

Specifications

Substrate

Glass Substrate:
50 x 50 x 0.7 mm
Glass cylindrical chamber:
ID=22, OD=25 mm
Conducting layer:
Indium tin oxide (ITO) (0.15 μm)
Insulation layer:
Polyimide

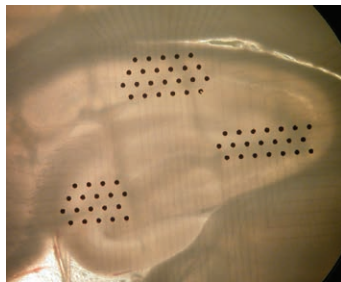
Recording/stimulating electrode

Number of electrodes:
64 (61 for MED-2Hxxx)
Material: ITO + Platinum Black
Size: 50 x 50 μm square
20 x 20 μm (MED-P210x)
Diameter: 20 μm (MED-P2H07x)
50 μm (MED-P5001x & P5002x)
Impedance:
<22 k Ω (MED-P5xxxx)
<40 k Ω (MED-P2xxxx)
(1kHz, 50 mV sine wave)
Maximum voltage: 1 V
Maximum current:
200 μA , 0.1 msec

Reference electrodes

Number of electrodes: 4
Material: ITO + Platinum Black
Size: 200 x 200 μm
Diameter 100 μm x 4 (MED-P2H07x, MED-P5001x)
Impedance:
<2.2 k Ω (1 kHz, 50mV sinusoidal wave)

Available in two chamber depths and four inter-electrode spacings



Hippocampal slice on our MED-P5001A probe designed with electrode groups located at CA1, CA3 and DG.

Effortless electrophysiology.



MED64 Probes

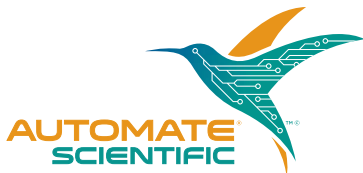
Acute or cultured biological preparations are placed or grown directly on a grid of 64 planar microelectrodes, with the capability for stimulation and signal recording.

The standard MED probe has 64 planar microelectrodes arranged in an 8 x 8 grid embedded in the center of a transparent glass plate. The surrounding glass or plastic cylinder makes the MED probe a self-contained recording chamber. Four models with inter-electrode spacings of 100, 150, 300, and 450 μm enable detailed evaluation of network interactions across a sample. Each electrode is 50 μm x 50 μm in size for 150, 300, and 450 μm spacing configuration, or 20 μm x 20 μm for 100 μm spacing configuration.

Also available are probes featuring an electrode pattern specific to hippocampus anatomy and a hexagonal pattern, as well as 2- and 4-well MED probes for increasing throughput.

MED64 Ordering Information

Many sizes of probes, electrodes and spacing available. Please see web site for all sizes and part numbers. Minimum order quantity 10 pieces on probes. Please call or email for a quote.



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