Product profile		
Part number	2016-0100	
Article name	HeatPlate	

Description Automation friendly Heater thermoblock. Designed to be integrated in liquid handling and

automation platforms to process labware in chemical and biological laboratories.

Recommended use Automation | Heating | Tubes, Vials, Microplates

HeatPlate | External power supply | Power cords Europe & US | 2x screws to mount device Scope of delivery

(M3 x 18 | DIN 912) | Calibration certificate | Operation & Integration manual

Conforming use System is operated by qualified and trained research and laboratory personnel. Applicable

safety standards or rules need always be fulfilled.

Country of origin DE

Customs tariff code 8419 89 98

Temperature control

Temperature range* RT to 99 °C (RT to 211.82 F) with 0.1 °C increment resolution

Temperature accuracy ± 0.1 °C

±0.5 K at 45 °C | ±0.7 K at 75 °C | ±1.0 K at 95 °C Temperature uniformity*

Heating speed above RT* ~ 7 K/min (10 min from 21 to 95 °C)

^{*} Value depends on the used thermo-adapter. Given value conditions: RT = 21 °C, Adapter = 2016-1041, 96-well PCR, adapter temperature

Thermo-adapter	plates for	different	labware

An adapter is required for optimal temperature transfer to and/or optimal fixation of labware Description

and needs to be purchased separately. The adapter can be exchanged by the user.

All microplates according ANSI-SLAS format Microplates

4-, 6-, 8-, 12-, 24-, 48-, 96-, 384-, and 1536-well microplates, deep well plates, PCR plates

Tubes and Vials 0.2, 0.5, 1.5, 2.0 ml standard tubes | 2.0, 4.0, 6.0, 8.0, 10.0 ml cylindrical shaped vials

Others Custom made adapter on request

Device control

Description Required electronic for remote control is build in the device. No external controller required.

Operation control Remote controlled as described in the Integration Manual

Peripheral interface EIA-232 / RS-232 interface (2 m cable with RS-232 plug-in connector)

optional: USB via USB-Serial Adapters (Rec. DIGITUS DA-70156) or USB via MOXA USB-to-Serial Hub

Status LED in front (GREEN = ok | RED = error)

Electrical

Operating voltage 24 V DC | Imax: 4.5 A | Peff: 85 Watt | Pmax: 108 Watt

Power supply Input: 100 - 240 V AC | 50 - 60 Hz

Output: 24 V DC | Imax: 5.0 A | Pmax: 120 Watt

External power supply unit (CE/UL/CSA approved, 85-264 V AC, 47-63 Hz, IEC/EN60320-1 C14 | Degree of pro-

Power connection* Prewired cable | length 2 m | barrel connector ID 2.5 mm x OD 5.5 mm

Operating, transport and storage conditions

Operating range 5 °C - 45 °C (41 - 113 F) | 10 - 80 % RH | up to 2000 m above sea level | non-condensing

stable (resonance free) | horizontal | dry | inside buildings | even | well ventilated and no dir-Floor base requirements

ect exp. to sunlight

Transportation and storage -10 °C - 60 °C (14 - 140 F) | 10 - 80 % RH | non-condensing

General properties

Housing material Aluminum anodized

Degree of protection IP20 (Protected against solid objects up to 12 mm | No protection against water)

Pollution degree ${f 1}$ (no contamination or only dry, non-conductive contamination, whereby the contamination has no influence)

Airborne sound emission < 70 db (A)

^{*} Only use the device with the delivered power cord. If another power cord is used ensure the wire diameter is adequate.

Dimension and weight		
Dimensions	(W x D x H) 142 x 99 x 62.7 mm 5.59 x 3.9 x 2.47 inch	
Weight	1.3 kg 2.87 lbs	
Packaging size	(W x D x H) $347 \times 252 \times 131 \text{ mm} \mid 13.66 \times 9.92 \times 5.16 \text{ inch} \mid \text{cardboard box}$	
Packaging weight	3 kg 6.61 lbs	
Certifications		
Regulatory compliance	2014/30/EU, 2015/863/EU, 2011/65/EU, DIN EN 61010-1:2020-03, DIN EN 61010-2-010:2015-05, DIN EN 61326-1:2013-07, DIN EN IEC 63000:2019-05, DIN EN 61000-3-2:2015-03, DIN EN 61000-3-3:2014-03	
Patents pending	WO2008135565, US8323588, EP2144716, WO2011113858, US9126162, EP2547431, WO2013113847, US10052598, EP2809436, WO2013113849, US9371889, EP2809435, WO2014207243, US20160368003, EP3013480, WO002022128814A1, WO002022128809A2 Please notify us or our designated agent, if you believe that a user has infringed our intellectual property rights.	

Drawing

