GENERA.





G1/F1 SYSTEM



Desktop. Clean. Automated.

The G1/F1 brings the GENERA workflow and automation to your desktop. It is compatible with the GENERA validated material library and uses a cartridge-based material unit to store the resin. The G1/F1 utilizes the GENERA shuttle technology for a clean and safe workflow. The F1 uses a mercury flash bulb for curing the parts in an inert atmosphere.

The parts are cleaned in two cleaning tanks specially designed for secure use with IPA.

The whole workflow is RFID tracked.

The material unit, combined with a material cartridge, ensures clean and safe handling. The material unit is automatically opened by the G1 and automatically dispensed. An integrated recoater helps to mix the resin within the resin vat to ensure consistent print results. The vat can be heated and tracks low resin levels as well as the film lifetime. After the printing process the G1 automatically stores the part in the shuttle. The part is then automatically post-processed by the F1.

HARD FACTS

Print volume

@70 μm x: 134 mm

y: 76 mm

z: 150 mm

Wavelength

 $385\,\mathrm{nm}\,\mathrm{DLP}$

2K Resolution (1920×1080)

Glove free process with shuttle technology and automated post-processing

Material unit with cartridge for easy and secure resin handling

Active carbon filter for odor reduction

Post-curing in inert atmosphere

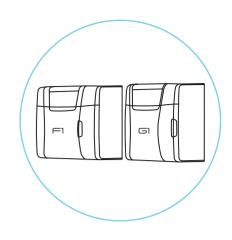
Documentation and traceability by RFID tag and database

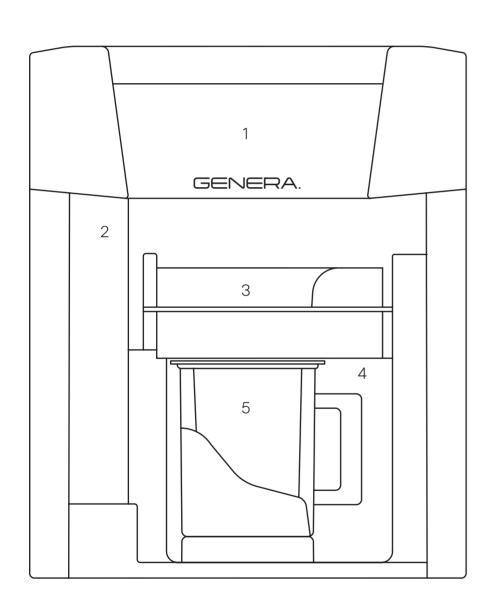




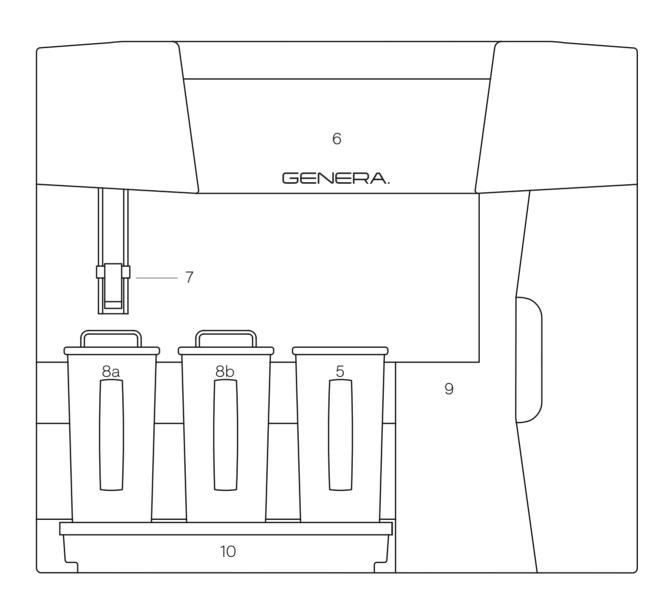
2

G1/F1





3



SYSTEM COMPONENTS G1/F1

- Human Machine Interface (HMI) with machine control, part preview and printing progress
- 2 Automatic handling system for platforms
- Material unit and cartridge
- 4 2K 385 nm DLP light engine with 70 μm pixel size
- Glove-free process with RFID-tagged transport-shuttle for fully automated post-processing
- 6 Human Machine Interface (HMI) with machine control, part preview and status progress
- 7 Automatic handling system for platforms
- 8a, 8b Glove-free process with

 RFID-tagged pre- and postwashcontainer with Integrated magnetic
 stirrer for fully automated washing
- Post-curing chamber
 - o High-power mercury flash bulb
 - o Inert atmosphere o Part drying

Overflow protection

10

4



alphacam GmbH Erlenwiesen 16 D-73614 Schorndorf Tel.: +49 (0) 71 81 92 22 - 0 info@alphacam.de alphacam austria GmbH Handelskai 92, Gate1 / 2. OG / Top A A-1200 Wien Tel.: +43 (0) 1 36 19 600 - 0 info@alphacam.at alphacam swiss GmbH Zürcherstrasse 14 CH-8400 Winterthur Tel.: +41 (0) 52 - 262 07 - 50 info@alphacam.ch



alphacam.de

.at