PRO 131 / PRO 135

2-channel handheld meter/data logger

for thermocouple probes

- 2-channel for type K, J, T, N, R, S, B, E thermocouple probes
- Calculation of the measurement difference between the 2 channels
- 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 135**)
- Statistical functions Min, Avg, Max
- Acoustic alarm with high/low thresholds and optional hysteresis
- 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 probe connectors)
- Optionally available DAkkS/ACCREDIA certificates
- Long battery life and external power via USB

DESCRIPTION

PRO 131 and PRO 135 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.

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.

TC connectors

for further information please refer to www.gsg-e-shop.com | Phone no.: +49 931 / 30 40 8-0

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.

If two probes are connected, the instrument calculates and shows the difference between the measurement of the two channels.

°C, °F and K units of measurement are available.

Data logging (only PRO 135)

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

The logged data are store in CSV 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 135) 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.

TECHNICAL SPECIFICATIONS

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: -50.0...+1750.0 °C / -58.0...+3182.0 °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: -50.0...+1750.0 °C / -58.0...+3182.0 °F
Resolution	0.1 °C / 0.1 °F or 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) ±(0.5 °C + 0.4% of measured value) ± 1 digit (S, B, R)
Cold junction accuracy	±0.3 °C
Measurement rate	4 meas/s
Long-term drift	±0.1 °C/year

General specifications

Channels	2 Miniature female flat-pin TC connectors
Storage capacity (only PRO 135)	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 135)	Automatic with manual start/stop
Logging interval (only PRO 135)	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 135)
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 probe connection), IK 04
Dimensions	170 x 78 x 38 mm
Weight	320 g approx.
Housing material	ABS, TPE (side protection), Polyester (front panel)

ORDERING CODES

PRO 131   2-channel handheld temperature meter for thermocouple probes. Supplied with 4 x AA alkaline batteries.

Art.No. 486119

PRO 135   2-channel handheld temperature meter/data logger for thermocouple probes. Supplied with 4 AA alkaline batteries, USB cable and software downloadable from Senseca website.

Art.No. 486118

Probes have to be ordered separately.