

REGEN+U



R - GEN 100 DATASHEET

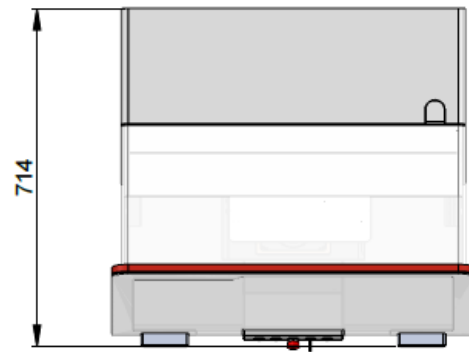
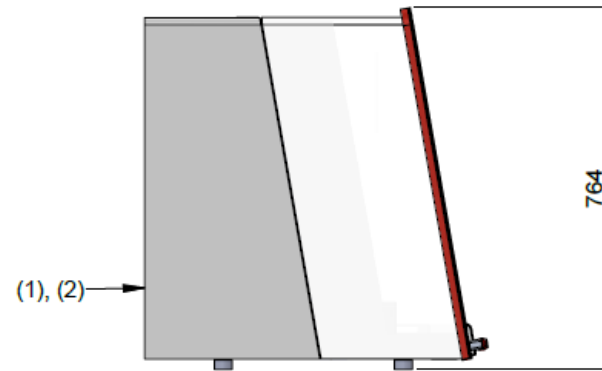
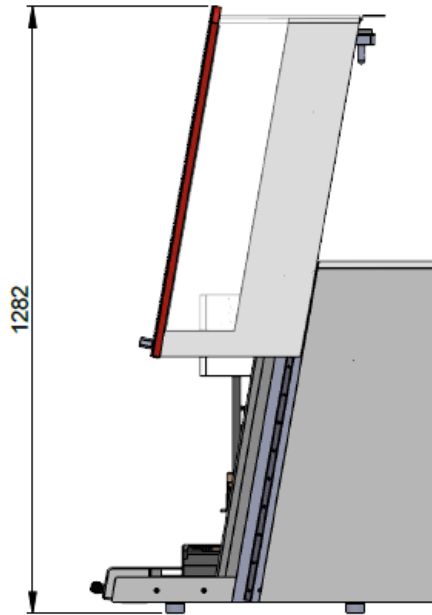
PRODUCT NAME	R-GEN 100
SHORT DESCRIPTION	Tabletop 3D Bioprinter with fully modular configuration
BASE INSTRUMENT	<p>3D printing robot with closed-loop position control</p> <p>Instrument interface R-GEN CONTROLLER</p> <p>Computer & Display (including keyboard & mouse)</p> <p>Tool calibration system, vacuum sample mounting system</p> <p>Built-in interface for electrospinning and -writing kit</p> <p>Built-in interface for temperature control management system</p>
INSTRUMENT CONFIGURATION	<p>Accommodates</p> <ul style="list-style-type: none"> - up to 5 individually configurable dispensing tools for multi-material / multi-cellular 3D constructs. - up to 2 light curing kits for in-process material crosslinking. - substrate height calibration system for printing on varying height labware substrates. - modular functional workzones for sample fixation, substrate temperature control, or electrospinning and writing. - process supervision system with modular observation unit.
SOFTWARE	Live process interaction with R-GEN CONTROLLER including parameter adaptation.
LABORATORY WORKSPACE FEATURES	<p>Built-in anti-vibration systems and user safety</p> <p>Interior illumination</p> <p>CE conformity</p>
INSTALLATION DATA	<p>Dimension: 770 x 720 x 760 mm</p> <p>Weight : 160 kg</p> <p>Pneumatic : 8 Bar - Air quality : ISO 8573-1:2010 [1:4:1]</p> <p>Network Fuse : 100-240VAC/4.46-8.52A</p> <p>Frequency : 50-60 Hz</p>
LABORATORY OPERATIONAL ENVIRONMENT	<p>Temperature : 15-35°C</p> <p>Humidity : Max. 60 % RH</p>
STORAGE	<p>Temperature : 5-45°C</p> <p>Humidity : Max. 60 % RH</p>

FOOTPRINT (Requested working area)	770 x 720 x 1250 mm (with hood opened)
PERFORMANCE DATA	
MAXIMUM BUILD VOLUME	130 x 90 x 65 mm
SPEED	Dispensing 50 mm/s; Quick-Travel: 100 mm/s
DISPENSING PRESSURE	Max. 8 Bar
MINIMAL STRAND DIAMETER	+/- 10 μ m – material and technology dependent

All the data/information are subject to change without notice

Instruments Compatibility

READY TO USE TOOLS	Pneumatic Strand Dispenser, Pneumatic Drop Dispenser, Pneumatic Melt Dispenser, Volumetric Strand Dispenser
WORKZONES	Compatible with Standard Workzone Kit, PhysTemp Kit, High Temperature Kits, Electrospinning and Writing Kit
OPTIONS	Compatible with Light Curing Kits, Process Supervision System
DESIGN SOFTWARE	Compatible with SHAPER planning software for 2D/3D design and bioprinting process and protocol management
THIRD-PARTY PRODUCTS	Compatible with Liquid Temperature Control Unit for cartridges and workzone temperature control



POWER SUPPLY (1): 230 VAC, 50Hz, 6.3A / 110VAC, 60 Hz, 10A

COMPRESSED AIR SUPPLY:
Pressure input (2): 0.6 MPa – 1Mpa
Displacement: 108 l/min

OPERATIONAL PERFORMANCE (FOR INDOOR USE ONLY):

Laboratory environment temperature range: 15°C to 35°C
Environment humidity: 20% - 60% relative humidity

WEIGHT:
Ca. 160 kg