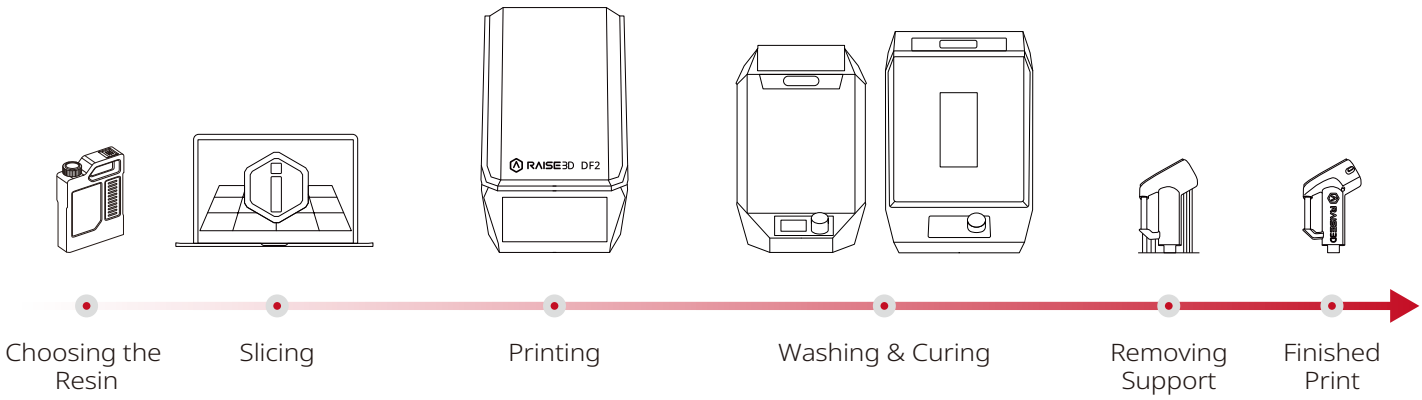
Raise3D DF2 Solution

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

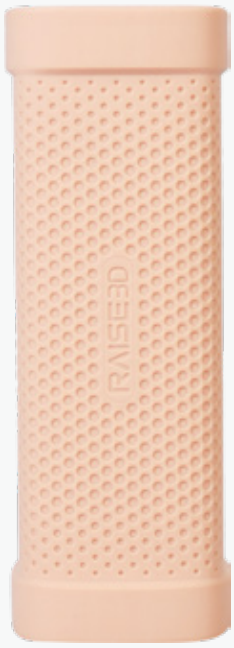
- Strong and stiff prototypes
- Jigs and fixtures
- Manufacturing aids
- Housings and enclosures

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

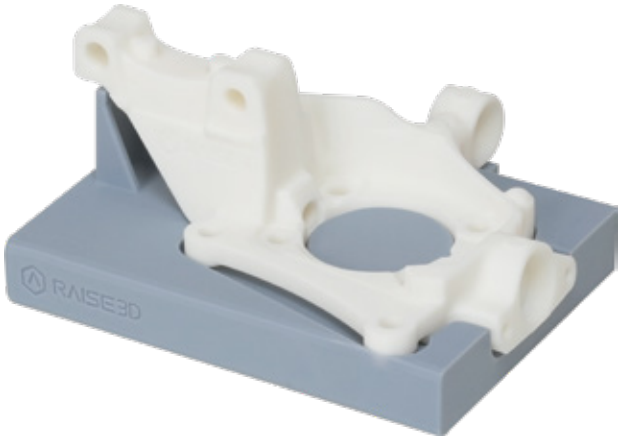
Material with high strength, rigidity and heat-resistance

Advantages

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

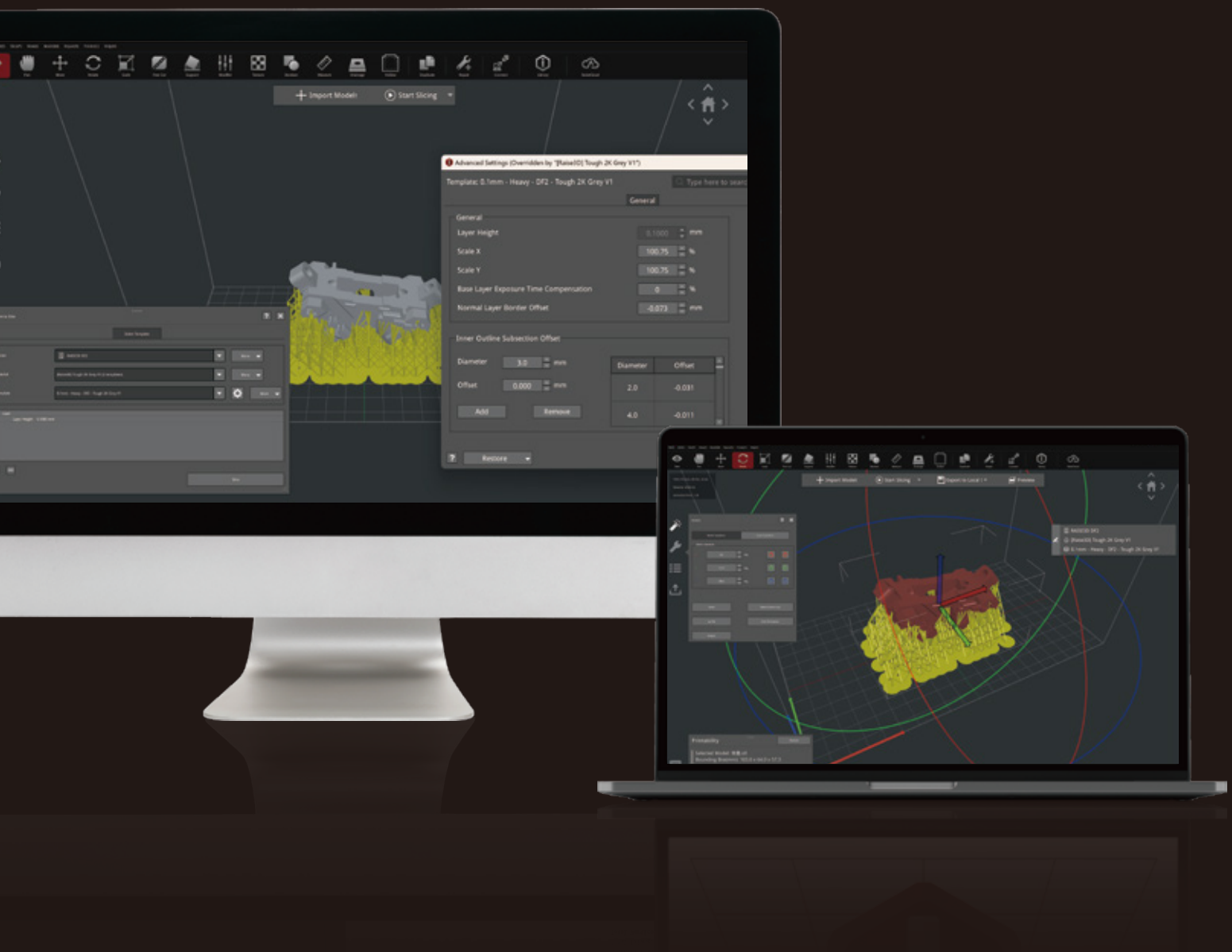
Applications

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



High Temp Resin (Coming soon)

High temperature resistant material for harsh thermal environments



ideaMaker®

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

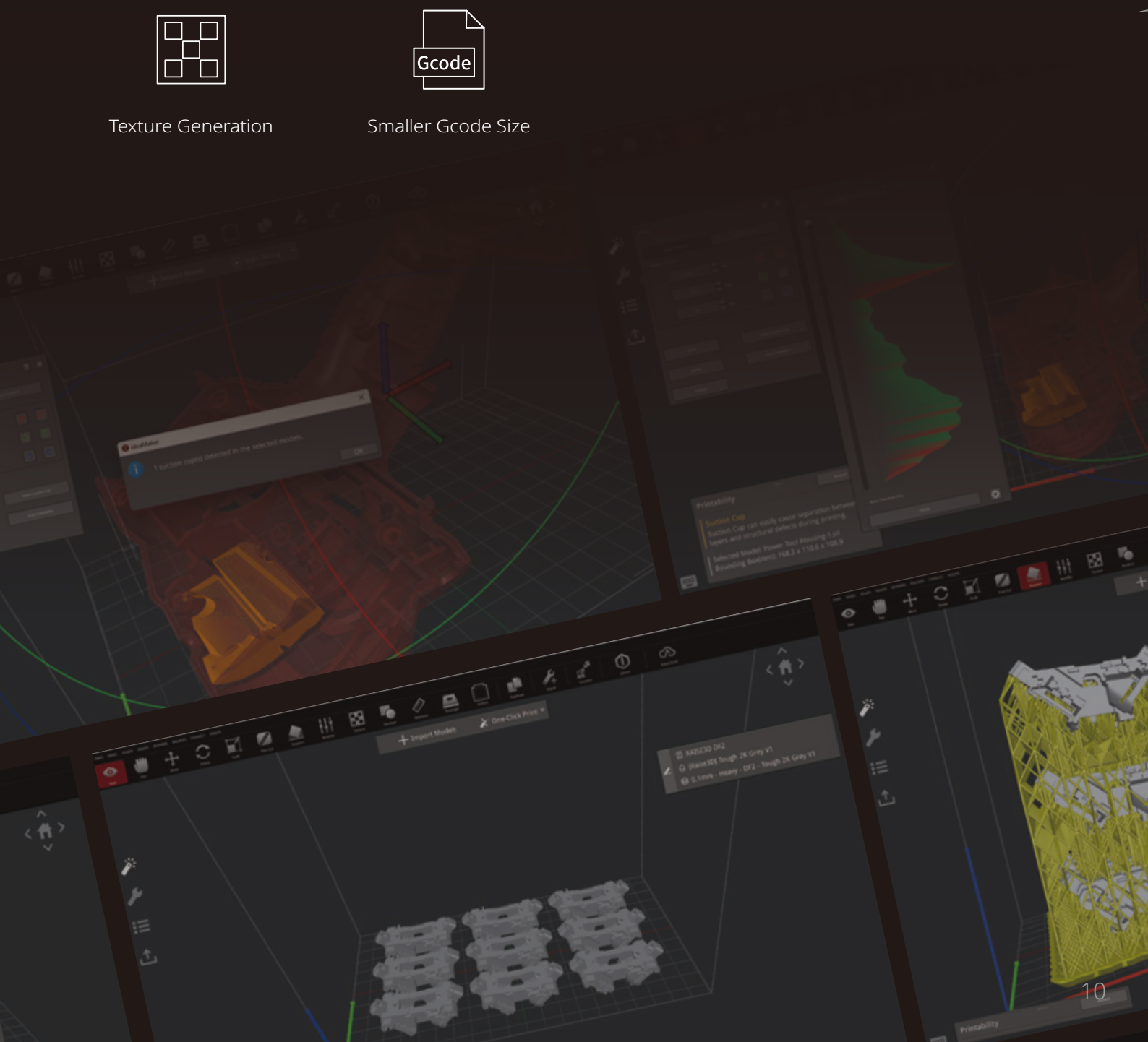
Auto Orientation

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

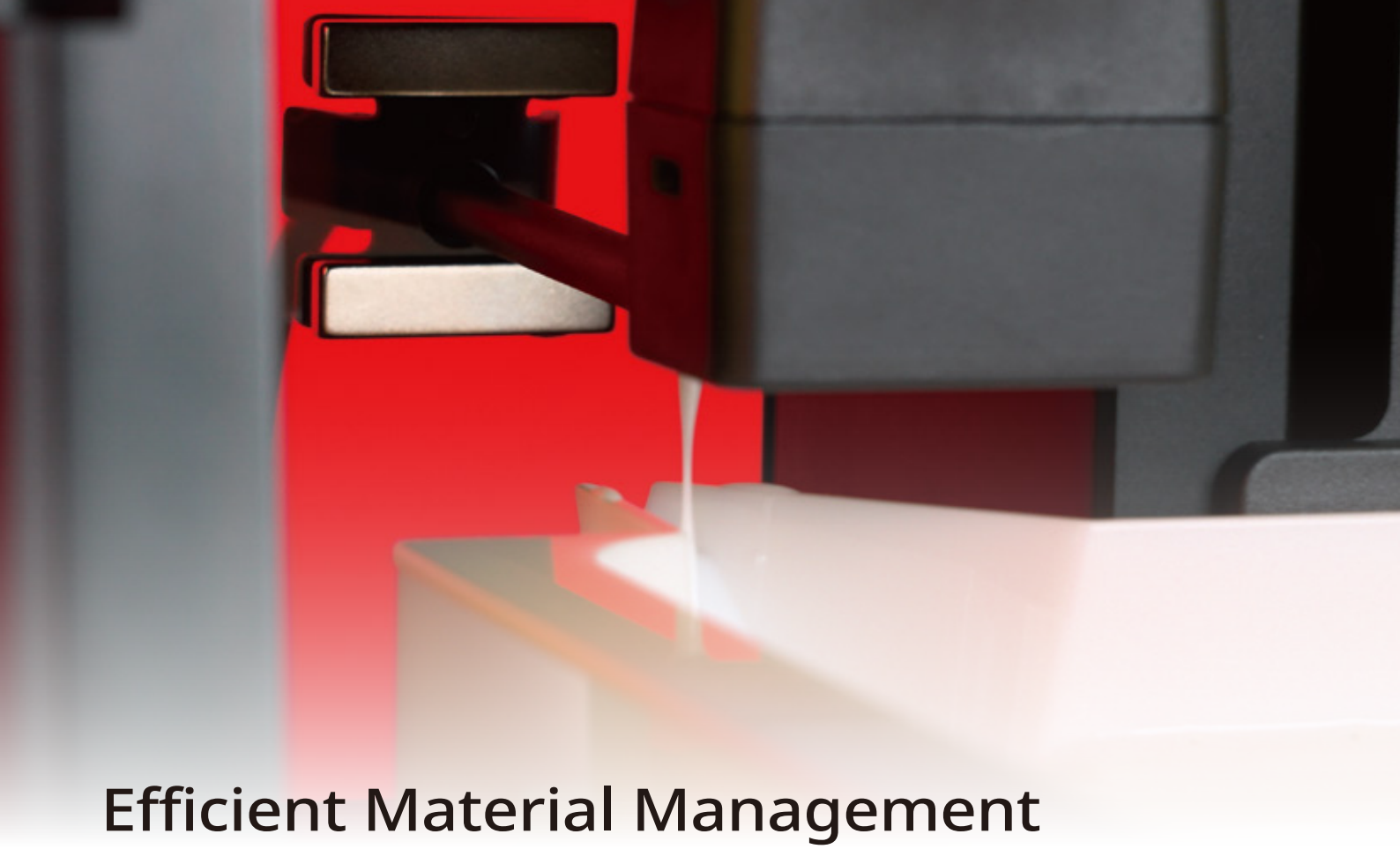
Industrial Grade Optical Components

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

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.



Efficient Material Management

Ultrasonic Liquid Level Detection Module and Automatic Dosing

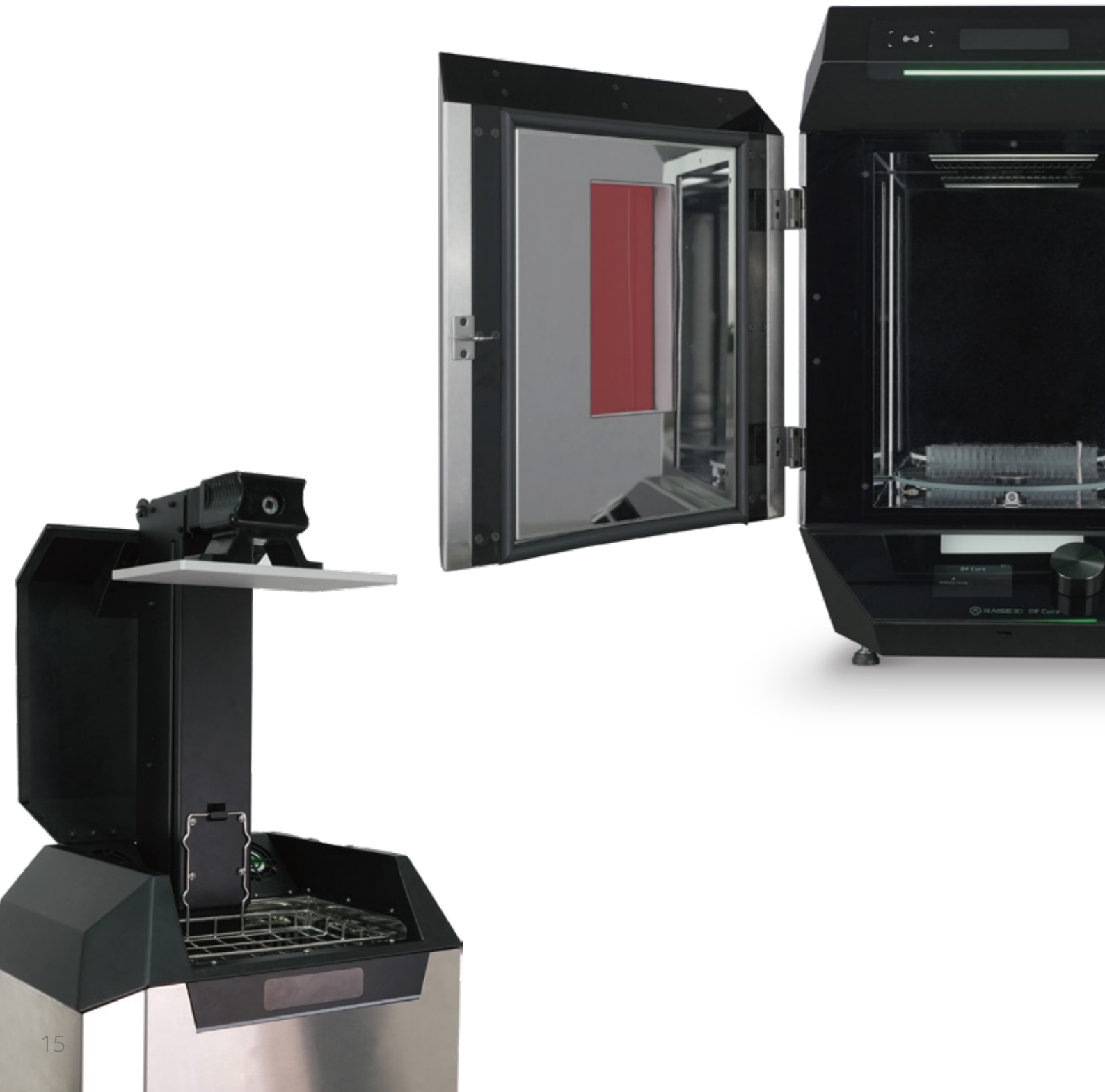
When the ultrasonic liquid level detects a lack of material, the resin dosing device will automatically replenish the container with material.

Compatible Post-processing

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

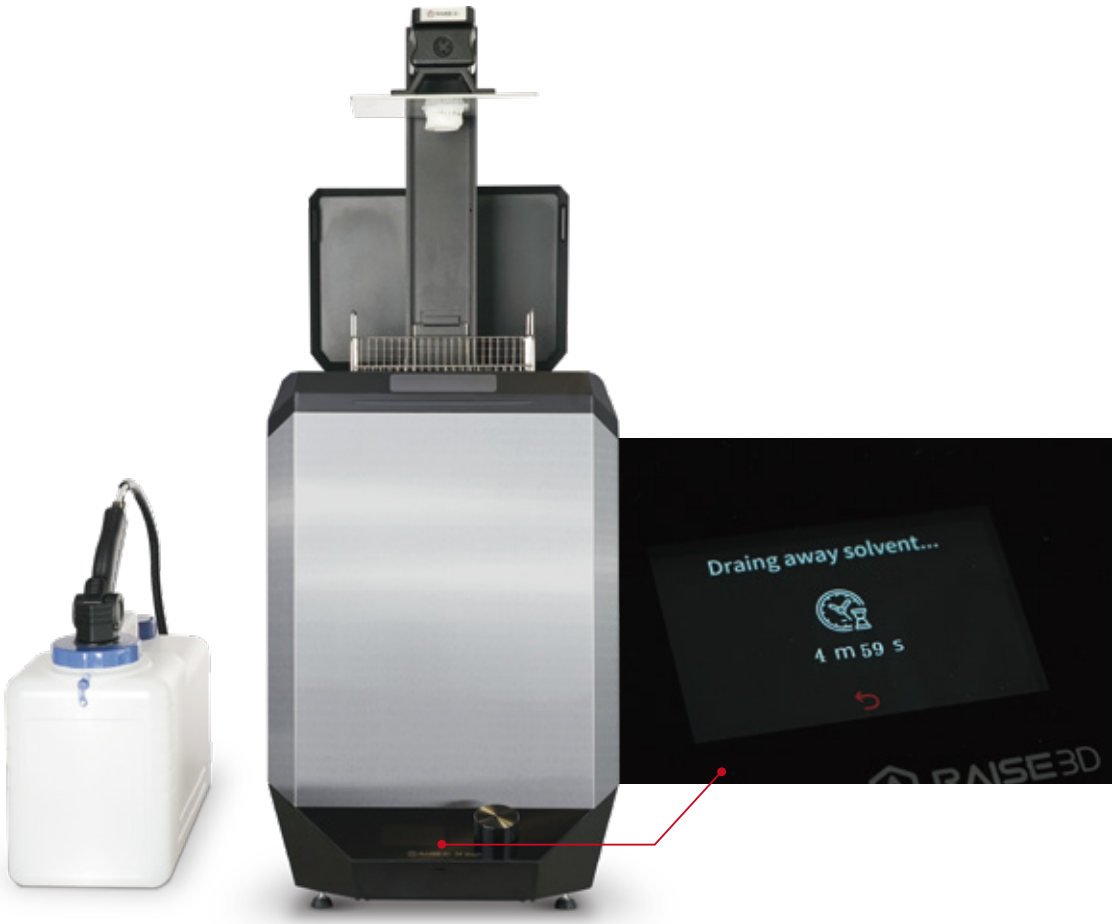
- **Compatible Solvent: IPA, Water* and TPM**
- **Dual Curing Sources & Multiple Wavelengths (365/385/405 nm)**

*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

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

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Raise3D DF Wash & DF Cure Specification

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

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

NOV. 2023 VERSION 1.5

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