

# PRO 211-x

# PRO 215-x

## DIFFERENTIAL PRESSURE HANDHELD METER / DATA LOGGER

### INTRODUCTION

**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. PRO 215 also has **data logging capability**.

### FEATURES

#### 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<sup>2</sup>, inHg, mmHg, mmH<sub>2</sub>O.

#### 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 out 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.

#### Alarm

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

### CONFIGURATION & MEASUREMENT

#### Sensors

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

#### Connection to PC

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.

#### Statistics

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



### HIGHLIGHTS

- 2 x universal barbed pressure ports (+/-) for differential pressure
- Fast and accurate
- Backlit dot matrix/clear text display, multilingual
- Life chart display
- Data logger with files read out via USB (PRO 215 only)
- Statistical functions Min, Avg, Max
- Acoustic/optic alarm
- Foldable stand and magnet for flexible operation
- Shock and impact proof, IP 67 waterproof (except pressure ports)
- Optionally available DAKKS/ ACCREDIA certificate

## Measurement specifications

Measuring range	PRO 21x-2: $\pm 20.00$ hPa PRO 21x-3: $\pm 200.0$ hPa PRO 21x-4: $\pm 500.0$ hPa PRO 21x-5: $\pm 2000$ 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	$\pm 0,15\%$ FSS (*) $\pm 1$ digit typ. @ 25 °C $\pm 1,5\%$ FSS $\pm 1$ digit max.
Measurement rate	4 meas/s
Overpressure limit	PRO 21x-2: $\pm 100$ hPa PRO 21x-3: $\pm 1000$ hPa PRO 21x-4: $\pm 2000$ hPa PRO 21x-5: $\pm 3500$ hPa
Temperature drift (ref. 25 °C)	$\pm 0.002\%$ FSS/K typ.
Long-term drift	$\pm 1\%$ FSS/year max.
Compatible media	Air and non-aggressive dry gases

(\*) FSS = 2 x full scale pressure

## Ordering codes

PRO 211-x	Differential pressure meter. Supplied with universal barbed pressure ports for 4 and 6 mm inner Ø hose, 4 x AA alkaline batteries.
PRO 211-2 Art.No. 486241	Range $\pm 20$ hPa
PRO 211-3 Art.No. 486124	Range $\pm 200$ hPa
PRO 211-4 Art.No. 486242	Range $\pm 500$ hPa
PRO 211-5 Art.No. 486243	Range $\pm 2000$ hPa
PRO 215-x	Differential pressure meter/data logger. Supplied with universal barbed pressure ports for 4 and 6 mm inner Ø hose, 4 x AA alkaline batteries, USB cable and software downloadable from Senseca website.
PRO 215-2 Art.No. 486244	Range $\pm 20$ hPa
PRO 215-3 Art.No. 486125	Range $\pm 200$ hPa
PRO 215-4 Art.No. 486245	Range $\pm 500$ hPa
PRO 215-5 Art.No. 486246	Range $\pm 2000$ hPa
Other optional pressure ports must be ordered separately.	

## Accessories

GDZ-UT-GE Art.No. 479260	Universal barbed pressure port for 4 and 6 mm inner Ø hose.
GDZ-QC6-GE Art.No. 479261	Quick coupling pressure port for 4 mm inner Ø hose.
GDZ-ST6-GE Art.No. 479466	Screw coupling pressure port for 4 mm inner Ø hose.
GDZ-MCF-GE Art.No. 480221	2.7 mm nominal Ø mini female quick coupling for 4 mm inner Ø hose.
GDZ-MCM-GE Art.No. 479467	2.7 mm nominal Ø mini male quick coupling for 4 mm inner Ø hose.

## General specifications

Channels	1 differential 2 x universal barbed pressure ports (+/-) for 4 and 6 mm inner Ø hose Interchangeable G 1/8 thread connections
Storage capacity (only PRO 215-x)	Up to 1 million data sets, file system based. Each data set includes date/time stamp and measurement. Data are stored in CVS files.
Logging type (only PRO 215-x)	Automatic with manual start/stop
Logging interval (only PRO 215-x)	1, 2, 5, 10, 15, 30 s / 1, 2, 5, 10, 15, 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: <ul style="list-style-type: none"> <li>• Large digit single value</li> <li>• Multi-row</li> <li>• Statistical info (Min/Avg/Max)</li> <li>• Chart view</li> </ul>
User interface	Multilingual
PC connection	USB C Mass Storage Device (only PRO 215-x)
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	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 probe connection) IK 04
Dimensions	170 x 78 x 38 mm
Weight	340 g ca.
Housing material	ABS, TPE (side protection) Polyester (front panel)



Pressure inputs