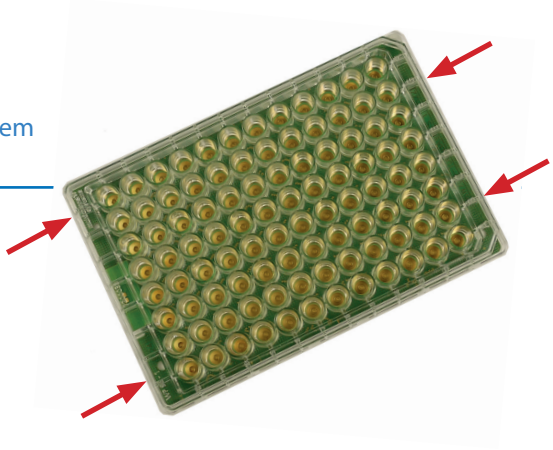
multichannel systems
An Affiliate of Harvard Bioscience, Inc.

96 Well Plate: 96W700/100G-288

Multiwell Plate with Glass Base for Use with the Multiwell-MEA-System

96W700/100G-288



Technical Specification

General Characteristics	
Temperature compatibility	0 - 40 °C
Dimensions (W x D x H)	127.76 mm x 85.48 mm x 19 mm
288 MultiwellMEA Layout	
Base material	Glass
Electrode material	Au (Gold)
Electrode height	planar
Track material and contact pads	Au (Gold)
Electrode diameter	100 µm
Interelectrode distance (center to center)	700 µm
Isolation material	SU-8 (Photoresist)
Electrode impedance	25 - 50 kΩ @ 1 kHz
Electrode number	288
Number of recording electrodes	3 per well
Number of reference electrodes	1 circular electrode per well
Area of each well bottom	32 mm^2
Software: Multiwell Screen and Multiwell Analyzer	Version 2.0.8.0 and Version 2.0.6.0
Multiwell MEA Plate	
Lid	Comes with lid which can be kept in place during recording to enable repeated recordings under sterile condiditions.
Sterilization before use	Well plates come sterilized by gamma radiation, ready for use.
Important!	- Do not autoclave well plates. - Do not clean wells mechanically. - Do not expose to temperatures over 40 °C. - Do not apply alcohol longer than 30 minutes to the wells.

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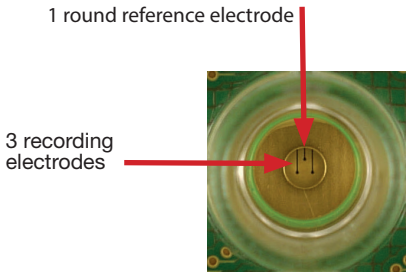
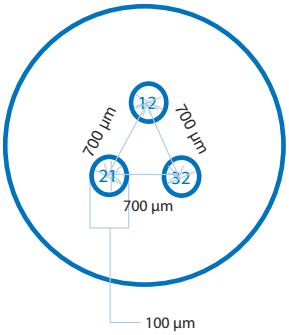
96W700/100G-288: Electrode Layout

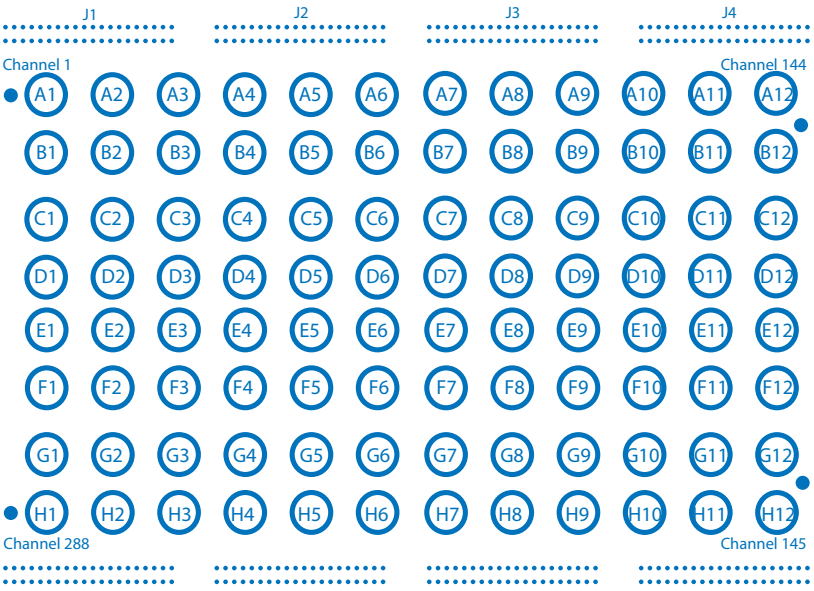
Electrode Layout





Dimensions of one Well

Height: 12.7 mm
Diameter base: 5 mm
Diameter opening: 7 mm
Total volume: 0.36 ml



Electrode ID per Well

Inside each well the numbering of MEA electrodes in the 1 + 2 grid follows the standard numbering scheme for square grids: The first digit is the column number and the second digit is the row number. These electrode IDs are displayed in the channel map of the software. The internal ground reference surrounds the three recording electrodes.

Technical Specifications of the Multiwell MEA Plate

Pretreatment	Pretreatment to increase the hydrophilicity: Fill dry wells with PBS and place the well plate at 30 °C on a heating plate for at least five hours before using. Close lid to avoid drying out. Alternatively treat the well plates in a plasma cleaner.
Cleaning (on user's risk)	TergAZyme: Rinse the multiwell plate with distilled water and fill wells with TergAZyme solution afterwards, wait 12 hours at room temperature before washing the wells (2 x 30 min) with distilled water. Ethanol: Fill the wells with 70 % Ethanol for at least 20 minutes, keep the lid closed. Then rinse the wells three times with distilled water, dry overnight. Sterilization: Please use ultraviolet light as well as alcohol for sterilization. Storage: Please store used well plates cleaned, at room temperature and in a dark and dust free place.
Period of shelf-life	The period of shelf-life for multiwell plates is six month from the date of delivery. We generally recommend to always use new multiwell plates for your recordings. However, repeated use is possible when paying attention to the cleaning and sterilization procedures. The number of cycles depends on the experimental design. Repeated use of multiwell plates is on customer's own risk.
Multiwell MEAs are not symmetrical	All types of well plates have two holes on each of the short sides on the bottom, one pair wider apart, one pair closer together. They fit on corresponding bolts on the Multiwell-MEA headstage. Only if the well plate sits on those bolts, and cannot be moved laterally, the brackets of the headstage close properly.

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