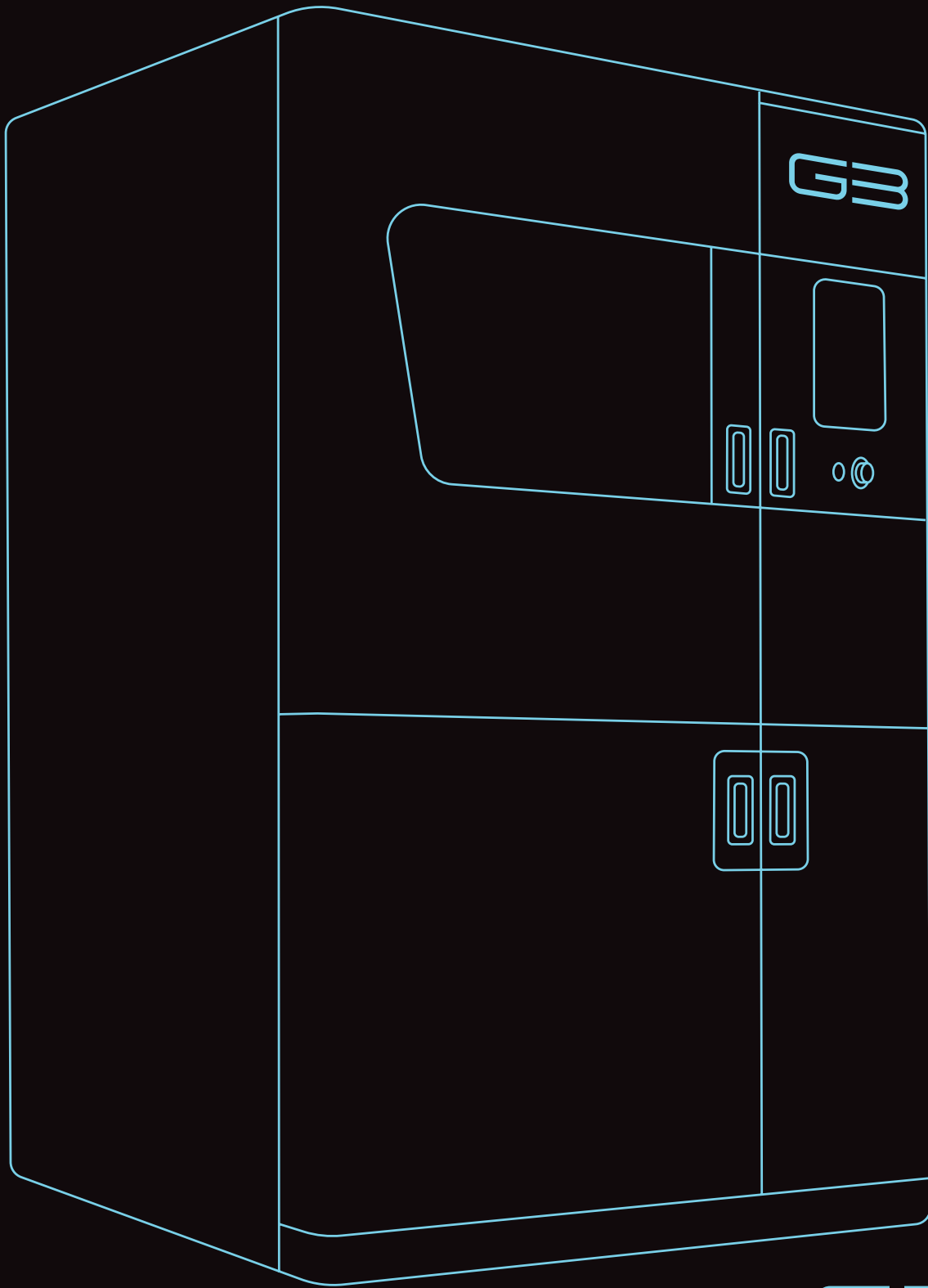


# GENERA.



Creation made reliable.

**GB**

The **All-in-one** System  
Coming in **2022**

## G3 ALL IN ONE SYSTEM

# G3

The powerful technologies of the G2 and F2 have now been integrated into one compact machine. For the first time ever, users can take a digital part file to a fully washed and post-cured part, all in one machine. G3 can be preconfigured for 40, 70, or 100  $\mu\text{m}$  pixel size resolutions using the same powerful 4K 385nm DLP light engine found on the G2. Print with the same flexibility as the G2 using the open material vat resin system and Genera's ever-expanding material database. Parts are automatically cleaned after printing with our non-flammable Genera Clear3d cleaning fluid in the wash station with integrated stirrer. Final post-curing is completed in the high-powered and homogeneous UV LED post-curing chamber that is temperature programable with optional inert atmosphere flooding.

Print, wash, and post-cure.  
All with the G3.

### HARD FACTS

<b>Print volume @40/70/100 <math>\mu\text{m}</math></b>	<b>Available preset pixel sizes</b>
x: 153/268/384 mm	40 $\mu\text{m}$ or
y: 87/153/216 mm	70 $\mu\text{m}$ or
z: 320 mm	100 $\mu\text{m}$

<b>Wave length</b>	<b>Speed</b>
385 nm DLP	Up to 3 mm/min*

<b>Light intensity</b>	<b>4K Resolution</b>
max. 30 mW/cm <sup>2</sup>	(3840 x 2160)

**Active carbon filter for odor reduction**

**Fully automated post-processing**  
(1 Build Job)

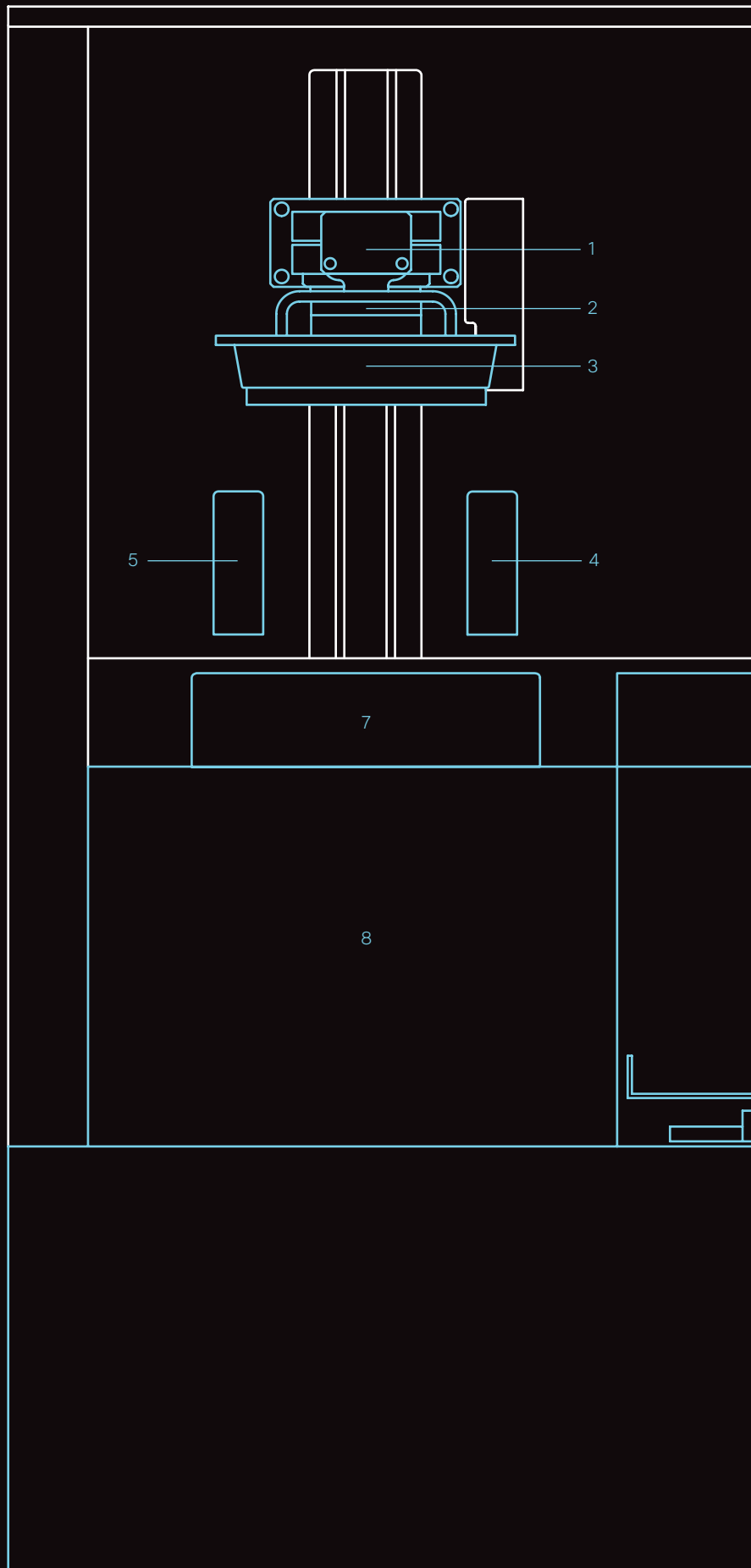
**Non-flammable cleaning fluid**  
(Genera Clear3d)

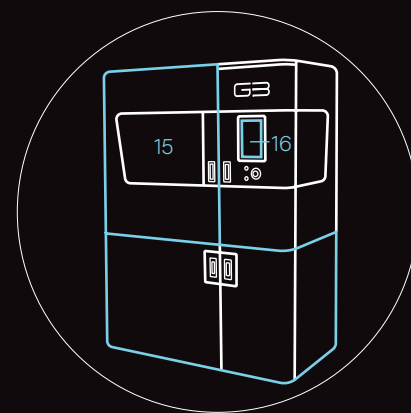
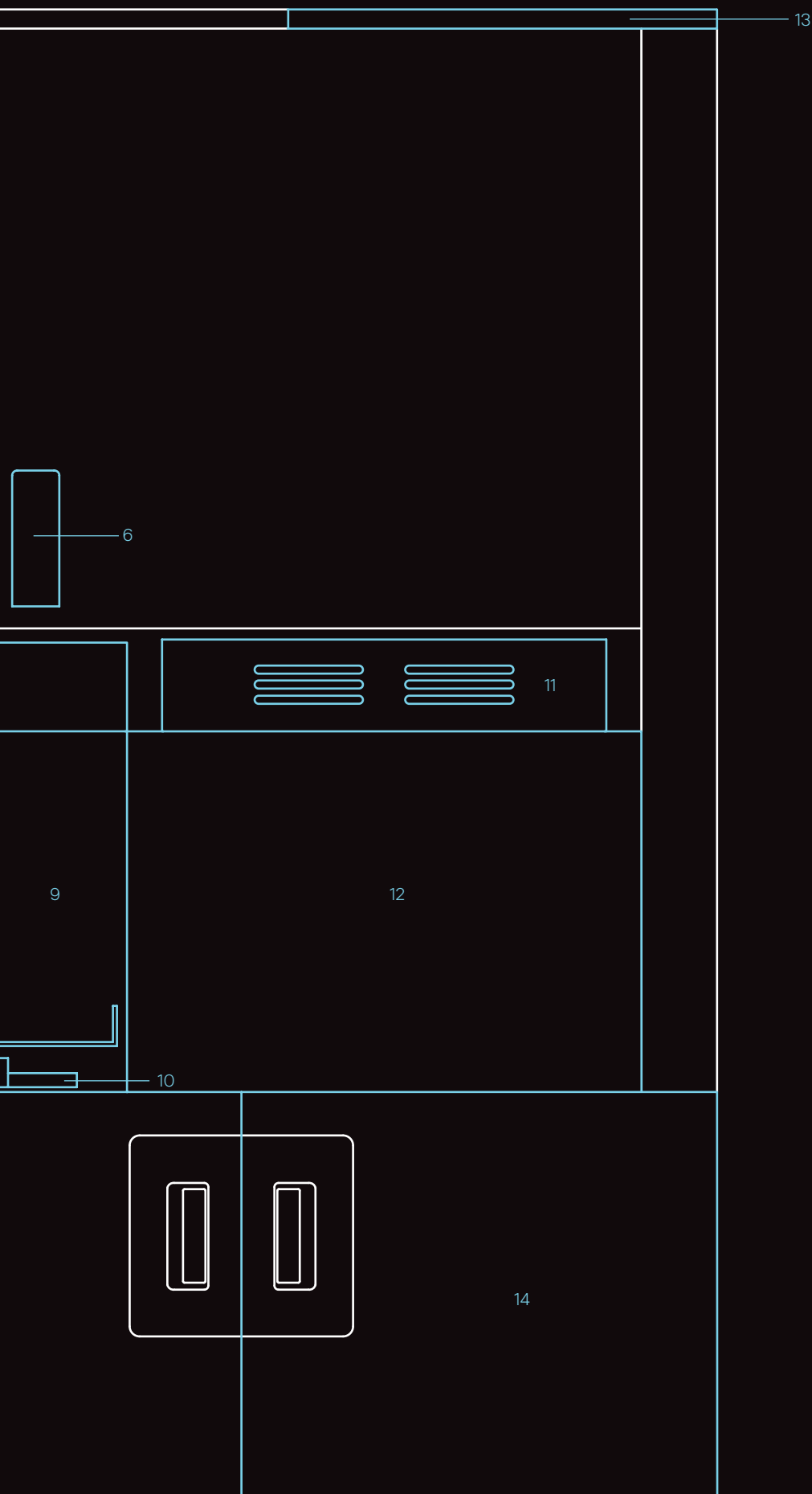
**High power and uniform LED curing  
chamber @ 405 nm**

**Post-curing in inert atmosphere with  
part tempering**

**Intelligent database for printing, post-  
processing and documentation**

\*depending on material and  
vat system





## MACHINE COMPONENTS

- 1 Print/post-processing diagnostic sensors
- 2 Automatic handling system for platforms
- 3 Heated build platform
- 4 Resin temperature sensor
- 5 Resin level sensor
- 6 Wash fluid level sensor
- 7 Special heatable vat system
- 8 4K 385 nm DLP light engine
- 9 Glove-free process with fully automated post-processing
- 10 Integrated magnetic stirrer and protection for delicate and efficient cleaning of green parts
- 11 Heating unit (part drying and tempering)
- 12 LED post-curing chamber
- 13 LED for status information
- 14 Resin tank and lightproof, automated resin dispensing system for high throughput production
- 15 Secure, fully enclosed, air-filtered machine
- 16 Human Machine Interface (HMI) with machine control, part preview, and print-/post-process progress



PRELIMINARY SPECIFICATION

GENERAL

<b>Description</b>	All-in-One System (printing and post-processing)
<b>Materials</b>	Validated with all resins from the Genera open material library
<b>Build Volume (XYZ)</b>	Available preset pixel sizes (max. 26.5 L)
@100 $\mu$ m	384 × 216 × 320 mm (15 × 8.5 × 12.6 in)
@ 70 $\mu$ m	268 × 153 × 320 mm (10.55 × 6 × 12.6 in)
@ 40 $\mu$ m	153 × 87 × 320 mm (6 × 3.4 × 12.6 in)
<b>Resolution</b>	4K DLP (3840 × 2160)
<b>Wavelength</b>	385 nm
<b>Light Intensity</b>	Max. 30 mW / cm <sup>2</sup> (@40 $\mu$ m)
<b>Build Speed</b>	up to 3 mm / min
<b>Cleaning Fluid</b>	Genera Clear3d (non-flammable) 2 × 60 L (pre-wash and post-wash)
<b>Heating / Drying Chamber</b>	up to 80 °C
<b>LED Curing Chamber</b>	405 nm (optional under inert atmosphere)
<b>Typical Post Processing Time</b>	45 min
<b>Regulatory Compliance</b>	CE

PHYSICAL FOOTPRINT

<b>System Size (W × D × H)</b>	1420 × 970 × 1960 mm (55.9 × 38.1 × 77.1 in)
<b>System Weight</b>	approx. 700 kg (1.543 lbs)

FACILITY REQUIREMENTS

<b>Power Requirements</b>	AC 220-240 V, 50-60Hz, 15A
<b>Power Consumption</b>	3500 W (max)
<b>Network Connectivity</b>	Ethernet
<b>Compressed Air Connection</b>	6–12 bar (0.6–1.2 MPa)
<b>Nitrogen Connection</b>	3–6 bar (0.3–0.6 MPa)
<b>Exhaust (optional)</b>	Integrated active carbon filters (optional facility exhaust)
<b>Operating Conditions</b>	+15 °C to +25 °C
<b>Recommended Installation Space (W × D × H)</b>	1920 × 2870 × 2060 mm (75.6 × 113 × 81 in)

SOFTWARE AND DESIGN TOOL

<b>CAM</b>	Genera Utility Center
<b>Print- / PPU-Cockpit</b>	Live print and post processing monitoring

