

# VALIDATED ULTRACUR3D® RESIN OVERVIEW





### **DLP STATION 5**

# **DLP STATION 5 EXZ**

# atum <u>3D</u>

### **TECHNICAL SPECIFICATIONS**

Digital Light Processing
Full HD 1920x1080 px
100 µm
192 x 108 x 250 mm
6 to 500 μm
Anodised aluminum
Quick release, coated
Up to 130 mm/hr
LED
Yes
Yes
Yes
Optional
110 - 240 V
15°C – 30°C
38 kg
488 x 355 x 1062 mm
488 x 355 x 1483 mm
488 x 355 x 620 mm



### **TECHNICAL SPECIFICATIONS** Technology Digital Light Processing Light engine 2K Ultra HD Print resolution 70 µm Build volume 192 x 108 x 450 mm Z-axis resolution 6 to 500 µm Build Platform S Anodised aluminum Resin Tray Quick release, coated Print speed Up to 150 mm/hr LED Light engine Auto light control Yes USB port Yes Netfabb<sup>®</sup> support Pending Ethernet Optional AC input 110 - 240 V 15°C – 30°C Operating temp. Weight 136 kg

588 x 461 x 1826 mm

588 x 461 x 2454 mm

Included

W x D x H closed

W x D x H open

Base

### **DLP STATION 5**

Resin	Wavelength (nm)	Power (mW/cm <sup>2</sup> )	Curing time (s)	Voxel depth (µm)	Resin tray
Ultracur3D <sup>®</sup> EL 60	405	15	3,30	150	HIGH SPEED
Ultracur3D <sup>®</sup> EL 150	405	15	1,20	150	HIGH SPEED
Ultracur3D <sup>®</sup> EL 4000	405	15	1,20	100	HIGH SPEED
Ultracur3D <sup>®</sup> EL 4000 B	405	15	1,20	100	HIGH SPEED
Ultracur3D <sup>®</sup> FL 300	405	15	0,75	100	HIGH SPEED
Ultracur3D <sup>®</sup> ST 45	405	15	2,40	300	HIGH SPEED
Ultracur3D <sup>®</sup> ST 45	405	15	0,85	100	STANDARD
Ultracur3D <sup>®</sup> ST 45 B	405	15	2,50	100	STANDARD
Ultracur3D <sup>®</sup> ST 80	405	15	2,00	100	STANDARD
Ultracur3D <sup>®</sup> ST 1400	405	15	1,60	100	HIGH SPEED
Ultracur3D <sup>®</sup> ST 1400	405	15	4,70	300	HIGH SPEED
Ultracur3D <sup>®</sup> RG 1100	405	15	1,00	100	HIGH SPEED

### **DLP STATION 5 EXZ**

Resin	Wavelength (nm)	Power (mW/cm <sup>2</sup> )	Curing time (s)	Voxel depth (µm)	Resin tray
Ultracur3D <sup>®</sup> EL 60	365	5	3,50	200	HIGH SPEED
Ultracur3D <sup>®</sup> EL 60	405	15	3,30	150	HIGH SPEED
Ultracur3D <sup>®</sup> EL 150	365	5	1,00	150	HIGH SPEED
Ultracur3D <sup>®</sup> EL 150	405	15	1,20	150	HIGH SPEED
Ultracur3D <sup>®</sup> EL 4000	405	15	1,20	100	HIGH SPEED
Ultracur3D <sup>®</sup> EL 4000 B	405	15	3,00	200	HIGH SPEED
Ultracur3D <sup>®</sup> FL 300	365	5	0,50	50	HIGH SPEED
Ultracur3D <sup>®</sup> FL 300	405	15	0,75	100	HIGH SPEED
Ultracur3D <sup>®</sup> ST 45	365	5	1,80	300	HIGH SPEED
Ultracur3D <sup>®</sup> ST 45	405	15	2,40	300	HIGH SPEED
Ultracur3D <sup>®</sup> ST 45	405	15	0,85	100	STANDARD
Ultracur3D <sup>®</sup> ST 45 B	365	5	4,00	100	HIGH SPEED
Ultracur3D <sup>®</sup> ST 45 B	405	15	2,50	100	STANDARD
Ultracur3D <sup>®</sup> ST 80	365	5	1,80	100	HIGH SPEED
Ultracur3D <sup>®</sup> ST 80	405	15	2,00	100	STANDARD
Ultracur3D <sup>®</sup> ST 1400	405	15	1,60	100	HIGH SPEED
Ultracur3D <sup>®</sup> ST 1400	405	15	4,70	300	HIGH SPEED
Ultracur3D <sup>®</sup> RG 35	365	5	1,00	50	STANDARD
Ultracur3D <sup>®</sup> RG 1100	405	15	1,00	100	HIGH SPEED

atum3D strives for 3-fold excellence. With proprietary **software**, **hardware** and an **open resin platform**, we offer exceptional **accuracy**, **speed** and **cost-effectiveness**. We aim to make your life easy with comprehensive **training**, **services** and **support**. Team up with atum3D and become a part of the next industrial revolution!



For more information and specifications, please call +31 (0)85 488 26 60 or visit **atum3D.com**.

### **HIGH SPEED PRINTING**

Our purpose-built LED light source offers a very high light intensity, which allows DLP Station 5-405 to reach unprecedented build speeds. The large build envelope allows you to combine different unique -or slightly different- parts in a single run without impacting build speed.

### **CONSISTENT ACCURACY**

atum3D's integral expertise allows us to optimise part preparation for production on DLP Station. Combined with a high resolution and uniformity, this leads to consistent, very accurate and detailed results which, for example, can contain truly round openings in any direction.

### **UNPRECEDENTED VERSATILITY**

DLP Station 5-405 is available in 50 or 100 micron resolution versions to fit your accuracy needs. DLP Station 5-405 has a 405 nm light source compatible with an extensive range of resins from different suppliers.

### **OPEN PLATFORM**

The proprietary PTFE-coated Resin Tray with a very high chemical resistance allows you to use any 405 nm resin. Resins are available with a wide range of properties, from flexible to heat resistant and from medical grade to impact resistant. DLP Station 5-405 can optionally be fitted with atum3D's new Self-Traversing Integrated Resin Homogeniser (STIRH), which actively homogenises the resin in the Resin Tray after each printed layer. Tell us your application and current material properties and we'll gladly advise you on the best material!

### **CONVENIENT CALIBRATION & OPERATION**

DLP Station 5-405 features the redesigned, self-leveling Build Platform S, which makes printer calibration a breeze. Convenient, single point fixation perfectly aligns the Build Platform S with the Resin Tray in seconds, which is imperative for optimal print results. Build Platform S allows you to replace the anodised aluminum build plate only, which saves time, material and costs. The Resin Tray is swiftly installed and removed using quick release pins.

### **INTUITIVE, CONNECTED & SUPPORTED**

Control DLP Station 5-405 through the large, intuitive touchscreen interface and the USB port. Optionally, you can operate the printer using the LAN interface. DLP Station 5-405 is optionally available with full workspace integration in Autodesk<sup>®</sup> Netfabb<sup>®</sup> modelling software.

## **FITS YOUR SPACE**

DLP Station 5-405 has been designed for side-by-side operation of multiple machines, controlled by a single operator. It's available as a compact Desktop model. Add the newly designed base to bring the DLP Station 5-405 to working height, offering additional storage space.

### **EXTENSIONS TO MAKE YOUR LIFE EASY**

Parts created by DLP Station 5-405 are ready to be further processed. Post-processing can be largely automated using atum3D's Cleaning Station and Curing Station, saving you a lot of time and effort. The Finishing Toolkit includes everything you need to remove supports and polish your accurate, high quality parts to a shine!

# **TECHNICAL SPECIFICATIONS**

### **DLP STATION 5-405**

Intended use	Professional & Industrial
Technology	Digital Light Processing (DLP)
Colour	Black
Projector resolution	Full HD 1920x1080 px
Print resolution (x,y)	50 or 100 μm
Build volume @ 50 µm (x,y,z)	96 x 54 x 250 mm
Build volume @ 100 µm (x,y,z)	192 x 108 x 250 mm
Z-axis resolution	6 to 500 μm
Z-axis guideway	High-end double linear guide
Spindle	High-end ground ball spindle
Build Platform S	Easy alignment mechanism, conventiently replaceable anodised aluminum Build Plate
Resin Tray	Quick release, PTFE-coated, robust, high chemical resistance
Third party materials	Yes
Resin Homogeniser (STIRH)	Optional
Print speed	Up to 90 mm/hr (depends on resin and detail)
Light source	LED
Wavelength	405 nm
Stand-alone printing	Yes
Automated projector control	Yes
USB port	Yes
Autodesk <sup>®</sup> Netfabb <sup>®</sup> supported	Yes
Ethernet	Optional
AC input	110-240 V
Operating temperature	15° – 30° C
Weight	38 kg
Dimensions (closed) (WxDxH)	488 x 355 x 1062 mm (Desktop, excluding base)
Dimensions (open) (WxDxH)	488 x 355 x 1483 mm (Desktop, excluding base)
Base (WxDxH)	488 x 355 x 620 mm



For more information and specifications, please contact:

**3D Center** Kvarngatan 7, 593 30 Västervik, Sweden info@3dcenter.se + 46 (0)490-10040 atum3D strives for 3-fold excellence. With proprietary **software**, **hardware** and an **open resin platform**, we offer exceptional **accuracy**, **speed** and **cost-effectiveness**. We aim to make your life easy with comprehensive **training**, **services** and **support**. Team up with atum3D and become a part of the next industrial revolution!

