PRO 131.2
PRO 135.2

2-CHANNEL HANDHELD METER / DATA LOGGER FOR THERMOCOUPLE PROBES



INTRODUCTION

PRO 131.2 and **PRO 135.2** are dual channel high class professional handheld meters for thermocouple probes with a rich set of features, high grade robustness and operating comfort for safe and reliable use.
PRO 135 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.
°C, °F and K units of measurement are available.
If two probes are connected, the instrument calculates and shows the difference between the measurement of the two channels.
On demand, the display of the internal device temperature (reference junction) can also be switched on.

Data Logging (only PRO 135.2)

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.

Alarm

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

CONFIGURATION & MEASUREMENT

Probes

Any K, J, T, N, R, S, B and E standard thermocouple probe can be connected.
Wide range of probes available.
Configurable surface correction factors can be set for use in combination with Senseca contact probes, for the best measuring accuracy.

Connection to PC

Via the USB C port, for viewing or downloading the files stored in the instrument internal memory (only PRO 135.2) 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-channel for type K, J, T, N, R, S, B, E thermocouple probes
- Display of the difference and of internal temperature
- Fast and accurate
- Backlit dot matrix/clear text display, multilingual
- Life chart display
- Data logger with read out via USB (only PRO 135)
- Statistical functions Min, Avg, Max
- Acoustic/optic alarm with high/low thresholds and optional hysteresis
- Built-in foldable stand and magnet for flexible operation
- Shock and impact proof
- Optionally available DAkkS/ ACCREDIA certificate

Measurement specifications

Measuring range	K: -220.0...+1372.0 °C / -364.0...+2501.6 °F J: -200.0...+1100.0 °C / -328.0...+2012.0 °F N: -200.0...+1300.0 °C / -328.0...+2372.0 °F S: -50...+1750 °C / -58...+3182 °F T: -200.0...+400.0 °C / -328.0...+752.0 °F E: -60.0...+850.0 °C / -76.0...+1562.0 °F B: +300...+1750 °C / +572...+3182 °F R: -50...+1750 °C / -58...+3182 °F
Resolution	0.1 °C / 0.1 °F o 1 °C / 1 °F depending on TC type (see meas. ranges)
Accuracy	±(0.2 °C + 0.2% of measured value) ± 1 digit (J, K, N, T, E) ±(1 °C + 0.4% of measured value) ± 1 digit (S, B, R)
Cold junction accuracy	±0.3 °C
Measurement rate	4 mes/s
Long-term drift	±0.1 °C/year
Max cable length	<30 m

Type K thermocouple probes

AX131-D3-130-L01-S-MF *Art.No. 486731*	Immersion probe, large handle, Ø3 mm, 1 m silicone cable, mini flat pin plug.
AX131-I1.5-130-L01-S-MF *Art.No. 486828*	Insertion probe, large handle, Ø1,5 mm, 1 m silicone cable, mini flat pin plug.
AX131-I3-130-L01-S-MF *Art.No. 486829*	Insertion probe, large handle, Ø3 mm, 1 m silicone cable, mini flat pin plug.
AX131-M3-150-L01-S-MF *Art.No. 486822*	Immersion probe, large handle, Ø3 mm, mineral insulated, 1 m silicone cable, mini flat pin plug.
AX131-S15-HA-L01-S-MF *Art.No. 486852*	Surface probe with spring band, fast, large handle, Ø15 mm, not potential-free, length 120 mm, head angled, 1 m silicone cable, mini flat pin plug.
AX131-S15-HS-L01-S-MF *Art.No. 486854*	Surface probe with spring band, fast, large handle, Ø15 mm, not potential-free, length 130 mm, head straight, 1 m silicone cable, mini flat pin plug.
AX131-S15-TA-L01-S-MF *Art.No. 486853*	Surface probe with spring band, fast, large handle, Ø15 mm, not potential-free, length 127+60 mm, sensor tube angled, 1 m silicone cable, mini flat pin plug.
AX131-S8-HS-L01-S-MF *Art.No. 486856*	Surface probe with coil spring, compact, large handle, Ø8 mm, not potential-free, length 130 mm, ceramic head straight, 1 m silicone cable, mini flat pin plug.

Ordering codes

PRO 131.2 *Art.No. 486119*	2-channel handheld temperature meter for thermocouple probes. Supplied with 4 x AA alkaline batteries.
PRO 135.2 *Art.No. 486118*	2-channel handheld temperature meter/data logger for thermocouple probes. Supplied with 4 AA alkaline batteries, USB cable and software downloadable from Senseca website.
Probes have to be ordered separately.	

General specifications

Channels	2 Miniature female flat-pin TC connectors, internal temperature
Storage capacity (only PRO 135.2)	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 135.2)	Automatic with manual start/stop
Logging interval (only PRO 135.2)	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: • Large digit single value • Multi-row • Statistical info (Min/Avg/Max) • Chart view
User interface	Multilingual
PC connection	USB C Mass Storage Device (only PRO 135.2)
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 06
Dimensions	170 x 78 x 38 mm
Weight	320 g ca.
Housing material	ABS, TPE (side protection) Polyester (front panel)



TC connectors

V 2.2

Senseca Germany GmbH
Hans Sachs Str. 26 | 93128 Regenstauf | Germany
www.senseca.com - info@senseca.com