

24-Well Plate 24W300/30G-288

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

Technical Specifications

Base material	Glass
Isolator	SU-8 (Photoresist)
Track material	Au (Gold)
Contact pads	Au (Gold)
Electrode material	Au coated with PEDOT (poly 3,4-ethylene-dioxythiophene)
Diameter of the electrodes	30 μm
Interelectrode distance (center to center)	300 μm
Electrodes per well	12 + 4 reference
Area of each well bottom	32 mm^2

Advantages

- Perfect combination of throughput and resolution for neuronal cultures.
- Comes with lid which can be kept in place during recording to enable repeated recordings under sterile conditions.
- 4 ground electrodes per well.
- Each electrode selectable for stimulation.
- ANSI / SLAS compliant well plate, compatible with traditional plate readers and liquid handling devices.

Applications

The 24-well plate with glass base is ideal for recordings from neuronal cell cultures. The transparent bottom facilitates the optical monitoring of the network. The low-noise PEDOT coated Au electrodes with only 30 μm diameter are ideally suited for neuronal network recordings and stimulation. Every single electrode can be selected for stimulation.

The 24-well plate is perfect for toxicity testing in neuronal cell cultures as well as neuropharmacology and recordings from iPS-cell derived neurons.

The plates are sterilized by gamma radiation.



Important: Well Plates are not symmetrical!

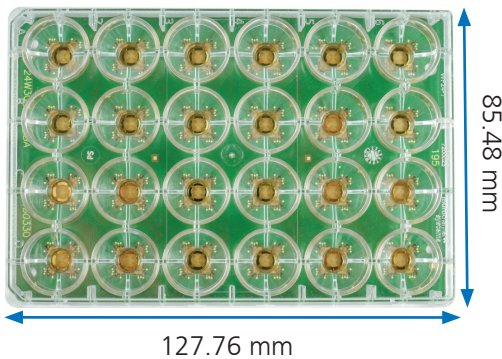
All types of well plates have two holes on each of the short sides on the bottom, one pair wider apart, one pair closer together. They fit on corresponding bolts on the Multiwell-MEA headstage. Only if the well plate sits on those bolts, and cannot be moved laterally, the brackets of the headstage close properly.

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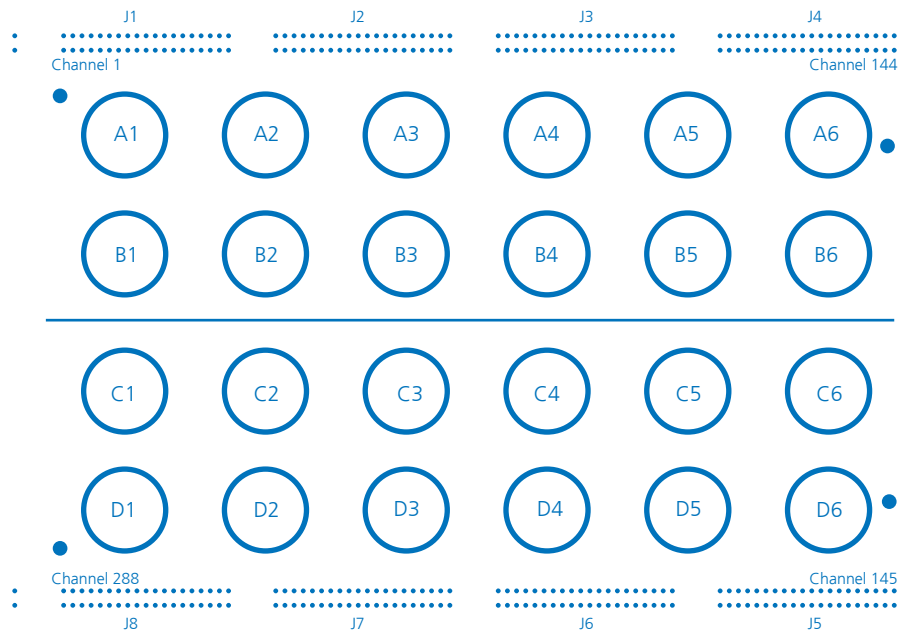
Pin Layout of the 24-Well Plate with Glass Base
for Use with the Multiwell-MEA-System

Dimensions of one Well

Height: 17.3 mm
Diameter base: 6.4 mm
Diameter opening: 16 mm
Total volume: 2.43 ml

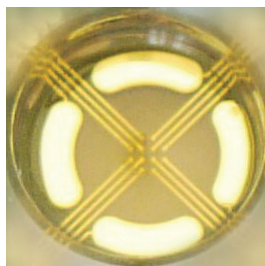
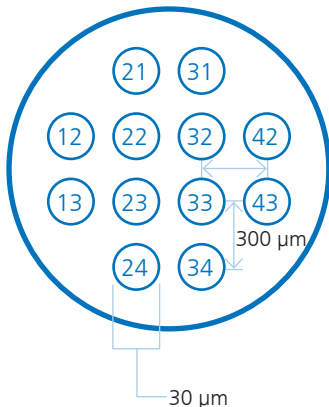


Height of the plate: 19 mm



Electrode ID per Well

Inside each well the numbering of MEA electrodes in the 4 x 4 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 Multiwell-Screen software.



Cleaning and Sterilization

Please rinse the well plate thoroughly with distilled water. Fill the wells with Terg-A-Zym for min. 12 hours at room temperature. Wash the wells twice for min. 30 minutes with distilled water again. Optional: Treat the well plate in a plasma cleaner before use. Please use alcohol or ultraviolet light for sterilization.

**Warning: Do not autoclave multiwell plates.
Do not expose to temperatures over 60° C.**