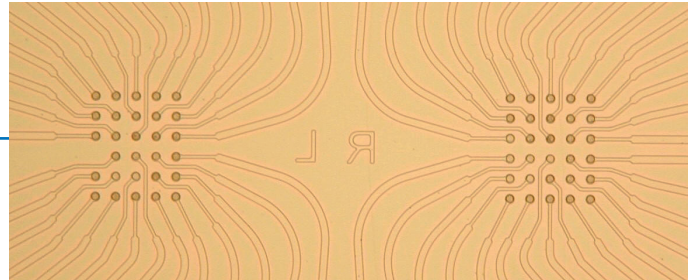


High Density MEA: 60HDMEA
Microelectrode Array with two Fields of Electrodes
for Use with MEA2100-System

60HDMEA30/10iR-ITO



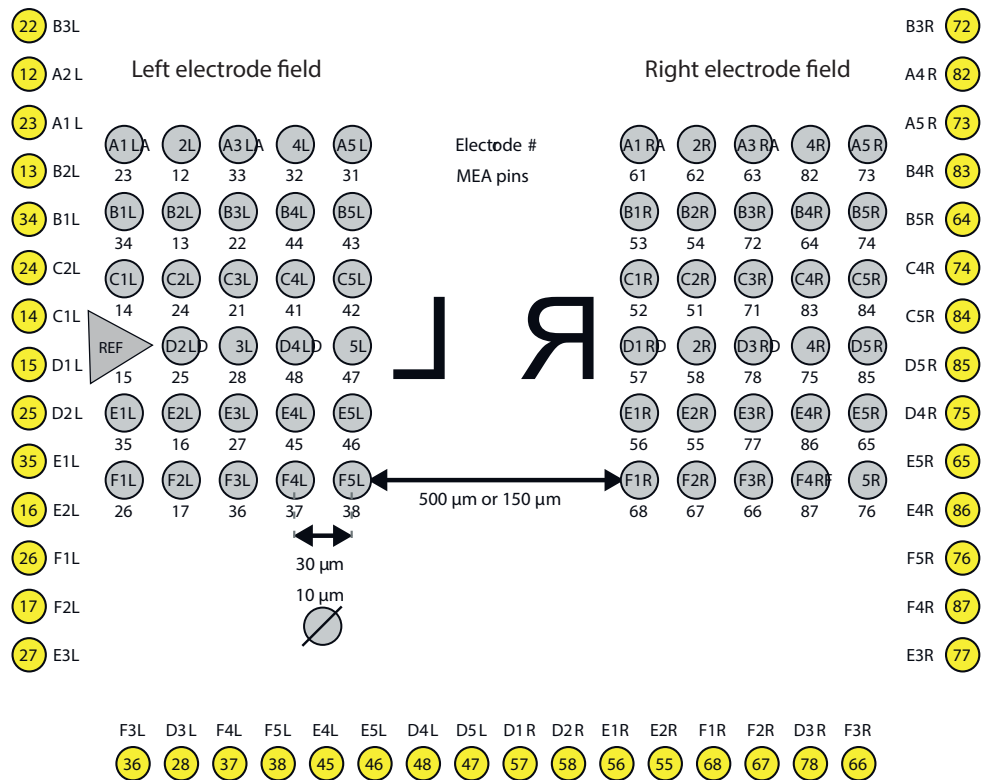
Technical Specification

General Characteristics	
Temperature compatibility	0 - 125 °C
Dimensions (W x D x H)	49 mm x 49 mm x 1 mm
120MEA Layout	
Base material	Glass
Electrode material	TiN (Titanium nitride)
Electrode height	planar
Track material and contact pads	ITO (Indium tin oxide)
Electrode diameter	10 µm
Interelectrode distance (center to center)	30 µm
Isolation material	Silicon nitride (SiN)
Electrode impedance	250 - 400 kΩ
Electrode layout grid	2 x (5 x 6)
Number of recording electrodes	59
Number of reference electrodes	1 internal reference electrode (iR)
Software: MC_Rack	MC_Rack: 2 dim. (MEA) or Configuration
Software: Multi Channel Suite	Multi Channel Experimenter: MEA Configuration
MEA Perfusion Chamber	
(w/o) Without ring (gr) Glass ring (pr) Plastic ring without thread (pr-T) Plastic ring with thread	ID +/- 19 mm, OD +/- 24 mm, height 6 / 12 mm ID +/- 26.5 mm, OD +/- 30 mm, height 6 / 12 mm ID +/- 26 mm, OD +/- 30 mm, height 6 / 12 mm
Sterilization	These MEA types are heatstable up to 125 °C! They can be autoclaved and coated with different procedures for cell and tissue cultures.

60HDMEA: Electrode Layout

Electrode Layout

MEA pins
Electrode # 33 21 32 31 44 43 41 42 52 51 53 54 61 62 71 63
A3 L C3L A4 L A5 L B4L B5L C4L C5L C1R C2R B1R B2R A1 R A2 R C3R A3 R



Technical Specifications of the 60HighDensityMEA

Numbering	The first letter of the electrode number code refers to the row number, the digit is the column number, and the second letter refers to the electrode field (left or right) of the 60HighDenseMEA. The specified MEA pin numbers are the channel numbers that are used in the data acquisition program. The electrode D1 of the left electrode field, connected to channel 15 is missing. It is replaced by a big internal reference electrode.
MEAs are not symmetrical	MEAs with internal reference electrode should be placed with reference electrode to the left side when looking directly to the opened amplifier.