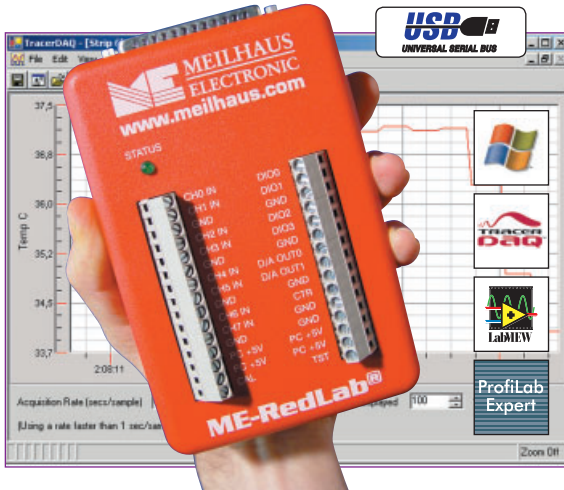


## Lowcost, complete 12 bit USB mini DAQ lab

## ME-RedLab 1008



The ME-RedLab 1008 is a complete USB miniature DAQ lab. It is the ideal alternative solution for simple standard DAQ and control applications at a low price, for example in education or for experimental measurement setups.

- 8 single-ended or 4 **differential** analog inputs.
- **12 bit A/D conversion** up to 1.2 kS/s, 8 kS/s up to 4000 values.
- Differential input range:  $\pm 20$  V,  $\pm 10$  V,  $\pm 5$  V,  $\pm 4$  V,  $\pm 2.5$  V,  $\pm 2.0$  V,  $\pm 1.25$  V,  $\pm 1.0$  V, programmable.
- **2 analog outputs**, 10 bit.
- **32 bit event counter**.
- **24 digital I/O channels**, wired to the 37-pin D-sub connector. Expandable with **relays or opto-isolation** with the ME-UB series.
- 4 additional, discrete **digital I/O channels** with screw terminals.
- USB 1.1 compatible.
- Size (mm): 157 (L) x 102 (W) x 40 (H).

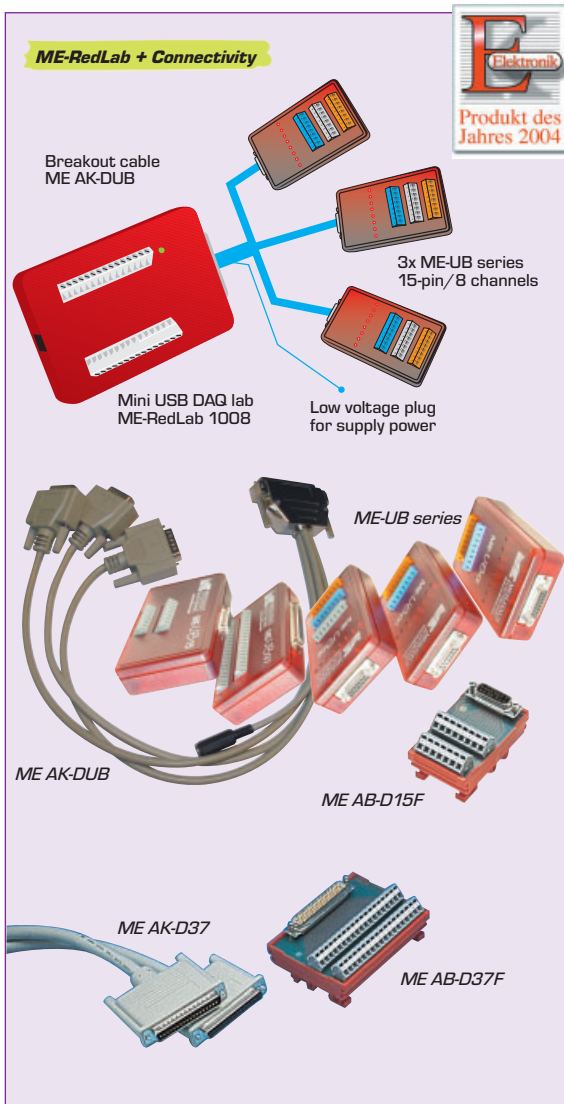
## Software

**Included:** TracerDAQ, Universal Library, Drivers for LabVIEW and SoftWIRE.

| » Ordering codes |   | ME-RedLab 1008 |
|------------------|---|----------------|
| Model            | Description   |                |
| ME-RedLab 1008   | USB mini DAQ lab. Included: Multi I/O DAQ lab, USB cable, screw driver and software |                |
| ME-RedPack 1008  | ME-RedLab 1008 bundled with software ProfiLab Expert                                |                |

## » Accessory

| Model           | Description  |
|-----------------|--|
| ME AK-D37       | 2 m <b>cable</b> . 37-pin D-sub male-female, 1:1 contacted. Connects ME-RedLab 1008 and ME AB-D37F or ME-UB37.   |
| ME AB-D37F      | <b>Terminal block</b> . 37-pin D-sub female and spring terminals.  |
| ME-UB37         | <b>Terminal box</b> . 37-pin D-sub female and spring terminals. Can be plugged directly on the ME-RedLab connector.  |
| ME AK-DUB       | <b>Cable</b> . Connects 3 ME-UB boxes to a ME-RedLab 1008: 37-pin D-sub female and 3x 15-pin D-sub male + low voltage plug for external power supply for the ME-UB boxes.  |
| ME-UB Serie     | <b>External expansions boxes</b> , with relays or opto-isolation. For the ME-RedLab 1008 digital ports. Use in any combination: ME-UB15 (terminal), ME-UBRE (relays), ME-UBOI (opto inputs), ME-UBOO (opto outputs). |
| ME AB-D15F      | <b>Terminal block</b> . 15-pin D-sub female and spring terminals. DIN rail mountable. Can be used instead of ME-UB15. For digital ports.   |
| ProfiLab-Expert | Graphic software for ME-RedLab 1008, also available as a bundle (ME-RedPack 1008)  |



## Specifications

| Analog inputs  |   |
|----------------|---|
| Channels       | 8, individually configured as 8 single-ended or 4 differential channels. Connectors: Screw terminals  |
| Input ranges   | $\pm 20$ V, $\pm 10$ V, $\pm 5$ V, $\pm 4$ V, $\pm 2.5$ V, $\pm 2.0$ V, $\pm 1.25$ V, $\pm 1.0$ V   |
| Rate           | Max. 8 kS/s   |
| Resolution     | 12 bit differential, 11 bit single-ended  |
| Trigger        | Source programmable external DIO0...DIO3  |
| Analog outputs |   |
| Channels       | 2 voltage outputs. Connectors: Screw terminals  |
| Output range   | 0...5 V   |
| Rate           | Software controlled 100 S/s (single channel), 50 S/s (2 channel)  |
| Resolution     | 10 bit  |
| Digital I/O    |   |
| Discrete I/Os  | 4 independent, programmable as input or outputs (screw terminals), 5 V/TTL.<br>Input, high: 3.0 V min., 15.0 V absolute max.; input, low: 0.8 V max.; output, no load: $V_s - 0.4$ V min., $V_s$ typ; output, 1 mA load: $V_s - 1.5$ V.<br>Protection: 1.5 k $\Omega$ serial resistor                   |
| Port I/Os      | 24 I/O channels, grouped in 4x 8 bit ports, each port programmable as input or output (type 82C55).<br>All pins with pull-up to $V_s$ over 47 k $\Omega$ .<br>Input, high: 2.0 V min., 5.5 V absolute max.; input, low: 0.8 V max., -0.5 V absolute min.; output high: ( $I_{OH} = -2.5$ mA) 3.0 V min. |
| Counter        |   |
| Channels       | 1 channel, event counter. Connector: Screw terminals  |
| Resolution     | 32 bit  |
| Frequency      | Input frequency max. 1 MHz  |
| Pulswidth      | High/low 500 ns min.  |
| Voltage        | Input, low: 0 V min., 1.0 V max.; input, high: 4.0 V min., 15.0 V max.  |
| General data   |   |
| Size (mm)      | ~157 (L) x 102 (W) x 40 (H)   |
| Power supply   | Via USB   |
| Interface      | USB 1.1 low-speed; max. 3 m USB cable   |
| Connectors     | Screw terminals, 37-pin D-sub male. USB: Type B   |
| Environmental  | Storage and operating temperature -40...85°C, 0...90% rel. humidity, non-condensing   |