

The innovation in pressure measurement!

GDUSB 1000

universal USB interface adapter for GMSD pressure sensors



- large variety of pressure sensors (range 2.5 mbar ... 1000 bar)
- 1000 measurements per second
- real pressure peaks registration
- comfortable display of the pressure developing on the PC
- no external power supply needed

GDUSB 1000 (device + software)
(for suitable probe please refer to pages 22/23)

Application areas:

- long term monitoring of pressure
- registration of pressure peaks (i.e. at switching operations)
- monitoring of pressure developing (i.e. in process technology)
- checking of working pressure developing in mechanical and plant engineering

General function description:

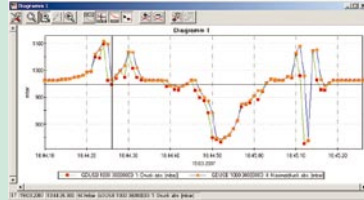
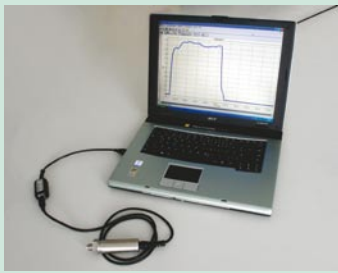
The GDUS1000 adapter allows the direct connection of a standard pressure sensor of the type GMSD/MSD to the USB interface of a PC. The adapter provides 4 channels: current measured value, average value, Max. and Min. peak, there are also two modes for the measurement available:

Fast-mode: (autom. sending)

At this mode the GDUS 1000 sends automatically the measured values at adjustable intervals after a trigger condition has occurred.

This mode is suitable for the analysis of pressure developments, recording of pressure peaks (with pre-trigger) etc.

The device is handled by the comfortable software GSOFT_USB, which has for example the following functions, i.e.: different trigger conditions for the recording start, analyse and archive the pressure developing. etc.



Standard-mode: (master-slave)

At this mode the GDUS1000 behaves like a handheld instrument of the GMH3xxx series and sends the measured value on demand.

The communication can be done via software EBS 20M (p.r.t. p. 41). This mode provides i.e. the opportunity of long term monitoring of pressure.

Specification: (GDUSB1000)

- Measuring range:** corresponding to connected probe
max. range: -19999 ... +19999 Digit
Pressure units: mbar, bar, Pa, kPa, MPa, mmHg, PSI, mH₂O, switchable, according to the used sensor
Sampling rate: 1000 measurements / sec. (= 1 ms)
Accuracy: ±0.2 % FS (at nominal temperature = 25°C)
Recording interval: 1 ms (at fast-mode) to 10 s via software adjustable
Connections:
PC: Standard USB plug (type A)
GMSD/GMXD: 6-pin screened Mini-DIN jack with bolting.
Power supply: via USB interface
Dimensions: 56 x 31 x 24 mm, **Cable length (USB):** 30 cm
System requirements software: CPU with 1GHz, 256 MB RAM
 The software is executable with: Windows 98SE, 2000, XP, Vista and 7.

USB Data Logger

with Display for external Thermocouples (J, K und T) or Humidity / Temperature and Dew Point



- Direct connection to USB interface
- 2 programmable alarm limits
- LED for indication of low battery power
- Data logger with display
- red, green and orange LED for system status
- IP67
- incl. software

EL-USB-2-LCD (device + software)
USB Data Logger for Humidity / Temperature and Dew Point

EL-USB-TC-LCD (device + software)
USB Data Logger for external Thermocouples (J, K und T)

Specification EL-USB-2-LCD:

- Measuring Range** Temperature: -35 ... +80°C
 Humidity: 0 ... 100% r.h.
 Dew Point via Software
Resolution: 0,5 °C / 0,5% r.h.
Accuracy Temperature (typ): ± 1°C
 Humidity: ± 3,5 %r.F. (in the range 20 till 80 %r.h.)
 Dew Point: ± 2°C (in the range 40...100%r.h., 25°C)
Memory: 16.382 recordings per humidity and temperature
Logging Interval: 10 sec, 1 min, 5 min, 30 min, 1 h, 6 h, 12 h programmable via software
Serial Interface: USB
Battery: 3,6V lithium battery, size 1/2 AA, exchangeable
Dimensions: 103 x 26,4 mm (L X W), Ø 27,0mm
Scope of supply: 1 device, 1 lithium battery 3,6V, 1 software, 1 clip
 1 protection cap, 1 operating manual (on CD-ROM), 1 clip

Specification EL-USB-TC-LCD:

- Measuring Range:** Typ J: -130 ... +900°C, Typ K: -200 ... +1300°C
 Typ T: -200 ... +350°C
Resolution: 0,5°C
Accuracy (typ.): ± 1,0°C @ 25°C
Thermocouple Connectors: Thermoelement socket in miniature size, suitable for flat-pin plugs
Memory: 32.000 data
Logging Interval: 1 sec, 10 sec, 1 min, 5 min, 30 min, 1 h, 6 h, 12 h adjustable via software
Operating Temp. Range: -10 ... +40°C
Serial Interface: USB
Battery: 3,6V Lithium battery, size ½AA
Battery Life Time: 6 month @ 25°C and recording intervall 1 min
Dimensions: 118,2 x 26,8 mm (L X W), Ø 27,0mm
Scope of supply: 1 device incl. 3,6V lithium battery, 1 software, 1 protection cap, 1 operating manual (on CD-ROM), 1 clip, 1 wire temperature probe

Special Note:

EL-USB-2-LCD and EL-USB-TC-LCE are neither BUS- nor EASYBUS compatible.