

TECHNICAL DETAILS



General technical data

Dimensions (W/H/D)	mm	760 x 1230 x 730
Weight	kg	230

Electrical supply data

Nominal voltage (AC)	VAC / Hz	230 ± 10
Supply frequency	Hz	50-60
Maximum intake current	A	12
Fuse protection provided by customer	A	Connect to a separate power circuit with residual circuit breaker B16A
Protection rating	-	IP 20 (Device is protected against access of objects, but not protected against access of water)

Environmental conditions for storage and operation

Temperature range	°C	5 - 40
Relative humidity, maximum	% rH	80
Device positioning	-	Dry interiors
Operating altitude	m AMSL (max.)	2.000
Pollution degree	m AMSL (max.)	2

Incubator

Internal volume	L	240
Setting temperature range	°C	+18 to +50
Setting temperature step	°C	0.1
Setting relative humidity range	% rH	30 - 90
Setting O2 range	%	1 - 21

Robot

Dimensions (W/H/D)	mm	420 x 360 x 360
Weight	kg	8.5
Pipetting volume	µl	5 - 200
Radial operation range	mm	180
Horizontal positioning accuracy	µm	± 35
Vertical positioning accuracy	µm	± 5
Maximum movement speed	mm/s	470
Positioning time	s	< 1.8
Maximum amount of pipette tips		24
Temperature range	°C	5 - 40
Relative humidity	% rH	10 - 80 (non condensing)
Nominal voltage (DC)	VDC	24

Microscope imaging system

Dimensions of body (W/H/D)	mm	100 x 145 x 156.5
Objectives	-	1
Objective magnification	x	20
Z - drive type	-	VoiceCoil
Focus range / resolution	µm	6800 / 0.002
Nominal voltage (DC)	VDC	+ -15
Maximum current consumption	A	1
Camera resolution	MPx	12.3
Pixel size	µm	3.45

Cellular impedance

Throughput (wells per second)	1 / s	14
Measuring frequency	kHz	10
Measuring range impedance Z	Ω	10 - 5000
Measuring range resistance R	Ω	10 - 5000
Measuring range capacity C	nF	0.3 - 3000
Nominal voltage	mV	20
Current density	mA/ cm ²	< 2
Measuring error	%	< 2
Resolution impedance magnitude	Ω	0.01
Resolution impedance phase	°	0.01
Frequency accuracy	%	< 0.01
Current range	mA	0.01 - 10
Sensitivity	%	0.01
Response time	s	0.01
Signal drift	% / d	0.1
Accurateness	%	< 5
Reproducibility (well to well)	%	< 2

pH and pO₂ single channel measuring device

	pO ₂	pH
Measuring range	0 - 50 %	6.0 - 8.5 pH
Resolution	± 0.4 % pO ₂	± 0.05 pH
Response time	s	< 30
Signal drift	0.2 % / week	0.1 pH / week
Accurateness	%	± 1.0 % at 20.9 % pO ₂ ± 0.2 % at pH7
Reproducibility (well to well)	< 5	