ME2100-System

General Characteristics

Operating temperature 10 °C to 50 °C
Storage temperature 0 °C to 50 °C
Relative humidity 10 % to 85 %, non-condensing

Headstages

Length of the cable Optional: 3 m, 5 m or 10 m
MEZ100-HS32-S and ME2100-HS32-M Please see also: ME2100-HS32-S/-M_Datasheets
ME2100-µPA16 and ME2100-µPA32 Please see also: ME2100-µPA16/-32_Datasheets

Integrated Amplifier

Number of analog recording channels 32
Ground input 1 additional ground input
Reference inputs Freely selectable reference inputs or fixed references on channel 8, 16, 24 or 32
Data resolution 24 bit
Signal input voltage range ± 500 mV (ME2100-HS32-S/-M); ± 250 mV (ME2100-µPA16/-32)
Bandwidth DC to 10 kHz, software controlled
Sampling frequency per channel up to 50 kHz, software controlled
Input impedance 470 MΩ||10 pF (ME2100-HS32-S/-M); 1 GΩ@1 kHz (ME2100-µPA16/-32)

Integrated Stimulus Generator: ME2100-HS32-S and ME2100-HS32-M only!

Output current ± 1.5 mA @ ± 16 V compliance voltage
Output voltage ± 10 V @ ± 20 mA max. compliance current
Stimulation pattern User customizable patterns
Number of stimulation channels 32 (each channel can be used for stimulation, 2 channels can be used for external stimulation).

External Stimulation: ME2100-HS32 only!

1 Output connector 6-pin connector (Preci-dip series 853, 1.27 mm grid, 0.44 mm round pin)

Signal Collector Unit (MCS-SCU)

up to 2 Signal Collector Units can be connected
Dimension (W x D x H) 250 mm x 83 mm x 25 mm
Weight 300 g
4 Inputs for headstages (HS1 to HS 4) Lemo connector, EPG.08.307.HLN
1 Connector with 4 analog outputs for LED driver Lemo connector, EPG.08.304.HLN
Voltage output of each analog output 0 - 5 V
1 64-Channel Analog Out connector 68-pin MCS standard connector, MCS high grade cable
Signal Collector Unit to Interface Board External power over serial ATA (eSATAp) cable

January 2020
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Technical Specifications

MCS-IFB 3.0 Multiboot Interface Board

Dimensions (W x D x H) 250 mm x 83 mm x 25 mm
Weight 300 mg

Front Panel
4 Digital Inputs
4 Digital Outputs
2 Auxiliary channels (not in use)

Rear Panel
1 16 Bit Digital In / Out
1 8-Channel Analog In
2 Analog Inputs
Signal input range for analog channels ±2500 mV
Gain for analog channels 2
1 Digital signal processor DSP port
2 USB 3.0 ports
Power supply
Ground
1 Audio output

Side Panel
2 Interface board to headstage connectors
External power over serial ATA (eSATAp)

Power Supply Unit (MPU 30)
Input voltage 90 - 264 VAC @ 47 - 63 Hz
Output voltage 11 - 13 V
Max. power 30 W
Mark of conformity CE, TÜV, cUL
European standard EN60601

Software
Operating system Windows 10, 8.1, and Windows 7 (32 or 64 bit), English and German version supported
Microsoft Windows ©
Multi Channel Suite software package:
Multi Channel Experimenter Version 2.6.0 and higher
Multi Channel Analyzer Version 2.6.0 and higher
Multi Channel DataManager Version 1.9.7 and higher