

Family Datasheet

Conductivity measuring device ECO 522 - ECO 523

- Modern and functional housing
- Outstanding price/performance ratio
- Waterproof (IP65 / IP67)
- 3-line display / overhead display at the push of a button
- Backlighting
- Durable, long battery life
- Measurement accuracy with high-precision measuring cells with temperature measurement
- Hold function for freezing measured values
- Min/Max function for minimum and maximum recorded measured value
- Made in Germany



Features

The primary focus in the development of the new G 1000 series was placed on the essential functions of the measurement technology. Pure measurement with a focus on precision, speed and reliability and compact packaging enable an impressive price/performance ratio, Made in Germany.

The devices also have impressive ergonomics, dust and water protection according to IP 65/67 and display backlighting.

ECO 522 is a universal wide-range conductometer with durable 2-pole measuring cell for measurements in applications from deionised water (purification processes, aquarium applications) to sea water with up to 100.0 mS/cm.

ECO 523 is equipped with a stainless steel purest water measuring cell and specialised for high-resolution measurement of purest water, alcohol, solvents and similar liquids. The resolution is up to 0.001 $\mu\text{S}/\text{cm}$.

The measuring devices can be used in aquarium, aquaculture, plant cultivation, pharmaceutical, laboratory, quality assurance and service (e.g. osmosis systems) applications.

Conductivity measuring device ECO 522 - ECO 523

Technical data

	ECO 522	ECO 523
	Wide-range meas. device, incl. graphite meas. cell	Cleanest water version, incl. stainless steel measuring cell
Measuring	Conductivity, salinity, TDS	Conductivity, specific resistance, NaCl
Measuring ranges	With automatic measuring range shifting	
Conductivity	0..2000 μ S/cm 0,00..20,00 mS/cm 0,0..100,0 mS/cm	0,000..2,000 μ S/cm 0,00..20,00 μ S/cm 0,0..100,0 μ S/cm
Specific resistance		In MOhm*cm 0,0100..0,2000 0,010..2,000 0,01..20,00
TDS	0..2000 mg/l	
Salinity (PSU)	0,0..50,0 g/kg	
Temperature Accuracy	-5,0..+105,0 °C	
Conductivity	\pm 0,5 % of meas. v. \pm 0,5 % FS	Typ. \pm 1% of m. value \pm 0,5 %FS
Temperature	\pm 0,3 °C	\pm 0,3 °C
Oxygen	\pm 1.5 % of meas. value \pm 02 mg/l or -> 0.2	
Temperature compensation	Off: deactivated nLF: non-linear, acc. to EN 27888	Off: deactivated nLF: non-linear, acc. to EN 27888 LIN: linear with variable coefficients NaCl: For weak NaCl solutions in accordance with EN 60746-3
Reference temperatures	20 und 25 °C	20 und 25 °C
Sensors / measuring inputs	Permanently connected 2-pole measuring cell with integrated temperature sensor	
Measuring cell	2-pole meas. cell, \varnothing 12 mm graphite Cable 1.2 m (others avail. for additional charge)	2-pole measuring cell, \varnothing 12 mm (stainless steel 1.4404,1.4435)) Cable 1.2 m (others avail. for add. charge)
Range of application	-5..+80 °C (temporarily 100 °C)	
Display	3-line with battery status indicator, background light, protected by an break-proof pane, overhead display at key press	
Operation	4 long-lasting, easy-to-operate buttons	
Additional functions	Automatic measuring range shifting, automatic temperature compensation	
Display unit environment	-20..+50 °C	
Current supply	2 x AA battery, >1000 h operating time	
Ingress protection	IP 65 /67	
Housing	Break-proof ABS housing	
Dimensions	108 x 54 x 28 mm (H x W x T) without sensor	
Weight	approx. 200 g (G 1410) approx. 230 g (G 1420)	

Conductivity measuring device ECO 522 - ECO 523

Measuring cell



Measuring cell G 1410, wide-range 2-pole graphite:
Low maintenance and applicable up to 100 mS/cm



Measuring cell G 1420, purest water 2-pole stainless steel/Peek:
High-resolution up to 0.001 μ S/cm

Scope of delivery

- Dust-proof and waterproof handheld measuring device according to IP 65/67
- Permanently connected measuring cell:
ECO 522: 2-pole graphite measuring cell up to 100 mS/cm
ECO 523: 2-pole stainless steel/Peek measuring cell up to 100 μ S/cm
- Test report
- 2x AA battery
- Operating manual

Bestellcodes

G1410 -

1.	Option
	Device, measuring cell LF 202, 2-pole graphite, permanently connected
1002	Device, measuring cell LF 202, 2-pole graphite, permanently connected, in case GKK1002

G1420 -

1.	Option
	Device, measuring cell LF 200 RW, 2-pole stainless steel/Peek, permanently connected
1002	Device, measuring cell LF 200 RW, 2-pole stainless steel/Peek, permanently connected, in case GKK 1002

Conductivity measuring device ECO 522 - ECO 523

Standard-Artikel

ECO 522-L01	Waterproof universal conductivity measuring device Set-Option: Device, measuring cell LF 202, 2 pole graphite, fix mounted Measuring cell: 2-pole graphite measuring cell Scope of delivery: Device incl. measuring cell, manual, battery, test protocol Range of application: Device: -20 ... +50 °C, measuring cell: -5 ... +80 °C (short time 100 °C) Article no. 486758
ECO 522-1002-L01	Waterproof universal conductivity measuring device Set-Option: Device, measuring cell LF 202, 2 pole graphite, fix mounted, in suitcase GKK1002 Measuring cell: 2-pole graphite measuring cell Scope of delivery: Device incl. measuring cell, manual, battery, test protocol Range of application: Device: -20 ... +50 °C, measuring cell: -5 ... +80 °C (short time 100 °C) Article no. 487055
ECO 522-WPL3-L01	Waterproof universal conductivity measuring device Set-Option: Device, measuring cell LF 202, 2 pole graphite, in suitcase GKK1002, factory calibration WPL3 Measuring cell: 2-pole graphite measuring cell Scope of delivery: Device incl. measuring cell, manual, battery, test protocol Range of application: Device: -20 ... +50 °C, measuring cell: -5 ... +80 °C (short time 100 °C) Article no. 487059
ECO 523-L01	high resolution ultrapure water conductivity measuring device Set-Option: Device, measuring cell LF 200 RW, 2 pole stainless steel, fix mounted Measuring cell: 2-pole stainless steel measuring call Scope of delivery: Device incl. measuring cell, manual, battery, test protocol Range of application: Device: -20 ... +50 °C, measuring cell: -5 ... +80 °C (short time 100 °C) Article no. 486760
ECO 523-1002-L01	high resolution ultrapure water conductivity measuring device Set-Option: Device, measuring cell LF 200 RW, 2 pole stainless steel, fix mounted, in suitcase GKK1002 Measuring cell: 2-pole stainless steel measuring call Scope of delivery: Device incl. measuring cell, manual, battery, test protocol Range of application: Device: -20 ... +50 °C, measuring cell: -5 ... +80 °C (short time 100 °C) Article no. 487056
ECO 523-WPL3-RW-L01	high resolution ultrapure water conductivity measuring device Set-Option: Device, measuring cell LF 200 RW, 2 pole stainless steel, in suitcase GKK1002, factory calibration WPL3-RW Measuring cell: 2-pole stainless steel measuring call Scope of delivery: Device incl. measuring cell, manual, battery, test protocol Range of application: Device: -20 ... +50 °C, measuring cell: -5 ... +80 °C (short time 100 °C) Article no. 487058

Conductivity measuring device ECO 522 - ECO 523

Accessories

GKL 100	Conductivity control solution (100 ml bottle with 1413 $\mu\text{S/cm}$, in accordance with DIN EN 27888)	article no. 601396
GKL 101	Conductivity control solution (250 ml bottle with 84 $\mu\text{S/cm}$)	article no. 601398
GKL 102	Conductivity control solution (100 ml bottle with 50 mS/cm)	article no. 601400
HD-22-3	Freely positionable, flexible laboratory electrode holding arm. For probes with \varnothing 12 mm	article no. 700040
GWZ-01	Glass flow vessel (for measuring cells \varnothing 12 mm, hose connection \varnothing 6 mm)	article no. 603499
ST-G1000	Device protection bag with 1 round cut-out	article no. 611373
GB AA	Spare battery AA (2 batteries required)	article no. 610049

Case:

GKK 1001	Compact storage of the device	article no. 611604
GKK 1002	With recesses for a device with sensor of G1400/G1500/G1600 series. Additional recess for temperature sensor GF1T (235 x 185 x 48 mm)	article no. 411907

Additional accessories

ISO calibration certificates

ISO-WPL3 (article no. 602622)

ISO calibration certificate with 3 test points:

~147 $\mu\text{S/cm}$, ~1413 $\mu\text{S/cm}$, ~12.90 mS/cm

ISO-WPL3-RW (article no. 602624)

ISO calibration certificate with 3 test points:

~2.50 $\mu\text{S/cm}$, ~7.00 $\mu\text{S/cm}$, ~15.00 $\mu\text{S/cm}$

Further available accessories can be found on the Senseca website.