

## Portable Conductivity Meter / Data Logger



- Available from 03.2026
- Water protected IP67
- Robust user interface: Impact proof, glove operation
- fix connected cable probes with integrated temperature sensor, long term stable, for highest accuracy
- Variants for wider range universal use and specialized item e.g. for high purity water.
- Easy to use due to backlit dot matrix/clear text display, multilingual
- life chart display
- PRO 525 : Data logger with files read out via USB - no extra software necessary (ProXware data management software free of charge)
- Built-in foldable stand and magnet for flexible operation

## INTRODUCTION

The PRO 521/525 are high class professional conductometers handheld meters with a rich set of features, high grade robustness and operating comfort for safe and reliable use in water analysis applications.

PRO 525 has data logging capabilities and a USB interface and supply. Water, drop and impact protection is making it a perfect choice for field use, integrated pop-up stand helps in laboratory use.

The practice proven measuring cells of the several variants are the top choices for any application:

-425 wide range for environmental and laboratory

-200 high resolution pure and ultra-pure water e.g. for filtering and deionization

-210 glass platinum for colors, petrol, alcohol and similar.

## 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 live chart of measurement history.

The HOLD feature allows freezing the measurements on display.

Many units of measurement are available, depending on the connected probes.

### Data Logging (PRO 525 only)

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

The logged data are stored 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 comfortable data management software **ProXware** is downloadable at [senseca.com](http://senseca.com) - for free.

Alternatively the logger can be used as a manual data collector: Datasets are recorded on demand into .json-file.

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.

## Power supply

4 powerful rechargeable AA NiMH batteries, the low power design and the configurable auto-off feature ensure long operation. For permanent operation the instrument can also be powered via its USB C port. Any standard 5 Vdc power adapter with min 800 mA or PC USB port can be used.

Configurable LCD backlight for more energy saving options.

## Connection to PC

Via the USB C port, for viewing or downloading the files stored in the instruments internal memory or connecting to the application software ProXware.

## CONFIGURATION & MEASUREMENT

### Probes input via fixed cable connection:

The fixed connection to long life measuring cells gives a very economic choice for the referring application field.

By renouncing the flexible connection of measuring cells, the individual adjustment procedure carried out at the factory and the high quality of the cells, the result is the best possible accuracy of the conductometer, which surpasses comparable measuring systems.

The integrated temperature sensors are the basis of the applicable automated temperature compensations - or at least are the perfect source of a reliable precise reference temperature for the correct measurement recording.

Via the USB C port, for viewing or downloading the files stored in the Logger instruments internal memory or connecting to the application software ProXware (PRO 525 only).

## Statistics

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



Front side cable entry

## **Adjustment with reference solutions**

Comfortable adjustment (“calibration”) can be accomplished with guided user interface, reliable and precise due to full temperature compensation. In combination with our reference solutions GKL 10x, this is an excellent economic and practicable solution.

## **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 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

Inputs	PRO 52x-425 conductivity application	4 pole graphite/epoxy/PVCU 0.0 ... 500.0 $\mu$ S/cm ... 0 ... 1000 mS/cm ultra-wide range, from well water to waste water, chemicals
	PRO 52x-200 conductivity application	2 pole stainless steel/Peek 0.000 ... 2.000 $\mu$ S/cm ... 0.0 ... 100.0 $\mu$ S/cm DI / pure water and ultra-pure water
	PRO 52x-210 conductivity application	2 pole Platinum/glass 0.00 ... 50.00 $\mu$ S/cm ... 0 ... 1000 $\mu$ S/cm alcohol, oil, color/paint ...
	Temperature	-5.0 ... 105.0 °C
Resolution	PRO 52x-425	min. 0.1 $\mu$ S/cm
	PRO 52x-200	min. 0.001 $\mu$ S/cm
	PRO 52x-210	min. 0.01 $\mu$ S/cm
	Temperature	0.1 °C / 0.1 °F
Calculated values	PRO 52x-425	Resistivity 0.001 ... 100.0 kOhm*cm Salinity: 0.0 ... 70.0 g/kg TDS: 0 ... 2000 mg/l
	PRO 52x-200	Resistivity 0.01 ... 20.00 MOhm*cm
	PRO 52x-210	Resistivity 0.001 ... 10.00 MOhm*cm TDS: 0 ... 1000 mg/l
	Accuracy (@ 25°C ±1 digit)	Conductivity PRO 52x-425 ±0.5 % of value ±0.2% FS or ±2 $\mu$ S/cm PRO 52x-200 Typ. ±1 % of value ±0.5 % FS PRO 52x-210 Typ. ±1 % of value ±0.5 % FS Temperature ±0.2 % of value ±0.3 K
Cell correction	adjustable 0.800 ... 1.200 1/cm manually or automatically via selectable conductivity control solutions GKL 10x	
Temperature compensation	Automatic or can be switched off using the temperature sensor integrated in the sensor	
	nLF: Non-linear function of natural water according to DIN EN27888 (ISO 7888) (reference temperature adjustable: 20 or 25 °C)	
	Lin: Linear compensation of 0.3 ... 3.0 % / K (reference temperature adjustable: 20 or 25 °C)	
	NaCl: Compensation of weak NaCl solutions only in pure and ultrapure water (reference temperature adjustable: 20 or 25 °C)	
	off: No compensation	
Measurement rate	1 meas/s	

## GENERAL SPECIFICATIONS

Logger (PRO525 only)		
	Storage capacity	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	Automatic with manual start/stop Single-shot logger (logging on keypress)
	Logging interval	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: <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 (de, en, it, fr, es)
PC connection		USB C Mass Storage Device
Power supply		4 x AA Alkaline batteries External 5 Vdc via USB C (power adapter or PC USB port)
Power consumption		18 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 IK 04
Dimensions		170 x 78 x 38 mm plus measuring cell
Weight		PRO 52x-425: 435 g approx.
Housing material		ABS, TPE (side protection), Polyester (front panel)

## ORDERING CODES

**PRO521-425** Waterproof conductivity measuring instrument, graphic display,  
scope of delivery: incl batteries, Quickstart  
Device in carton box, test-protocol, fixed measuring cell 4 pole graphite/epoxy/PVCU  
Art no. 489193

**PRO525-425** Waterproof conductivity measuring instrument, graphic display, with data logger  
scope of delivery: incl batteries, Quickstart, USB-C cable  
Device in carton box, test-protocol, fixed measuring cell 4 pole graphite/epoxy/PVCU  
Art no. 489194

**PRO521-200** Waterproof conductivity measuring instrument, graphic display,  
scope of delivery: incl batteries, Quickstart  
Device in carton box, test-protocol, fixed measuring cell 2 pole stainless steel/Peek  
Art no. 489668

**PRO525-200** Waterproof conductivity measuring instrument, graphic display, with data logger  
scope of delivery: incl batteries, Quickstart, USB-C cable  
Device in carton box, test-protocol, fixed measuring cell 2 pole stainless steel/Peek  
Art no. 489670

**PRO521-210** Waterproof conductivity measuring instrument, graphic display,  
scope of delivery: incl batteries, Quickstart  
Device in carton box, test-protocol, fixed measuring cell 2 pole Platinum/glass  
Art no. 489669

**PRO525-210** Waterproof conductivity measuring instrument, graphic display, with data logger  
scope of delivery: incl batteries, Quickstart, USB-C cable  
Device in carton box, test-protocol, fixed measuring cell 2 pole Platinum/glass  
Art no. 489671

## ACCESSORIES

### Consumables

GKL 100	Calibration solution 1413 $\mu$ S/cm, 100 ml bottle	Art no. 601396
GKL 101	Calibration solution 84 $\mu$ s/cm in 250 ml dosing bottle	Art no. 601398
GKL 102	Calibration solution 50 ms/cm, 100 ml bottle (sea water ref.)	Art no. 601400

For further articles, please visit Senseca website.

### Other Accessories

#### CASE PRO-400



Case for PRO Line.  
Recess for one instrument, space for accessories,  
carrying handle, zipper.  
Dimensions: 415 x 245 x 70 mm (W x H x D).  
Art. No. 486900