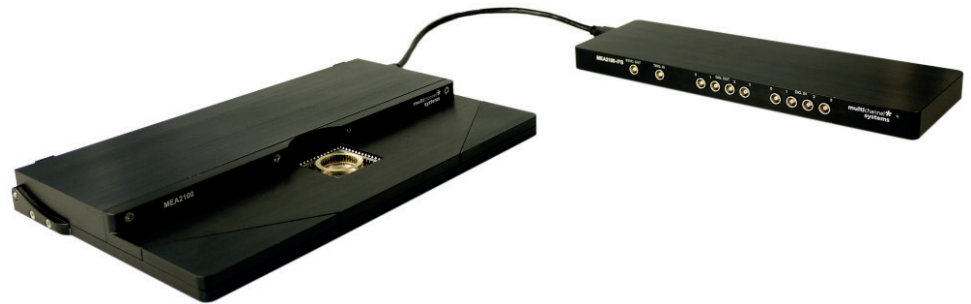


MEA2100-Lite-System



Technical Specification

General Characteristics	
Operating temperature	10 °C - 50 °C / 50 °F - 122 °F
Storage temperature	0 °C - 50 °C / -32 °F - 122 °F
Relative humidity	10 % to 80 %, non-condensing
Headstage	
Dimensions (W x D x H)	250 mm x 151 mm x 25 mm
Weight	1000 g
Type of headstage	MEA2100-HS60 for 60-electrode MEAs
Integrated Amplifier	
Number of analog recording channels	60
Data resolution	24 bit (16 bit, if operated with MC_Rack)
Signal input voltage range	MC_Rack: from ± 4.9 mV to ± 500 mV Multi Channel Experimenter: ± 1250 mV
Bandwidth	0.1 Hz to 10 Hz, software controlled
Sampling frequency per channel	up to 32 kHz, MC_Rack software controlled up to 25 kHz, Multi Channel Experimenter controlled
Input impedance	1 G Ω 10 pF
Integrated Stimulus Generator	
Output current	± 1.5 mA
Output voltage	± 12 V
Output current compliance voltage	± 16 V
Voltage output compliance current	± 20 mA
Stimulation pattern	MC_Rack: rectangle (biphasic, monophasic, pulse trains) Multi Channel Experimenter: almost arbitrary patterns
Number of stimulation channels	3 independent stimulation patterns
Resolution	16 bit

MEA2100-Lite-System

Technical Specifications

Integrated Heating Element	
Temperature sensor type	Pt 100 (with four wire connection, compatible with TCX)
Accuracy	± 0.1 °C
Interface Board IFB-C Multiboot	
Dimensions (W x D x H)	250 mm x 83 mm x 25 mm
Weight	300 mg
Front Panel	
2 Sync IN and Sync OUT	Lemo connector, EPL.00.250 NTN
1 8-Channel Analog IN	10-pin connector, DIL10Header-100mil
2 Analog Inputs, Channel 1 and Channel 2	Lemo connector, EPL.00.250 NTN
Signal input range for analog channels	±10 V voltage input range @ 24 bit ADC
Gain for analog channels	2
2 LEDs	LED light is on, while headstage is on
4 Digital Inputs	Lemo connector, EPL 00250 NTN
4 Digital Outputs	Lemo connector, EPL 00250 NTN
1 Ground	Common jack 4 mm, banana plug
Rear Panel	
I / O	Switch On / Off
1 Power supply	MPU 30, PWR DC 0.65 x 2.75 mm
1 Ground	Common jack 4 mm, banana plug
1 16 bit Digital In / Out	68-pin MCS standard connector, Honda-PCS-XE68LFD
2 Auxiliary channels (Not in use!)	Lemo connector, EPL.00.250 NTN
1 Audio output	Stereo jack 3.5 mm
1 JTAG DSP	14-pin JTAG connector, DIL14Header-100mil-angeled (not in use!)
2 IFB-C connectors	External power over iX-industrial cable, type B
2 USB-C ports	USB-C A and USB-C B

MEA2100-Lite-System

Technical Specifications

Power Supply Unit	
Voltage range	100 - 240 VAC
Output voltage	24 VDC
Max. power	60 W
Frequency	50 - 60 Hz
Mark of conformity	CE
European standard	EN61010-1
Software	
Operating system: Microsoft Windows [®]	Windows 10, 8.1 (32 or 64 bit)
Multi Channel Suite software package:	
Multi Channel Experimenter	Version 2.20.2 and higher
Multi Channel Analyzer	Version 2.20.2 and higher
Multi Channel DataManager	Version 1.14.9 and higher