.6 A 10-35°C -25 to 55°C, 10 - 90% RH Non-Condensing (HOLD) 31.95 kg 45.5 kg 490 × 400 × 610 mm (19.3 × 15.7 × 24.0 inch) 725 × 585 × 850 mm (28.5 × 23.0 × 33.5 inch)

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