proto3000
ISO 9001:2015

3D Printers for Digital Dentistry and Orthodontics

A new standard in speed, reliability, and workflow integration

rapidshape
DENTAL

Andreas Schultheiss
CEO Rapid Shape GmbH

Andreas Geitner
CTO Rapid Shape GmbH

We develop solutions for the needs of our customers - quickly and efficiently. We do this on the basis of our many years of experience and our extensive investments in research and development.

Making our customers‘ daily work easier through professional 3D printing – that is our drive.

Rapid Shape accompanies you throughout the entire 3D printing process and supports compliance with the Medical Device Directive.

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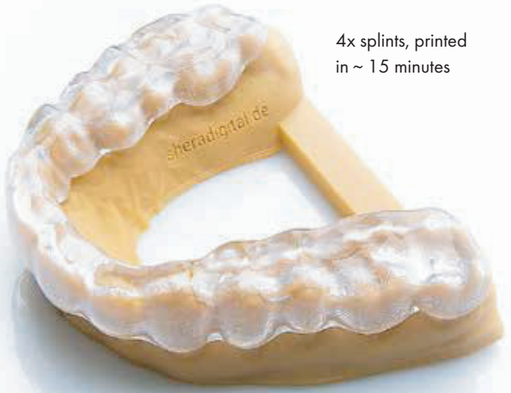
Professional solutions for dentists, small labs, sizeable labs and industry

Each machine is an all-rounder

28x crown & bridge units,
printed in ~ 15 minutes

2x surgical guides,
printed in ~ 15 minutes



4x splints, printed
in ~ 15 minutes

4x indirect bonding tray,
printed in ~ 15 minutes

2x trays, printed
in ~ 15 minutes
(horizontal)

6x trays, printed
in ~ 45 minutes
(vertical)

4x denture bases,
printed in ~ 45 minutes

2x ortho models,
printed in ~ 20 minutes

4x cast partials,
printed in ~ 45 minutes

28x gingiva mask
units, printed in
~ 15 minutes

2x master models,
printed in ~ 25 minutes

All mentioned printing times are based
on jobs done on a D20+ equipped
with Force Feedback System.

Simple steps to the perfect result:
Print locally without specialist knowledge

D10+

The fast, easy and clean 3D printing solution of dental products for daily use in dental offices.

The D10+ enables the immediate availability of locally printed 3D parts at the dentist. Validated workflows and a very easy handling of the system allow onsite 3D printing without specialist knowledge. Local data preparation or cloud connection to labs or design centers make unique workflows possible.

Performance parameters	D10+
Building area	90 × 60 mm and 30 × 60 mm (depending on print job)
Native pixel	+/-34 µm
Max. part height	90 mm
Light source	385 nm UV LED
Resolution	1280 × 720 px
Dimension (W × H × D)	335 × 541 × 349 mm
Connections	WLAN, TCP/IP, USB
Control	7“ LCD-Display, touch control

Quick & easy system

Zero cleaning effort

Optional Force Feedback

Material identification (RFID)

Certified auto calibration (ACCS)

Remote control by TeamViewer ®

Taylor made for dentists & practice labs

Clean & environmentally friendly disposal

Open system

Start 3D printing with professional equipment but low investment budget

D20+ cartridge

The professional 3D printing solution for small labs with minimal investment.

The D20+ cartridge combines a large installation area with the highest standards of quality and speed needed for short delivery times. With the cartridge, all consumables for 3D printing are provided, such as resin and the resin reservoir.

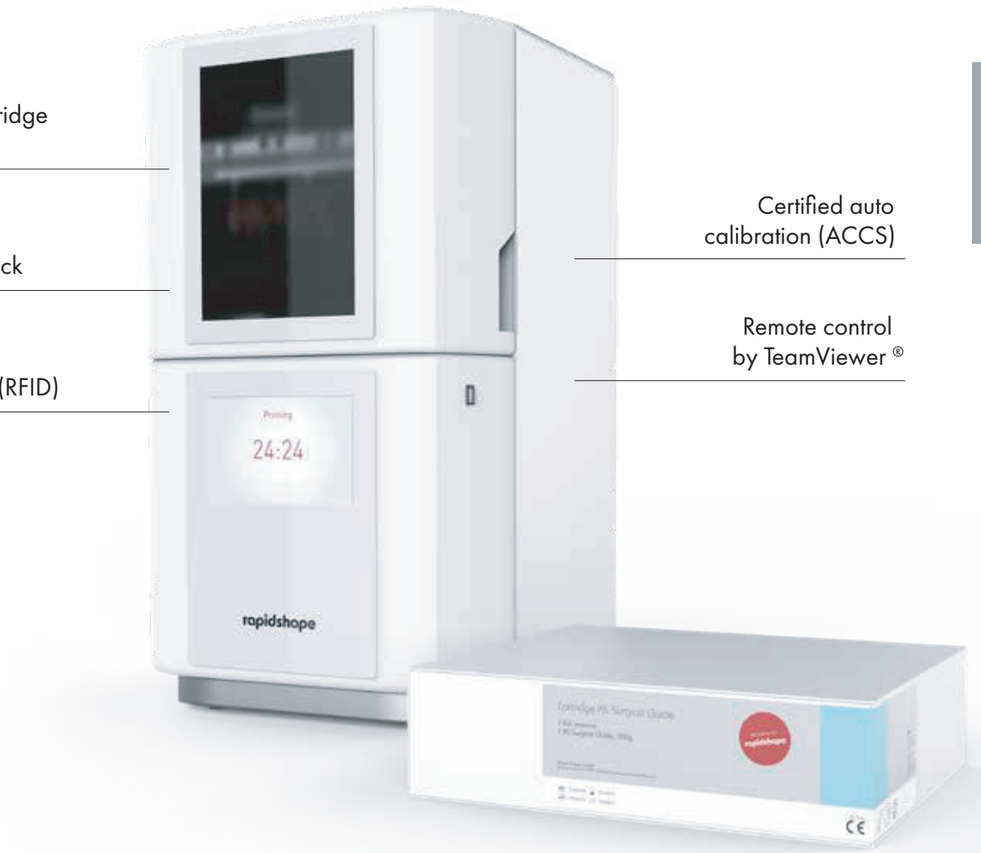
Producing up to 7 parts per day, the D20+ cartridge is the ultimate deal for you to start professional 3D printing. Upgrading to a D20+ with an open material system is available at any time.

Performance parameters	D20+ cartridge
Building area	133 × 75 mm
Native pixel	+/-34 µm
Max. part height	90 mm
Light source	385 nm UV LED
Resolution	HD 1920 × 1080 px
Dimension (W × H × D)	335 × 541 × 349 mm
Connections	WLAN, TCP/IP, USB
Control	7" LCD-Display, touch control
Consumables	Cartridge, multi-use with 100 or 200 gr, resin and matching resin reservoir

Quick & easy multi-use cartridge system

Optional Force Feedback

Material identification (RFID)



Certified auto calibration (ACCS)

Remote control by TeamViewer ®

Taylor made for small labs

Clean & environmentally friendly disposal

Cartridges for many indications

Economic 3D printing solutions for high quality and fast delivery labs

D20+

The most economic professional 3D printing solution for dental labs.

More flexibility and consistently professional print results: the D20+ offers a flexible and certified 3D printing solution for laboratories through its open material system with validated processes.

This printer not only excels with top of the class quality, but also with a large print area and short production times. Optional high speed Force Feedback technology makes printing times, e.g. for models within ~ 25 minutes possible.

Performance parameters	D20+
Building area	133 × 75 mm
Native pixel	+/– 34 µm
Max. part height	90 mm
Light source	385 nm UV LED
Resolution	HD 1920 × 1080 px
Dimension (W × H × D)	335 × 541 × 349 mm
Connections	WLAN, TCP/IP, USB
Control	7" LCD-Display, touch control
New features	Faster print speed Larger LCD screen Touch control Full cloud connectivity

Optional
Force Feedback

Resin handling system
(RHS) with RFID

Certified auto
calibration (ACCS)

Remote control
through TeamViewer ®

Small space requirement

Low acquisition cost

Open system

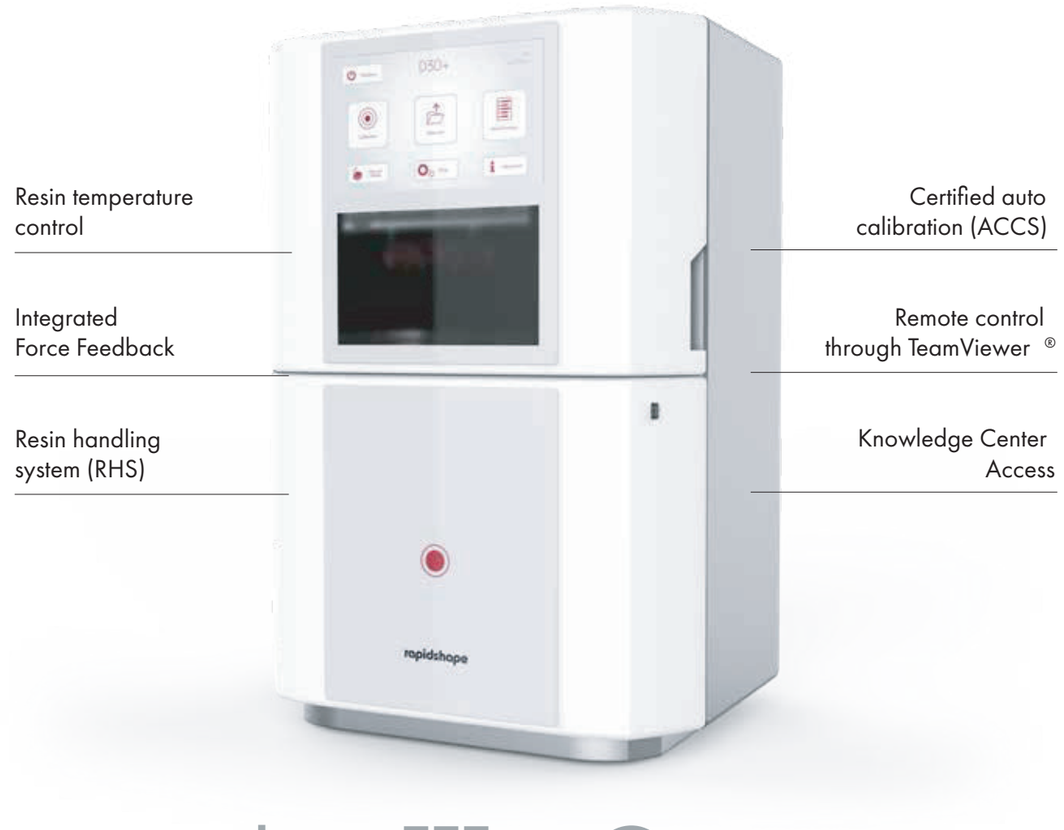
D30+ and D40 II

Fast, flexible and semi-automated: The workhorse for professional labs.

The powerful D30+ and D40 II again set new standards in terms of quality and productivity. The temperature-controlled resin reservoir provides process stability and increases part quality even more. The printers enable fast, high-volume print results with consistent quality - either through the Automatic Separation Module ASM of the D30+ or the double-sized building platform of the D40 II.

The ASM enables continuous operation without any manual effort to take off the parts from the platform (patent pending).

Performance parameters	D30+	D40 II
Building area	133 × 75 mm	2 × 133 × 75 mm (dual projection unit)
Native pixel	+/– 34 µm	+/– 34 µm
Max. part height	110 mm (with ASM 40 mm)	110 mm
Light source	385 nm UV LED	385 nm UV LED
Resolution	HD 1920 × 1080 px	dual HD 1920 × 1080 px
Dimension (W × H × D)	480 × 690 × 410 mm	480 × 690 × 410 mm
Connections	WLAN, TCP/IP, USB	WLAN, TCP/IP, USB
Control	10" touch-screen	10" touch-screen
New features	Faster print speed Automatic part separation module Full cloud connectivity	Full cloud connectivity



Automatic Separation Module (ASM) for D30+

Designed for volume production

User friendly

Open System

D30+ ortho

The fast, precise and reliable ortho printer for up to six models in ~ 20 minutes.

The D30+ ortho is a high quality DLP printer featuring long lifetime and consistent quality over time at an attractive price level. Tailor made for ortho indications, this system features an extra large build area and produces validated ortho models and individual trays. Furthermore, the temperature controlled resin reservoir provides process stability.

Performance parameters	D30+ ortho
Building area	165 × 93 mm
Native pixel	+/– 43 µm
Max. part height	110 mm
Light source	405 nm UV LED
Resolution	HD 1920 × 1080 px
Dimension (W × H × D)	480 × 690 × 410 mm
Connections	WLAN, TCP/IP, USB
Control	10" touch-screen

Resin temperature control

Integrated Force Feedback

Resin handling system (RHS)

Certified auto calibration (ACCS)

Remote control through TeamViewer ®

Knowledge Center Access

Designed for volume production

User friendly

Open System

RS wash

Perfect finish for dental products from the printer: automatic and environ - mentally-friendly cleaning.

The RS wash automated cleaning system boasts several new features to make cleaning your prints safe and easy (patents pending).

Fully automatic cleaning in approximately 6-8 minutes without the need to handle sticky resins. Easily achieve optimal results without wasting cleaning materials. The RS wash connects wirelessly to your printer, streamlining how you clean your prints.

Performance parameters	RS wash
Volume	130 × 75 × 60 mm
Cleaning time	approx 6–8 minutes (depending on material)
Cleaning medium	Isopropanol, ethanol
Connections	WLAN/LAN
Dimension (W × H × D)	230 × 270 × 450 mm

Effective computer-controlled cleaning agent use

Exchangeable liquid container (plug-in system)

Stackable with RS cure

Wireless connectivity to printer

Clean process, no handling of sticky resins

Reduced smell

RS cure

Safety and speed throughout the entire production process: 360° curing with certified programs.

The RS cure unit offers a validated material curing in just about 6-10 minutes. The illumination system cures homogeneously from all sides by powerful LEDs in combination with heating and vacuum (patents pending). The radiation covers the UVA and UVB spectrum.

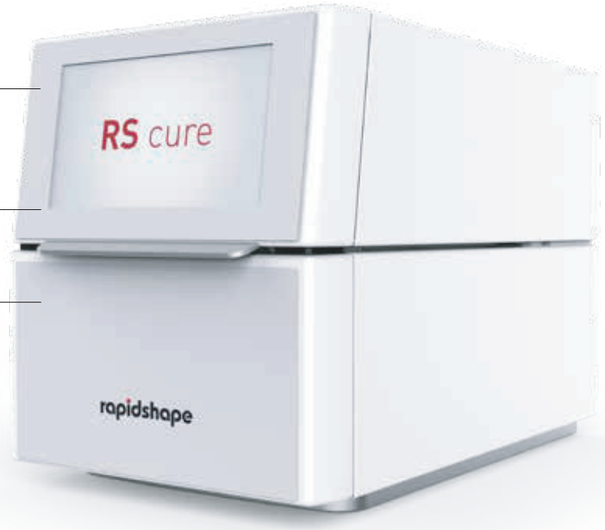
Mechanical properties and biocompatibility of the final product is certified by various material suppliers. Equipped with a data link to the 3D printer, the right curing program is pre-selected and starts with the touch of a button.

Performance parameters	RS cure
Volume	130 × 75 × 60 mm
Curing time	approx 6 –10 minutes (depending on material)
Connections	WLAN/LAN
Dimension (W × H × D)	230 × 270 × 380 mm
Version	with vacuum

360° illumination in one go

Certified auto calibration (ACCS)

Stackable with RS wash



Validated process

Compatibel with various material suppliers

Works with vacuum

Wireless connectivity to printer

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Industrial manufacturing solutions: Stand-alone or in sequence with full automation

D70+

The standalone 3D printer for industrial dental production.

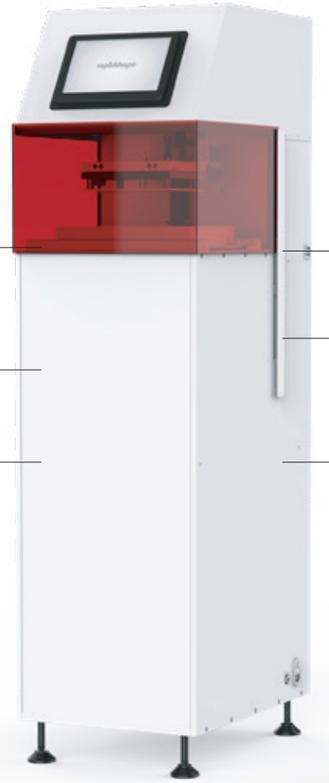
Rapid Shape D70+ offers all features for the volume production of high quality dental products. A true industrial grade printer engineered for 24/7 production on 100 % load. Modular high performance sub-systems including a dual-circuit cooling system with heat exchanger ensure optimal operation. Open system architecture allows a wide range of materials.

Performance parameters	D70+
Intended use	General dental
Building area	232 × 137 mm
Native pixel	+/– 23 µm
Max. part height	150 mm
Light source	385 nm, ultra high power UV LED
Resolution	4K 3840 × 2160 XPR
Dimension (W × H × D)	443 × 1593 × 625 mm
Connections	TCP/IP, USB
Control	10" touch-screen

AC controlled interior for continuous use

Certified auto calibration (ACCS)

Optional automatic resin refill



Remote control by TeamViewer ®

Webbrowser Access

Connection to process.net database system

24/7

Designed for industrial continuous manufacturing

E/pcs

Lowest cost per part

Joint development of applications

D90+ with Platform Changer

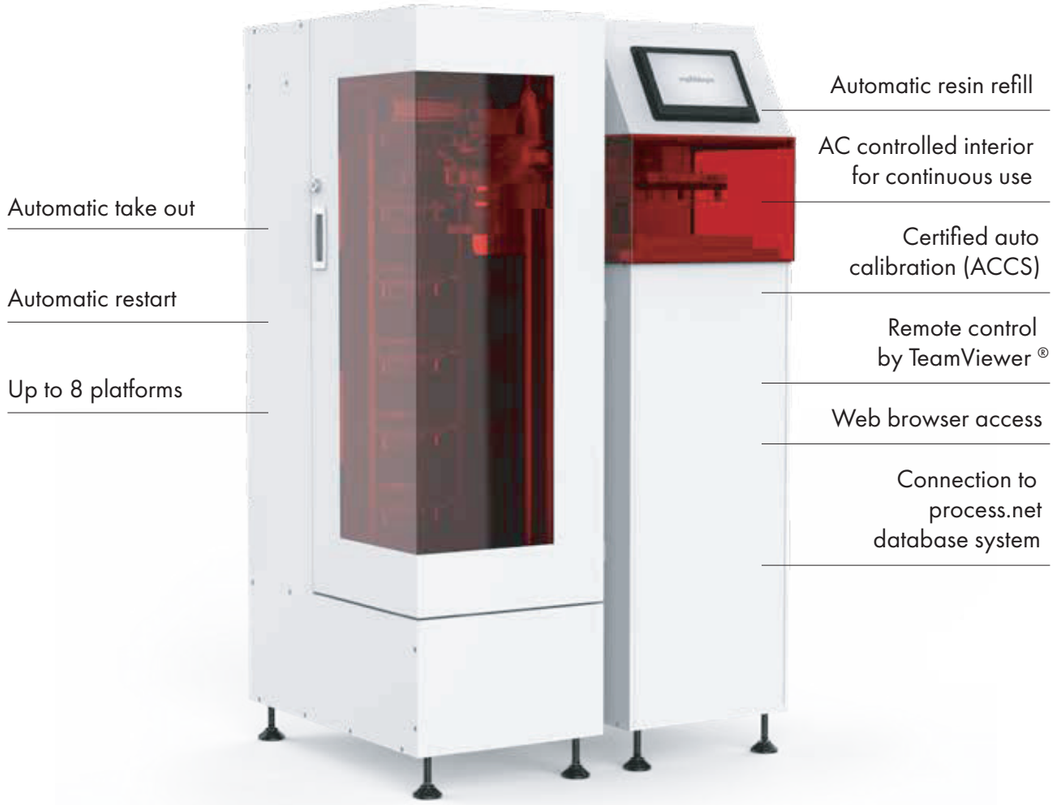
Reliable, open and most cost-effective production with automated platform changing.

The D90+ with Platform Changer is a high-performance printer for centralized production.

D90+ is a heavy use unit without any compromises in quality. Highest up-time rate, thanks to the patented Force Feedback technology, and lowest depreciation per part produced. The open system architecture allows a wide range of materials.

The Platform Changer (PFC) is the key automation system for up to eight self-loading platforms. The ready built job is taken out directly and the next print starts without any delay. In conclusion the machine works without breaks and even in night shifts.

Performance parameters	D90+	Platform Changer (PFC)
Building area	232 × 137 mm	
Native pixel	+/– 23 µm	
Max. part height	150 mm	
Light source	385 nm, ultra high power UV LED	
Resolution	4K 3640 × 2160 px XPR	
Dimension (W × H × D)	625 × 1593 × 443 mm	500 × 1593 × 800 mm
Connections	TCP/IP, USB	
Control	10" touch-screen	
No. of platforms		6 pcs with 120 mm height 8 pcs with 70 mm height
New features	High resolution projector Larger print area	



Automatic platform changing

E/pcs

Lowest cost per part

24/

Industrial continuous manufacturing

D90+ with cabinet or inline

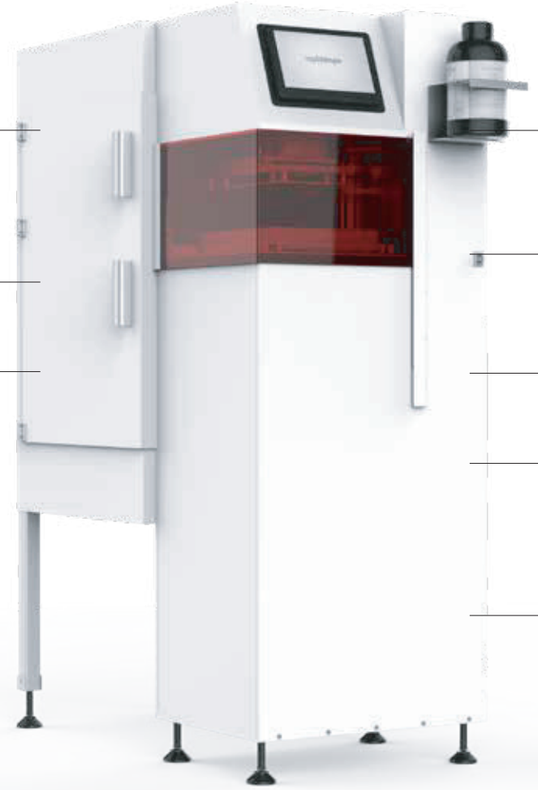
Perfect workflow at maximum speed with consistent quality.

High reliability, high sturdiness, re - producible quality over time – perfect results in a in a high performance production line. Standalone or for a fully automatic production line of your 3D printed parts.

Robot-supported functions are enabled through the automated part separation module (ASM). This module places the printed parts either in a cabinet or on a conveyor belt system for post-processing.

The D90+ enables true in-sequence manufacturing, with no breaks no matter day or night.

Performance parameters	D90+
Building area	232 × 137 mm
Native pixel	+/– 23 µm
Max. part height	150 mm
Light source	385 nm, ultra high power UV LED
Resolution	4K 3640 × 2160 px XPR
Dimension (W × H × D)	625 × 1593 × 443 mm
Connections	TCP/IP, USB
Control	10" touch-screen
New features	Automation functions High resolution projector Larger print area
Versions	Cabinet Inline (Specifications on request)



Part separation module (ASM)

Storing for large quantity of printed parts

Automatic resin refill

AC controlled interior for continuous use

Certified auto calibration (ACCS)

Remote control by TeamViewer ®

Web browser access

Connection to process.net database system

Automatic Separation Module (ASM)

Optional with cabinet or conveyor belt

24/7

Industrial continuous manufacturing

D100+ ortho with cabinet or inline

Industrial ortho production: Reliably and precisely up to 24 ortho models in ~ 30 minutes.

The D100+ ortho is tailor made for ortho models and features a large build area and validated ortho and aligner model precision. The D100+ ortho is a heavy use unit that does not compromise quality. The automated part separation module (ASM, patent pending) collects multiple print jobs in an integrated catch tank, eliminating the need for constant attention from a human operator. The printer is capable of working 24/7, without breaks, to push your company to the next level.

The D100+ also enables true in-sequence manufacturing, with no breaks no matter day or night.

Performance parameters	D100+ ortho
Building area	338 × 190 mm
Native pixel	+/– 44 µm
Max. part height	150 mm
Light source	405 nm, ultra high power UV LED
Resolution	4K 3840 × 2160 XPR
Dimension (W × H × D)	625 × 1593 × 443 mm
Connections	TCP/IP, USB
Control	10" touch-screen
Versions	Cabinet Inline (Specifications on request)


Automatic Separation Module (ASM)


Optional with cabinet or conveyor belt

Industrial continuous manufacturing

Lowest cost per part

Industrial Automation: Shift change on the way to mass production

Step 01 – CAM

Netfabb

Automatic digital print-job preparation

Step 02 – Load Balancing

RS production control

Automatic control of all print components in the production network

Step 03 – Conveyor System

RS conveyor

Automatic product removal post print-job

Step 04 – Cleaning System

RS clean C

Automatic positioning into the wash-unit

Step 05 – Monitoring

RS production control

Process and batch checking through to cleaning

Certified Dental Material Partners

Rapid Shape and the leading material manufacturers combine strength for full flexibility and availability. An end-to-end certified workflow is supported.

With Rapid Shape you have the full choice.

DeltaMed TURNING IDEAS INTO MATERIALS
DETAX
DMG
Dreve
GC
keystone industries
rapidshape
SHERA digital
straumann
voco

The integrated workflow: interlinked, easy, adaptable

With our newest Netfabb CAM software release, Rapid Shape offers a seamless connection to Dental Wings, 3Shape and Exocad. Design parameters, data transmission and print preparation functions are preconfigured and automated. In addition through the cloud, Rapid Shape 3D printers can be connected to every laboratory.

CAM

AUTODESK®
NETFABB®

Integrated workflows feature autonomous

- material pre-selection
- part orientation
- part positioning
- adding necessary supports
- build creation

Print

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DESIGN | SCANNING | 3D PRINTING | MILLING | MATERIALS | POST-PROCESSING

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Digital Solutions for Dentistry

Toronto, ON
Montreal, QC
Atlanta, GA

dental.proto3000.com
info@proto3000.com
1-888-887-7686

CONTACT US