

TiltStation®

Automated device for cellular applications

The TiltStation is the essential accessory for liquid handlers to automate cell culture application. It allows to create your cell maintenance workstation. Enable walk away automation and eliminate tedious tasks, free up from error prone manual work and reclaim your most valuable asset: **TIME**

BENEFITS FROM OUR SOLUTIONS

You can automate the following applications:

- Pre-coating of cell culture plates with e.g. collagen
- Media exchange, feeding of cells
- Supply cells with nutrients, oxygen and remove waste products
- Prevent accumulating and allow an evenly distribution of cells in the culture
- Passaging, Trypsin based application steps
- Harvesting and subculturing of cells

System features:

- Defined sloping position and see-saw motion
- Tilt angle of 8°
- Zero position for reliable plate transfer
- 2 reliable fixed tilt positions for media exchange
- ELM mechanism for secure plate positioning
- Continuous tilt motion with adjustable speed
- Programmable time and loop counter
- Easy integration due to identical footprint as known BioShake®



TiltStation	Order no.	2016-0710
-------------	-----------	-----------

Are you tired of manual media exchange?

Do you find yourself staying late or working weekends in order to complete cell growth tasks? Are you frustrated by the variance in results due to changes in performance? If so, we have a solution for you!

QINSTRUMENTS introduces the TiltStation

The TiltStation is a high valuable tool for liquid handling platforms to allow tilting cell plates. The new module offers a secure pipetting height that prevents scratching the cell layer when performing media exchange. With its smooth motion, the TiltStation avoids unnecessary stress to your cells, increases accuracy and brings forth reproducible results.

Understand your pain points

The TiltStation takes all of your tedious manual processes out of the equation and allows for improved accuracy while reducing errors associated with human handling. With its automation capabilities it can provide reproducible results every time which will help ensure successful experiments each time! Additionally, it eliminates user fatigue as well as saves valuable laboratory resources such as time and money while providing consistent quality data sets over extended periods of operation.

Its the right time to bring
Cell Line Development & Cell
Culture Application to the next level

SPECIFICATIONS

TILT	Description	TiltStation realizes a continuous see-saw (tilt) motion with adjustable speed, time or loop counter. Three defined and locked positions, offer a reliable plate transfer and media exchange.	
	Tilt frequency range	2 to 100 oscillation per minute with increment resolution of 1 oscil/min	
	Tilt angle	± 8°	
	Max. loading weight	500 g	
	Accel. / Decel. range	1 - 30 seconds with increment resolution of 1 second	
	Positions	3 locked positions: West Home East with accuracy of ± 0.2°	
DEVICE CONTROL	Description	Remote controlled All electronics built in No external controller required	
	Peripheral Interface	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 corner area GREEN = ok RED = error	
ELECTRICAL	Operation voltages	24 V DC I _{max} : 0.4 A P _{max} : 10 Watt	
	Power supply	Input: 100 - 240 V AC 50 - 60 Hz	Output: 24 V DC I _{max} : 5.0 A P _{max} : 120 Watt
	Power connection	External power supply unit (CE/UL/CSA approved, 85-264 V AC, 47-63 Hz, IEC/EN60320-1 C14 Degree of protection: IP20)	
ELM	Description	Patented Edge Locking Mechanism (elm) for repeatable and accurate positioning of micro-plates 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.	
	Positioning accuracy	± 0.1 mm	
DIMENSIONS & WEIGHT		(W x D x H) 142 x 99 x 83.4 mm 5.59 x 3.9 x 3.28 inch 1.35 kg 2.65 lbs	
LABWARE		Cell culture plates e.g. 6/12/24/48 well microplates	

ORDERING INFORMATION

ORDER NO.	INSTRUMENTS	
2016-0710	TiltStation	Automation friendly module for defined sloping position and see-saw motion

Legal Notices & Trademarks

QINSTRUMENTS is owner of numerous patents worldwide. Please respect our intellectual property.

WO2008135565, US8323588, EP2144716: Sample handling device for and methods of handling a sample

WO2011113858, US9126162, EP2547431: Positioning unit for a functional unit

WO2013113847, US10052598, EP2809436: Cog-based mechanism for generating an orbital shaking motion

WO2013113849, US9371889, EP2809435: Mechanism for generating an orbital motion or a rotation motion by inverting a drive direction of a drive unit

WO2014207243, US20160368003, EP3013480: Application-specific sample processing by modules surrounding a rotor mechanism for sample mixing and sample separation

WO002022128814A1: Laboratory apparatus comprising a fixing mechanism for fixing a slide

WO002022128809A2: Laboratory apparatus comprising a mixing mechanism for mixing a medium of a slide

Please notify us in writing, by email or mail to our designated agent, if you believe that a user has infringed our intellectual property rights. QINSTRUMENTS trademarks are recognised worldwide. Please respect our trademarks as we will vigorously protect their proper usage: BioShake®, ColdPlate®, HeatPlate®, TiltStation®, TurnStation®

Trademarks of third parties may appear on this site when referring to those entities or their products or services. All registered names, trademarks, etc. used on this site, even when not specifically marked as such, are not to be considered unprotected by law. Any names and trademarks not specifically marked or listed are property of the respective owner.

Technical specifications are subject to change without notice.



© 2024-TiltStation-rev03

QINSTRUMENTS GmbH
Loebstedter Strasse 101
07749 Jena . Germany

tel +49 3641 55430
email info@QInstruments.com

web QInstruments.com