



MEA2100-Mini-System

**Our latest 60/120 MEA-System -
Small footprint and usable inside of an incubator.**

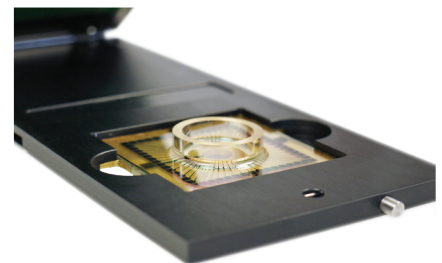
Advantages

Part of the Multi Channel Systems 2100 amplifier solutions, the MEA2100-Mini-System delivers innovative technology as part of our ongoing evolution of classic MEA amplifiers.

The small footprint, low-heat emission and ability for simultaneous operation of multiple headstages make the MEA2100-Mini-System an ideal solution for continuous, undisturbed recordings and stimulation of samples in the incubator or on a microscope stage for parallel optical data processing.

Your electronics are protected against humidity, so the headstage can be operated within an incubator for better results. The small footprint also makes it easy to position the headstage on standard microscopic tables, allowing you to merge optical and electrophysiological data (e.g. with our full transparent ITO MEAs).

Four mini-headstages can be connected to each Signal Collector Unit (SCU), and two SCUs can be operated in parallel from one Multiboot Interface Board. This allows you to run up to eight headstages simultaneously. In addition, you can easily connect other MEA solutions to your existing system (e.g. Multiwell-, CMOS-, and MEA2100-System).



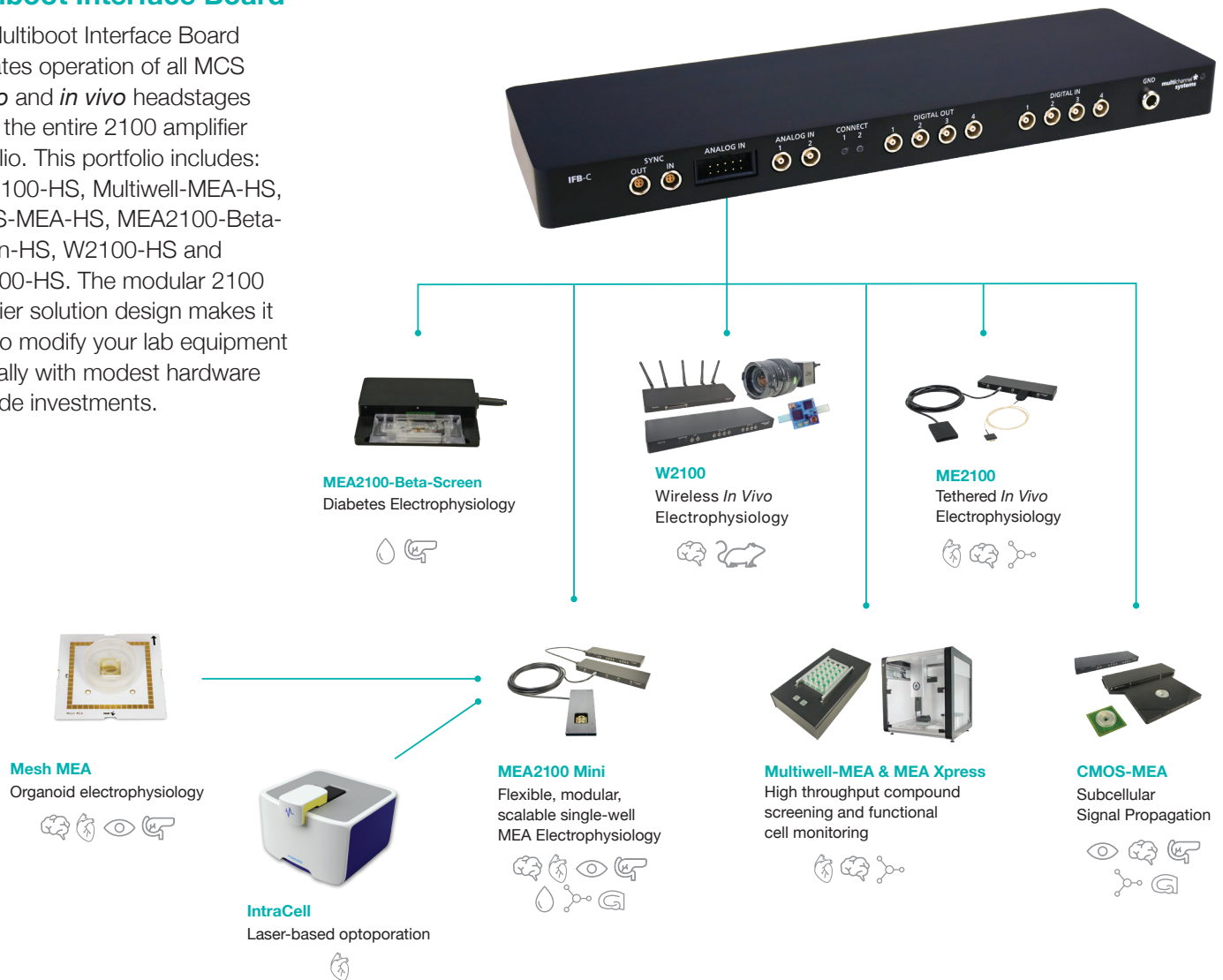
Closeup of an open MEA-Mini Headstage with transparent microelectrode array.

Key Features

- Scale up to eight headstages for higher throughput in multiple simultaneous experiments
- 60 or 120 rading channels per well — for high spatiotemporal resolution
- Independent electrical stimulation patterns to apply parallel stimulation pathways (e.g. LTP/LTD experiments)
- Up to 50 kHz sampling rate, 24 bit resolution for highest data accuracy in the field
- Allows functional recording within an incubator while ensuring perfect conditions for your cell cultures

Multiboot Interface Board

The Multiboot Interface Board facilitates operation of all MCS *in vitro* and *in vivo* headstages within the entire 2100 amplifier portfolio. This portfolio includes: MEA2100-HS, Multiwell-MEA-HS, CMOS-MEA-HS, MEA2100-Beta-Screen-HS, W2100-HS and ME2100-HS. The modular 2100 amplifier solution design makes it easy to modify your lab equipment generally with modest hardware upgrade investments.



Specifications

Amplifier	
Data resolution	24 bit
Number of recording channels	8x60 or 8x120
Stimulus Generator	
Current mode	± 1 mA
Voltage mode	± 10 V
Data converter and USB interface	
Sampling rate per channel	up to 50 kHz

= Cardiomyocytes, organoids and whole heart	= Cell cultures and stem cell applications
= Neuronal cultures, acute slices and organotypic tissue culture (OTC)	= Diabetes
= Retina	= Acute tissue slices
= Preclinical Research	= Pancreatic Islets