

ME2100-System

Technical Specifications

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	up to 8 headstages can be connected Optional: 3 m, 5 m or 10 m
ME2100-HS32-S and ME2100-HS32-M	Please read also: ME2100-HS32-S / -M_Datasheets
ME2100-μPA16 and ME2100-μPA32	Please read 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	± 240 mV / 250 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)

Integated 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).
Resolution	16 bit

External Stimulation: ME2100-HS32 only!

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

Dimension (W x D x H)	up to 2 Signal Collector Units can be connected 250 mm x 83 mm x 25 mm
Weight	300 g
4 Inputs for headstages (HS1 to HS 4)	Lemo connector, EPG.0B.307.HLN
1 Connector with 4 analog outputs for LED driver	Lemo connector, EPG.0B.304.HLN
Voltage output of each analog output	0 - 5 V
2 Signal Collector Unit to Interface Board connectors	External power over iX-industrial cable, type B
1 64-Channel Analog Out connector	68-pin MCS standard connector, Honda-PCS-XE68LFD

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Interface Board IFB-C Multiboot

Dimensions (W x D x H)

Weight

Front Panel

2 Sync IN and Sync OUT

1 8-Channel Analog IN

2 Analog Inputs, Channel 1 and Channel 2

Signal input range for analog channels

Gain for analog channels

2 LEDs

4 Digital Inputs

4 Digital Outputs

1 Ground

Rear Panel

I / O

1 Power supply

1 Ground

1 16 bit Digital In / Out

2 Auxiliary channels (Not in use!)

1 Audio output

1 JTAG DSP

2 IFB-C to SCU connectors

2 USB-C ports

Power Supply Unit

Voltage range

Output voltage

Max. power

Frequency

Mark of conformity

European standard

Software

Operating system: Microsoft Windows ®

Multi Channel Suite software package:

Multi Channel Experimenter

Multi Channel Analyzer

Multi Channel DataManager

250 mm x 83 mm x 25 mm

300 mg

Lemo connector, EPL.00.250 NTN

10-pin connector, DIL10Header-100mil

Lemo connector, EPL.00.250 NTN

±10 V voltage input range @ 24 bit ADC

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LED light is on, while link to SCU is working

Lemo connector, EPL 00250 NTN

Lemo connector, EPL 00250 NTN

Common jack 4 mm, banana plug

Switch On / Off

MPU 30, PWR DC 0.65 x 2.75 mm

Common jack 4 mm, banana plug

68-pin MCS standard connector, Honda-PCS-XE68LFD

Lemo connector, EPL.00.250 NTN

Stereo jack 3.5 mm

14-pin JTAG connector, DIL14Header-100mil-angeled

External power over iX-industrial cable, type B

USB-C A and USB-C B

100 - 240 VAC

24 VDC

60 W

50 - 60 Hz

CE

EN61010-1

Windows 10, 8.1 (32 or 64 bit),

Version 2.17.6 and higher

Version 2.17.6 and higher

Version 1.13.3 and higher

October 2021