PRO 211 / PRO 215

Differential pressure

handheld meter/data logger

- 2 x universal barbed pressure ports (+/-) for measuring differential pressure
- Different pressure ranges available for the best measurement accuracy in any applications
- Pressure **zero** and **slope** user corrections
- Pressure **peak** detection
- Fast and accurate
- Easy to use and read due to backlit **dot matrix/clear text** display
- Various measurement views available, including life chart
- Data logger with files read out via USB (only **PRO 215**)
- Statistical functions Min, Avg, Max
- Acoustic alarm with high/low thresholds and optional hysteresis
- List of favorite functions for quick access to the most used operations
- Built-in foldable stand and magnet for flexible operation
- Shock and impact proof
- IP 67 waterproof (except pressure ports)
- Optionally available DAkkS/ACCREDIA certificates
- Long battery life and external power via USB

DESCRIPTION

PRO 211 and PRO 215 are differential pressure high class professional handheld meters with a rich set of features, high grade robustness and operating comfort for safe and reliable use. PRO 215 also has data logging capability.

Pressure measurement

The meters have an internal digital differential pressure sensor. Different ranges are available, depending on model:

- PRO 21x-2: ±20 hPa
- PRO 21x-3: ±200 hPa
- PRO 21x-4: ±500 hPa
- PRO 21x-5: ±2000 hPa

The meter is equipped with a "peak" functionality for detecting sudden variations of the pressure measurement. Zero and slope user corrections allows compensating any possible sensor drift with time, for the best measuring accuracy.

The data logger is supplied with universal barbed pressure ports for connecting 4 and 6 mm inner diameter hose.

The pressure ports are screwed to the meter by a standard G 1/8 thread, allowing the user to change them with a different type of port, if necessary, to fit his specific needs.

Pressure connections

Display

The multilingual large dot matrix/clear text LCD has ergonomic wide-angle visibility from daylight to darkness, thanks to the backlight. It displays either large scale values, statistical data or the chart of a variable measurement history.

The HOLD feature allows freezing the measurements on display, while the REL feature allows showing the measurement against the measured value.

Many units of measurement available, depending on measuring range: Pa, hPa, kPa, MPa, bar, mbar, psi, kg/cm^2, inHg, mmHg, mmH_2O.

Data logging (only PRO 215)

Large storage capacity: up to 1 million data, file system based.

The logged data are store in CVS files that can be easily viewed connecting the instrument to a PC via USB: the instrument is seen by the PC as a mass storage device, the data can be read oud and evaluated without software necessarily needed.

.

Automatic log with configurable interval.

The instruments integrate a Real Time Clock: date and time of each logged sample are stored.

Application software

In addition to CSV files, the free user-friendly basic **ProXware** PC application software allows for examination of a large amount of logged data.

For a more in-depth data analysis, an optional advanced version of the **ProXware** software is available.

Alarm

Configurable alarm thresholds and optionally hysteresis can be set. LCD indication and buzzer activation when thresholds are exceeded.

Statistics

Detection of MIN, AVG (average) and MAX for each displayed variable. The user can clear the statistical info to start a new statistical calculation.

PC connectivity

Via the USB C port, for viewing or downloading the files stored in the instrument internal memory (only PRO 215) or connecting to the application software **ProXware**.

Power supply

4 Powerful AA batteries, the low power design and the configurable auto-off feature are ensuring long operation.
For permanent operation the instrument can also be powered via its USB C port. Any standard 5 Vdc power adapter or a PC USB port can be used.

Configurable LCD backlight for more energy saving options.

Ergonomics

The construction allows for both one-handed use as well as bench-top use with the foldable back stand.

Side rubber protection offers a secure grip during the use in the field.

Calibration support

Calibration reports or DAkkS/ACCREDIA certificates are available upon request.

The last calibration date is stored.

Measurement specifications	
Measuring range	PRO 21x-2: ±20.00 hPa PRO 21x-3: ±200.0 hPa PRO 21x-4: ±500.0 hPa PRO 21x-5: ±2000 hPa
Resolution	PRO 21x-2: 0.01 hPa PRO 21x-3: 0.1 hPa PRO 21x-4: 0.1 hPa PRO 21x-5: 1 hPa
Accuracy	±0.15 %FSS[*] ± 1 digit typ. @ 25 °C ±1.5 %FSS ± 1 digit max.
Measurement rate	4 meas/s
Overpressure limit	PRO 21x-2: ±60 hPa PRO 21x-3: ±600 hPa PRO 21x-4: ±1500 hPa PRO 21x-5: ±3500 hPa
Temperature drift (ref. 25 °C)	±0.002 %FSS/K typ.
Long-term drift	±1 %FSS/year max.
Compatible media	Air and non-aggressive dry gases

[*] FSS = 2 x full scale pressure

General specifications

Channels	1 differential 2 x universal barbed pressure ports (+/-) for 4 and 6 mm inner diameter hose Interchangeable G 1/8 thread connections
Storage capacity (only PRO 215)	Up to 1 million data sets, file system based Each data set includes date/time stamp and measurements of all channels Data are stored in CVS files
Logging type (only PRO 215)	Automatic with manual or scheduled start/stop
Logging interval (only PRO 215)	1, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 20, 30 min / 1 hour
Clock	User settable RTC Max. drift 1 min/month @ 25 °C
Display	140 x 160 dot matrix backlit LCD / Visible area 42 x 50 mm Multiple choice of measurement screens: • Large digit single value • Multi-row • Statistical info (Min/Avg/Max) • Chart view
User interface	Multilingual (de, en, it, fr, es)
PC connection	USB C Mass Storage Device (only PRO 215)
Power supply	4 x AA alkaline batteries External 5 Vdc via USB C (power adapter or PC USB port)
Power consumption	20 mA typ.
Battery autonomy	> 150 h typ. continuous operation
Auto power off	Yes, user configurable Automatically disabled if external power is connected
Operating conditions	-5…50 °C / 0…85 %RH non-condensing
Storage temperature	-25…65 °C (without batteries)
Protection degree	IP 67 (except pressure ports) IK 04
Dimensions	170 x 78 x 38 mm
Weight	340 g approx.
Housing material	ABS, TPE (side protection), Polyester (front panel)

ORDERING CODES

PRO 211-x   Differential pressure meter. Supplied with universal barbed pressure ports for 4 and 6 mm inner diameter hose, 4 x AA alkaline batteries.

Available ranges:

PRO 211-2: ±20 hPa	**Art.no. 486241**
PRO 211-3: ±200 hPa	**Art.no. 486124**
PRO 211-4: ±500 hPa	**Art.no. 486242**
PRO 211-5: ±2000 hPa	**Art.no. 486243**

PRO 215-x   Differential pressure meter/data logger. Supplied with universal barbed pressure ports for 4 and 6 mm inner diameter hose, 4 x AA alkaline batteries, USB cable and software downloadable from Greisinger website.

Available ranges:

PRO 215-2: ±20 hPa	**Art.no. 486244**
PRO 215-3: ±200 hPa	**Art.no. 486125**
PRO 215-4: ±500 hPa	**Art.no. 486245**
PRO 215-5: ±2000 hPa	**Art.no. 486246**

Other optional pressure ports must be ordered separately (see accessories).

Accessories

GDZ-UT   Universal barbed pressure port for 4 and 6 mm inner diameter hose.
Art. No. 479260
Spare part – Included in the scope of supply

GDZ-QC6   Quick coupling pressure port for 4 mm inner diameter hose.
Art. No. 479261

GDZ-ST6   Screw coupling pressure port for 4 mm inner diameter hose.
Art. No. 479466

GDZ-MCF   2.7 mm nominal diameter mini female quick coupling for 4 mm inner diameter hose.
Art. No. 480221

GDZ-MCM   2.7 mm nominal diameter mini male quick coupling for 4 mm inner diameter hose.
Art. No. 479467