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Product profile	
Part number	2016-0710
Article name	TiltStation
Recommended use	Automation Tilt Microplates
Scope of delivery	TiltStation External power supply Power cords Europe & US 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	8479 82 00
Tilt	
Description	The TiltStation realizes a continuous see-saw (tilt) motion with adjustable speed, time or loop counter. With the three defined and locked positions, a reliable plate transfer and media exchange can be realized.
Tilt frequency range	2 to 100 oscillation per minute with 1 oscil/min increment resolution
Tilt angle	±8°
Maximum weight	500 g
Accel. / Decel. range	1 - 30 seconds with 1 second increment resolution
Positions	3 locked positions: West Home East with accuracy of $\pm0.2^\circ$
ELM positioning	
Description	Patented Edge Locking Mechanism (elm) for repeatable and accurate positioning of microplates on a liquid handling or automation platform. With the elm, labware can either easily be exchanged manually/automatically or it is strongly fixed in a diagonal centered position.
ELM position accuracy	± 0.1 mm
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: 0.4 A Pmax: 10 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 protection: IP20)
Power connection*	Prewired cable length 2 m barrel connector ID 2.5 mm x OD 5.5 mm
* Only use the device with the deliver	red power cord. If another power cord is used ensure the wire diameter is adequate.
Operating, transport and st	orage 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 Floor base requirements

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 $1 \ (\text{no contamination or only dry, non-conductive contamination, whereby the contamination has no influence}) \\$

Airborne sound emission < 70 db (A)

Dimension and weight

Dimensions (W x D x H) 142 x 99 x 83.4 mm | 5.59 x 3.9 x 3.28 inch

Weight 1.35 kg | 2.65 lbs

Packaging size (W x D x H) 347 x 252 x 131 mm | 13.66 x 9.92 x 5.16 inch | cardboard box

Packaging weight 3 kg | 6.61 lbs

Certifications

Regulatory compliance 2014/30/EU, 2015/863/EU, 2011/65/EU, DIN EN 61326-1:2013-07, DIN EN IEC 63000:2019-05

Patents pending WO2010106147, U9126200, EP2408563, DE102009013778, WO2011113858, US9126162,

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Drawing







