REGENHU

R -GEN 200 DATASHEET

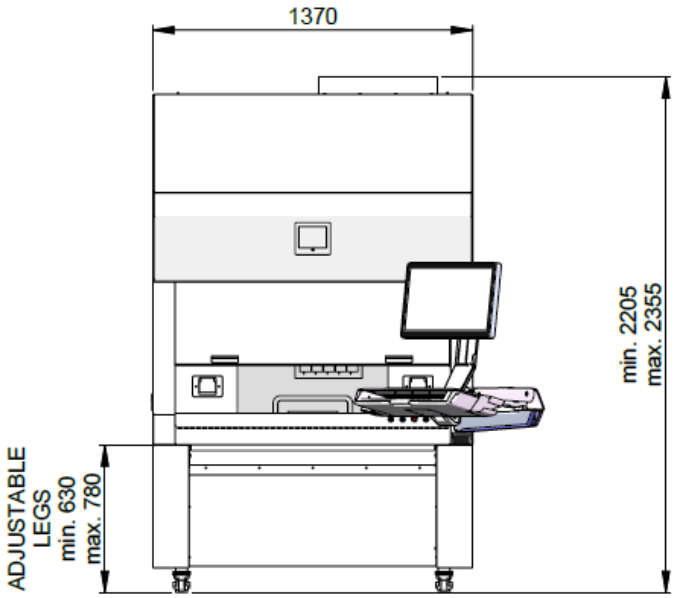
PRODUCT NAME	R-GEN 200
SHORT DESCRIPTION	3D Bioprinting Station with fully modular configuration in biosafe environment
BASE INSTRUMENT	3D printing robot with closed-loop position control Instrument interface R-GEN CONTROLLER with multi-touch input, Computer (including keyboard & mouse) Tool calibration system, vacuum sample mounting system Built-in interface for electrospinning and –writing kit Built-in interface for temperature control management system
INSTRUMENT CONFIGURATION	Accommodates - 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	Class II Biosafety Enclosure (Type A2) - NSF/ANSI 49 Built-in anti-vibration systems and user safety Ultraviolet germicidal lamp Configurable work bench height Casters Configurable mechanical fixation of display panel (left or right side) CE conformity Biosafety calibration and certification excluded

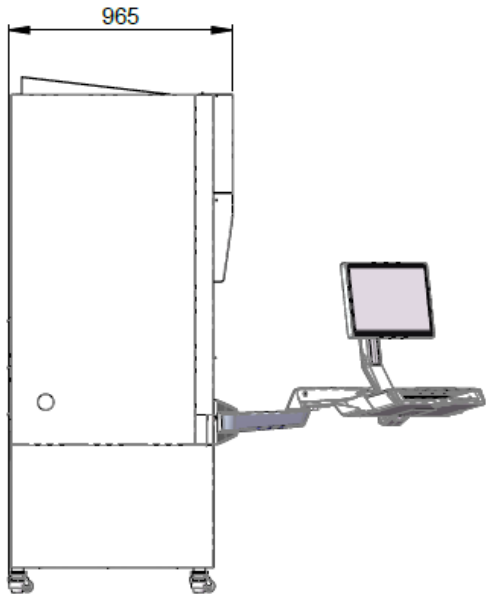
INSTALLATION DATA	Dimension: 1366 x 963 x 2202 mm Weight: ca 600 kg Pneumatic: 8 Bar - Air quality: ISO 8573-1:2010 [1:4:1] Network Fuse: 100-240VAC/4.46-8.52A Frequency: 50-60 Hz
LABORATORY OPERATIONAL ENVIRONMENT	Temperature: 15-35°C Humidity: Max. 60 % RH
STORAGE	Temperature: 5-45°C Humidity: Max. 60 % RH
FOOTPRINT (Requested working area)	Requested working area with display panel mounted Min: 2080 x 2460 x 2205 mm Max: 2080 x 2460 x 2355 mm
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 DIMENSION	+/- 10 μm – material and technology dependent

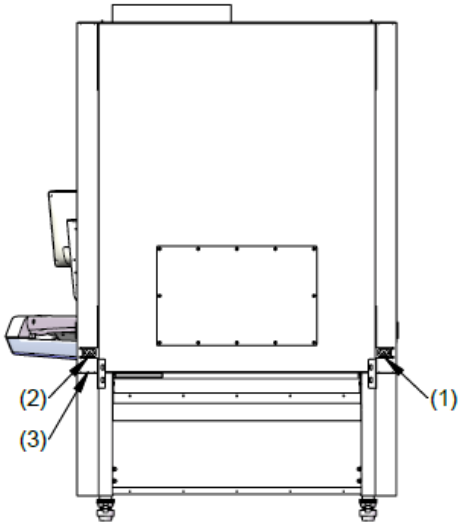
All the data/information are subject to change without notice

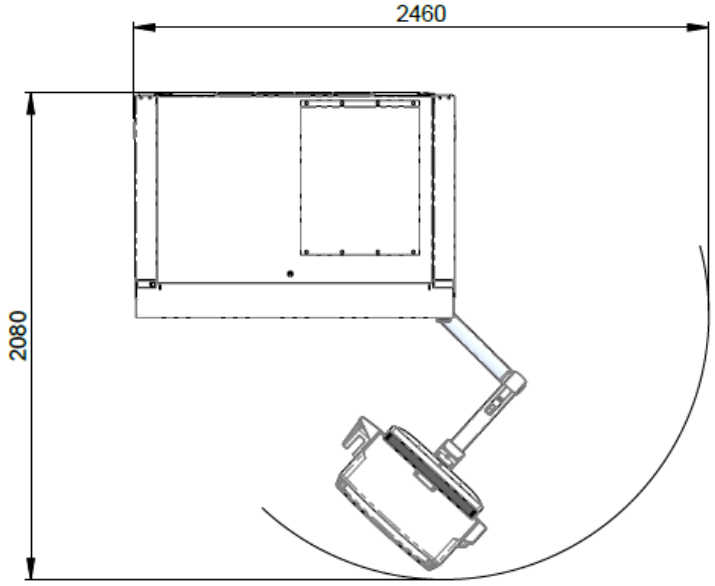
Instruments Compatibility

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

Power supply cabinet (1): 230 VAC, 50Hz, 10A / 110VAC, 60 Hz, 10A
Power supply instrument (2): 230 VAC, 50Hz, 6.3A / 110VAC, 60 Hz, 10A

COMPRESSED AIR SUPPLY

Pressure input (3): 0.6 MPa – 1Mpa
Displacement: 108 l/min

EXHAUST AIRFLOW 338 CFM (574 CMH)

OPERATIONAL PERFORMANCE (FOR INDOOR USE ONLY)

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

WEIGHT

Ca. 600 kg

R+H