**Important!**

CMOS-MEAs are not symmetrical! Please take care for the correct orientation of the chip. The round edge of the CMOS-MEA has to be in the front on the left side when looking directly to the open CMOS-MEA headstage.

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**Technical Specifications**

- **Temperature**: 0 - 125 °C
- **Dimensions (W x D x H)**: 55 x 55 x 2 mm
- **Base material**: PCB
- **CMOS chip**: glass like surface
- **Track material**: Bonding wires and Au
- **Contact pads**: Au
- **Electrode diameter**: 8 µm
- **Interelectrode distance from center to center**: 16 or 32 µm
- **Active area**: 1.04 mm x 1.04 mm or 2.08 mm x 2.08 mm
- **Flat area (around active area)**: rectangle: 8 mm x 8.5 mm or round: diameter 6 mm
- **Recording electrodes**: 4225 in 65 x 65 layout grid
- **Stimulation electrodes**: 1024 in 32 x 32 layout grid

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**Sterilization**

Before using the CMOS-MEA chip, please sterilize the surface with UV radiation, for example, in a conventional flow box.

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**Warning**: It is not recommended to treat the CMOS chip in plasma cleaner! Plasma treatment may destroy the chip.
CMOS-MEA Chip
for Use with the CMOS-MEA5000-System

Chamber Types combined with a CMOS-MEA Chip:
for the Cell Cultures (-CC),
for Slices (-SCB and -SCA).

Cleaning of the CMOS-MEA Chip
Different detergents are suitable to clean the chip. Place the CMOS chip in a beaker with detergent that it is totally covered for two hours. Rinse it with double distilled water for removing the detergent.

Use a cotton swab for carefully cleaning the surface, if necessary. Please do not damage the surface mechanically, otherwise the chip will be destroyed.

The following cleaning protocol was used in experiments with retina cells. Please read the paper which is online free available: Axonal Transmission in the Retina Introduces a Small Dispersion of Relative Timing in the Ganglion Cell Population Response from Guenther Zeck, Armin Lambacher, Peter Fromherz (2011).