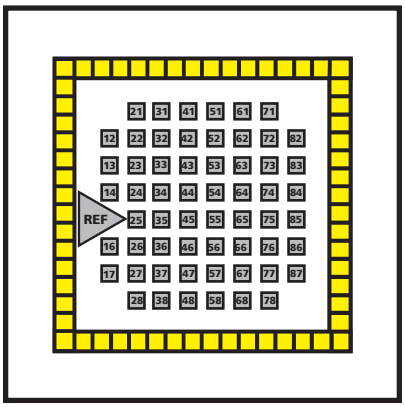
# 60SquareMEA200/50iR-Ti

## Layout




## Technical Specifications

| | |
|---|---|
| Temperature compatibility | 0 - 125 °C |
| Dimensions (W x D x H) | 49 mm x 49 mm x 1 mm |
| Base material | Glass |
| Track material | TI (Titanium) |
| Contact pads | TiN (Titanium nitride) |
| Electrode width and length | 50 x 50 µm |
| Interelectrode distance (center to center) | 200 µm |
| Electrode height | Planar |
| Electrode material | TiN (Titanium nitride) |
| Isolation material | Silicon nitride 500 nm (PEVCD) |
| Electrode impedance | < 100 kΩ |
| Electrode layout grid | 8 x 8 |
| Number of recording electrodes | 59 |
| Number of reference electrodes | 1 internal reference electrode (iR) |

Software

| | |
|---|---|
| Multi Channel Experimenter | MEA Configuration |
| MC_Rack | 2 dim. (MEA) or Configuration |
| Channel map | Default |

## Advantages

- The signal-to-noise ratio is excellent.
- The electrode size of 50 x 50 µm guarantees very low noise.
- MEAs with TiN electrodes are very stable. Therefore, the MEAs can be reused several times and are perfect for long-time experiments (up to several weeks and even months).

## MEA Perfusion Chamber

(w/o) Without ring
(gr) Glass ring ID +/- 19 mm, OD +/- 24 mm, height 6 / 12 mm
(pr) Plastic ring without thread ID 26.5 mm, OD 30 mm, height 6 / 15 mmm
(pr-T) Plastic ring with thread ID 26 mm, OD 30 mm, height 6 / 15 mmm

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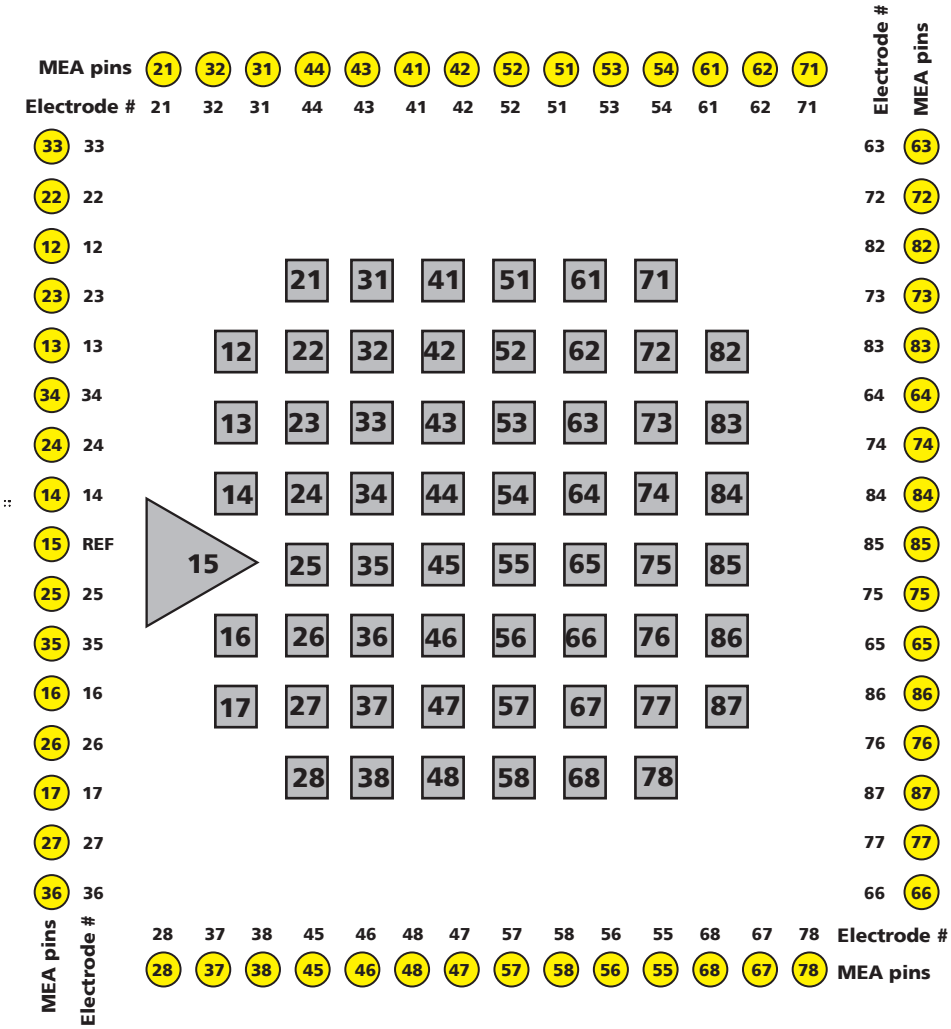
MEAs are not symmetrical! MEAs with internal reference electrode should be placed with reference electrode to the left side when looking directly to the opened amplifier.




### Numbering

The numbering of MEA electrodes in the 8 x 8 grid follows the standard numbering scheme for square grids:

The first digit is the column number, and the second digit is the row number. For example, electrode 23 is positioned in the third row of the second column.

The specified MEA pin numbers are the channel numbers that are used in the data acquisition program. When using MC_Rack software, please select the 2 dimensional layout (or Configuration) in the "Data Source Setup". The electrode 15 is missing in MEAs with internal reference electrode. It is replaced by a big internal reference electrode, connected to pin 15 of the amplifier.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