**Portable ME32-System**

The Portable ME32-System can be used either with two µPA16s - OR - with one µPA32. The device is preconfigured for use with two µPA16s or with one µPA32 by Multi Channel Systems and cannot be modified by the user. If you like to change the preconfiguration, please contact MCS [www.multichannelsystems.com](http://www.multichannelsystems.com).

### 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
- **Dimensions (W x D x H):** 24 mm x 25 mm x 3 mm with connector

#### Supply voltage range
- ± 2.5 V

#### Number of amplifier channels
- 16

#### Output connector type
- Omnetics pin HD D SUB female

#### Input connector type
- Omnetics pin dual row Omnetics sockets, NSD series A 79039-001 female

#### Gain
- 10

#### Supply current range
- < 30 mA, typically ± 26 mA

#### Supply voltage range
- ± 250 mV (with respect to a supply voltage of 2.5 V)
- ± 1 V

#### Input impedance
- 1 MΩ @ 1 kHz

#### Input noise
- < 1.2 nV / √ Hz @ 1 kHz (0.1 Hz to 10 Hz, inputs short-circuited)

#### Noise density
- ± 10 nV / √ Hz @ 1 kHz

#### Bandwidth
- DC to 50 kHz

#### Number of input channels
- 32

#### Interface and connectors
- 2 analog inputs for µPA32
- 16 digital input and output bits

#### Power supply unit (MPU 30)
- 26-pin HD D-SUB female (Harting)

#### Data transfer
- USB 2.0 High Speed cable (type A – mini B)

#### Power supply
- Lemo connector, EPL 00 250 NTN

#### Software
- Multi Channel Suite
- MC_Rack
- MC_DataTool

### 32-Channel filter amplifier

#### Number of input channels
- Gain
- Bandwidth
- Input voltage range
- Input impedance
- Input noise
- Noise density
- Filter slope

### 32-Channel data acquisition

#### Sampling frequency
- up to 50 kHz (software controlled)

#### Data resolution
- 16 bit

#### Crosstalk (channel to channel)
- typical 0.01 %, max. 0.1 %

#### Number of analog input channels
- 32

#### Number of digital input and output channels
- 16

#### Input signals
- TTL (CMOS 3.3 V)

#### Output signals
- TTL (CMOS 3.3 V)

### Warning: The device may only be used together with ME-Systems from Multi Channel Systems MCS GmbH, and only for the specified purpose. Damage of the device and even fatal injuries can result from improper use. Do not open the data acquisition box and do not change hardware configuration as it could lead to improper behaviour of the system.