Family Datasheet

Conductivity Meter 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
- Backlight
- 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
- ECO 523 for DI / filtered / ultra-pure water

ECO 522

ECO 523

Features

The primary focus in the development of the ECO-Line 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 backlight.

ECO 522 is a universal wide-range conductometer with durable 2-pole measuring cell for measurements in applications from deionized 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 µS/cm.

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

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Conductivity Meter 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 µS/cm 0.00 ... 20.00 mS/cm 0.0 ... 100.0 mS/cm	0.000 ... 2.000 µS/cm 0.00 ... 20.00 µS/cm 0.0 ... 100.0 µS/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	±0.5 % of meas. v. ±0.5 % FS	Typ. ±1% of m. value ±0.5 %FS
Temperature	±0.3 °C	±0.3 °C
Oxygen	±1.5 % of meas. value ± 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, Ø 12 mm graphite Cable 1.2 m (others avail. for additional charge)	2-pole measuring cell, Ø 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 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 (ECO 522) approx. 230 g (ECO 523)	

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Conductivity Meter 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 µS/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 µS/cm
- Test report
- 2x AA battery
- Operating manual

ORDER CODES

ECO522 - [ ] (1.)

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

ECO523 [-] (1.)

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

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Conductivity Meter ECO 522 / ECO 523

STANDARD ARTICLES

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) **Art 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) **Art 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) **Art 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) **Art 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) **Art 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) **Art no. 487058**

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Conductivity Meter ECO 522 / ECO 523

ACCESSORIES

GKL 100	Conductivity control solution (100 ml bottle with 1413 µS / cm, in accordance with DIN EN 27888)	**Art no. 601396**
GKL 101	Conductivity control solution (250 ml bottle with 84 µS / cm)	**Art no. 601398**
GKL 102	Conductivity control solution (100 ml bottle with 50 mS / cm)	**Art no. 601400**
GWZ-01	Glass flow vessel (for measuring cells Ø 12 mm, hose connection Ø 6 mm)	**Art no. 603499**
ST-G1000	Device protection bag with 1 round cut-out	**Art no. 611373**
GB AA	Spare battery AA (2 batteries required)	**Art no. 610049**

Case:

GKK 1001	Compact storage of the device	**Art no. 611604**
GKK 1002	With recesses for a device with sensor, additional recess for temperature sensor GF1T (235 x 185 x 48 mm)	**Art no. 411907**

ADDITIONAL ACCESSORIES

ISO calibration certificates

ISO-WPL3	ISO calibration certificate with 3 test points: ~147 µS/cm, ~1413 µS/cm, ~12.90 mS/cm	**Art no. 602622k**
ISO-WPL3-RW	ISO calibration certificate with 3 test points: ~2.50 µS/cm, ~7.00 µS/cm, ~15.00 µS/cm	**Art no. 602624k**

Further available accessories can be found on the Senseca website.

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