FlexMEA36-OM

Flexible Microelectrode Array with 36 Electrodes and Omnetics Connector for Use with the ME2100-HS32 Headstage or the 32-Channel Micro Preamplifier µPA32

Layout

Electrode field on this side

Cleaning

Rinse with distilled water, optional with ethanol 70 %.

Sterilization: Do not autoclave or sterilize FlexMEAs by heat. These MEA types are not heat-stable and will be irreversibly damaged! Please do not use ultrasonic bath for cleaning.

Technical Specifications

Temperature compatibility	10 - 50 °C
Dimensions (W x D x H)	45 mm x 13.8 mm x 1.8 mm
Thickness of the electrode field	12 µm
Base material	Polyimide 2611 foil
Weight	< 1 g
Track material and contact pads	Gold (Au)
Electrode diameter	30 µm
Interelectrode distance (center to center)	300 µm
Diameter of the holes	50 µm
Electrode height	Planar
Electrode material	TiN electrodes (Titanium nitride)
Isolation material	Polyimide 2611 foil
Electrode impedance	< 150 kΩ
Electrode layout grid	6 x 6
Number of recording electrodes	32
Number of reference electrodes	2
Number of ground electrodes	2
Software	
Multi Channel Experimenter	linear

Advantages

- The FlexMEA36-OM is made of flexible polyimide 2611 foil, perfect for *in vivo* and specific *in vitro* applications, for example, whole-heart preparations.
- The titanium nitride electrodes have a diameter of 30 µm, and the distance between the electrodes is 300 µm.
- The polyimide foil is perforated with holes of 30 µm diameter, ensuring optimal tissue contact.

Warning: The FlexMEA36-OM may only be used together with the devices from Multi Channel Systems MCS GmbH, and only for the specified purpose. Damage of the device and even injuries can result from improper use.

January 2020

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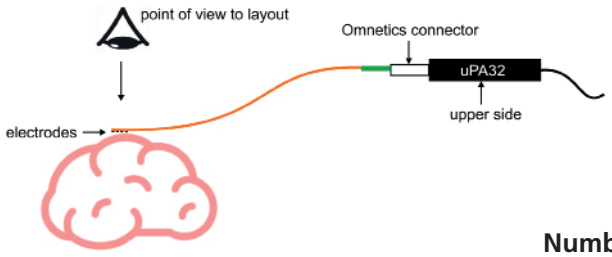
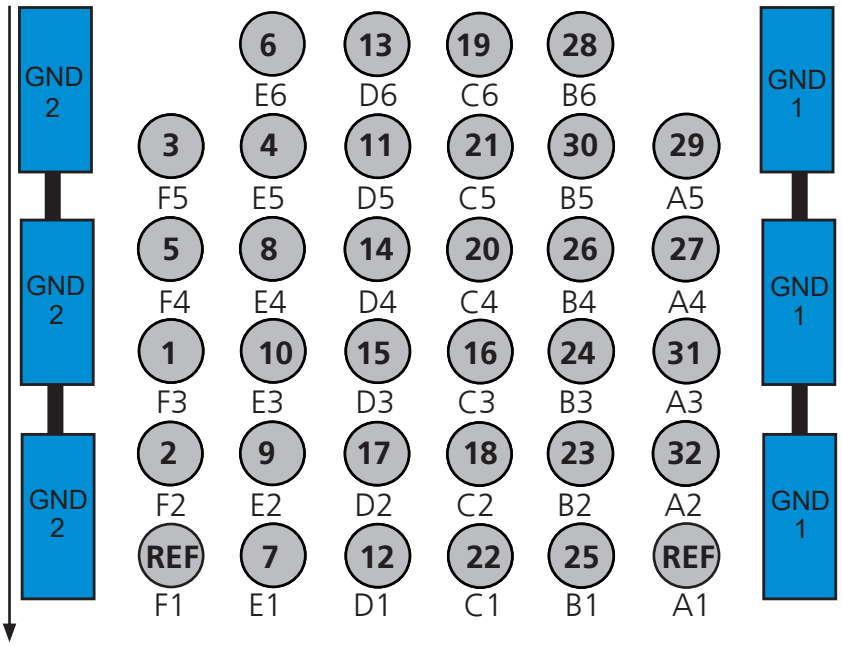


Important: The channel map is constructed by looking on the back side of the electrodes, because the FlexMEA36-OM electrodes are placed on the preparation upside down!

Numbering

The letter digit code below the electrode refers to the position of the electrode in the grid. The numbers inside are the linear channel numbers in Multi Channel Experimenter and MC_Rack.

Electrode Layout (electrodes facing down, seen from behind)



Direction to the connector.

Multiple Headstages

MC_Rack

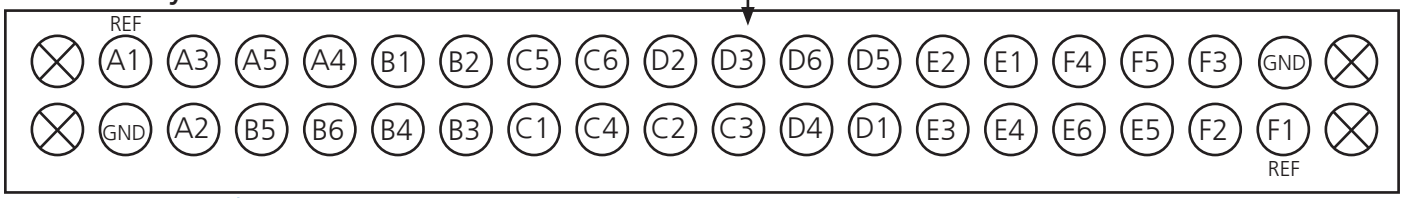
If you use more than one µPA32, the signal collector SC2x32 leads the output channels of the second amplifier to channel number 33 - 64. Please see datasheet SC2x32 for details.

Multi Channel Experimenter

If you use a ME2100-System with more than one headstage, the second/third/fourth headstage will be displayed as channels B1 - B32 / C1 - C32 / D1 - D32.

Connector Layout

Labeled side of the connector.



Connector Specification

Manufacturer:	**Omnetics**
Manufacturer Part No:	A79022-001
Type:	NDP-36-DD-GS

Connector with 36 pos, dual row, male, provided with 4 holes for guide posts.

⊗ Guide post

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