

Mobil Multi Parameter Salinity and Temperature pH-Meter Conductivity Meter DHS



DHS Chip



Professional Benchtop Meter



Portable Meter



Portable Meter Kit

Portable pH-Meter EC-21 pH • EC-26 pH

In the development of the new EC-21/EC-26 series, a particular focus was put on easy handling during daily routine. The high-resolution color display guides the user intuitively through all measurement and calibration processes.



EC-21 pH

EC-21 pH • EC-26 pH

- high-resolution colour display, adjustable brightness
- DHS function, automatic recognition of DHS and analogue sensors
- Display of pH/mV and temperature values
- automatic pH calibration up to 3 points
- automatic ORP 1-point calibration
- selectable stability parameter (low-medium-high)
- automatic and manual temperature compensation
- Protection class IP 57
- Supplied in a robust transport case with all accessories

... additional for EC-26 pH

- GLP functions
- Data logger (automatic or manual) 1000 data records
- Connection to PC via micro-USB
- free DATA LINK +
- automatic brightness adjustment



EC-26 pH

Portable pH-Meter EC-21 pH • EC-26 pH

Various sets are available

- EC-21-pH-0 Kit without pH electrode, with temperature sensor, cable S7/BNC, pH buffer solution, carrying case and accessories
- EC-21-pH-1 Kit included pH electrode 201T, pH buffer solution, carrying case and accessories
- EC-21-pH-5 Kit included pH electrode 201T-DHS, pH buffer solution, carrying case and accessories
- EC-26-pH-0 Kit without pH electrode, with temperature sensor, cable S7/BNC, pH buffer solution, carrying case and accessories
- EC-26-pH-1 Kit included pH electrode 201T, pH buffer solution, carrying case and accessories
- EC-26-pH-5 Kit included pH electrode 201T-DHS, pH buffer solution, carrying case and accessories

Kit EC-26 pH 1

Model	EC-21 pH	EC-26 pH
Meas. Range/Resolution(pH)	0,00...14,00	-2,00 ... 16,00
Measuring Accuracy (pH)	0,1/0,01	
Calibration points	1...3	
Buffer solutions	USA, NIST and User defined	
Measuring range (mV)	±1.000	-1.000 ... 1900
Resolution (mV)	1	0,1 / 1
Temperature measuring range	0.0...100	-10 – 110
Resolution/Accuracy	0,1 / ± 0,5°C	
GLP	No	Yes
Calibration alarm	No	Yes
Memory	No	1000 Data
Interface	No	Micro USB
IP-class	IP 57	
Dimension	185 x 85 x 45 mm / 400 g	
Warranty Instrument	3 Years	



Basic Benchtop pH-Meter EC-31 pH • EC-36 pH

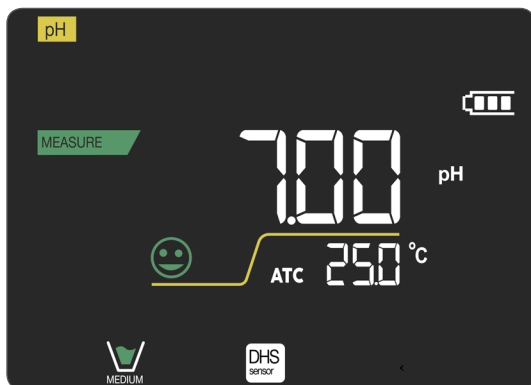
In the development of the new EC-31/EC-36 series, a particular focus was put on easy handling during the daily routine. The high-resolution color display guides the user intuitively through the measurement and calibration process.

EC-31 pH

- high-resolution colour display, adjustable brightness
- DHS function, automatic recognition of DHS and analogue sensors
- Display of pH/mV and temperature values
- automatic pH calibration up to 3 points
- automatic ORP 1-point calibration
- selectable stability parameter (low-medium-high)
- automatic and manual temperature compensation
- Protection class IP 54



EC-31 pH with electrode holder



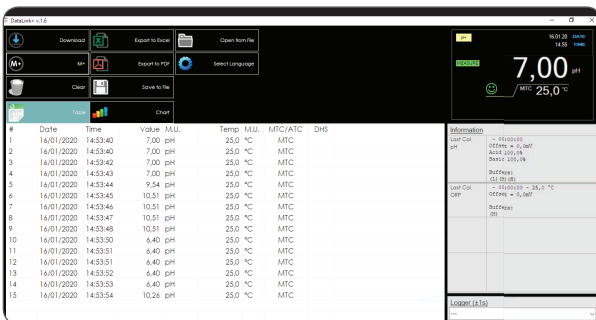
High Resolution colour Display EC-31 pH

Model	EC-31 pH	EC-36 pH
Meas. Range/Resolution(pH)	0,00...14,00	-2,00 ... 16,00
Measuring Accuracy (pH)	0,1/0,01	
Calibration points	1...3	
Buffer solutions	USA, NIST and User defined	
Measuring range (mV)	±1.000	-1.000 ... 1900
Resolution (mV)	1	0,1 / 1
Temperature measuring range	0.0...100	-10 – 110
Resolution/Accuracy	0,1 / ± 0,5°C	
GLP	No	Yes
Calibration alarm	No	Yes
Memory	No	1000 Data
Interface	No	Micro USB
IP-class	IP 54	
Dimension	170 x 145 x 60 mm / 530 g	
Warranty Instrument	3 Years	

Basic Benchtop pH-Meter EC-31 pH • EC-36 pH

... additional for EC-36 pH

- GLP functions
- Data logger (automatic or manual) 1000 data records
- Connection to PC via micro-USB
- free DATA LINK +
- automatic brightness adjustment



#	Date	Temp	Value	HLU	Temp	HLU	MFC/ATC	DHS
1	18/01/2020	14:53:40	7,00	pH	25,0	°C	MTC	
2	18/01/2020	14:53:40	7,00	pH	25,0	°C	MTC	
3	18/01/2020	14:53:42	7,00	pH	25,0	°C	MTC	
4	18/01/2020	14:53:43	7,00	pH	25,0	°C	MTC	
5	18/01/2020	14:53:44	9,54	pH	25,0	°C	MTC	
6	18/01/2020	14:53:45	10,51	pH	25,0	°C	MTC	
7	18/01/2020	14:53:46	10,51	pH	25,0	°C	MTC	
8	18/01/2020	14:53:47	10,51	pH	25,0	°C	MTC	
9	18/01/2020	14:53:48	10,51	pH	25,0	°C	MTC	
10	18/01/2020	14:53:50	6,40	pH	25,0	°C	MTC	
11	18/01/2020	14:53:51	6,40	pH	25,0	°C	MTC	
12	18/01/2020	14:53:51	6,40	pH	25,0	°C	MTC	
13	18/01/2020	14:53:52	6,40	pH	25,0	°C	MTC	
14	18/01/2020	14:53:53	6,40	pH	25,0	°C	MTC	
15	18/01/2020	14:53:54	10,26	pH	25,0	°C	MTC	

DATA LINK +

The software allows remote control of the instrument in measure mode.

It shows all information relating to the instrument and calibrations, data export at the end of the analysis (also in Excel and PDF format) and the display of measurements in the table and in graphic.



EC-36 pH with electrode holder

Various sets are available

EC-31-pH-0 Kit without pH electrode, with temperature sensor, cable S7/BNC, pH buffer solution, electrode holder

EC-31-pH-1 Kit included pH electrode 201T, pH buffer solution, electrode holder

EC-31-pH-5 Kit included pH electrode 201T-DHS, pH buffer solution, electrode holder

EC-36-pH-0 Kit without pH electrode, with temperature sensor, cable S7/BNC, pH buffer Solution, electrode holder

EC-36-pH-1 Kit included pH electrode 201T, pH buffer solution, electrode holder

EC-36-pH-5 Kit included pH electrode 201T-DHS, pH buffer solution, electrode holder

Conductivity Portable Meter EC-21 and EC-26 cond

In the development of the new EC-21/EC-26 series, particular emphasis was put on easy handling during daily routine. The high-resolution color display guides the user intuitively through all measurement and calibration processes.



EC-21 cond

EC-21 cond • EC-26 cond

- high-resolution colour display, adjustable brightness
- DHS function, automatic recognition of DHS and analogue sensors
- Display of Conductivity/TDS and temperature values
- automatic Conductivity calibration up to 5 points
- selectable stability parameter (low-medium-high)
- automatic and manual temperature compensation
- Protection class IP 57
- Supplied in a robust transport case with all accessories



EC-26 cond

... additional for EC-26 cond

- GLP functions
- Data logger (automatic or manual) 1000 data records
- Connection to PC via micro-USB
- free DATA LINK +
- automatic brightness adjustment

Conductivity Portable Meter EC-21 and EC-26 cond

Various sets are available

EC-21-cond-0 Kit without cell, with standard calibration solutions, carrying case and accessories

EC-21-cond-1 Complete kit include cond. Cell 2301T with ATC, cable length 1m and BNC plug, standard calibration solutions, carrying case and accessories

EC-26-cond-0 Kit without cell, with standard calibration solutions, power supply, software PC-Link, USB cable, carrying case with accessories

EC-26-cond-1 Complete kit include cond. Cell 2301T with ATC, cable length 1m and BNC plug, Standard calibration solutions, power supply, software PC-Link to download data, USB cable, carrying case with accessories.

Set EC-26 cond 1



Model	EC-21 cond	EC-26 cond
Meas. Range(Cond-mS)	0,00...200	
Measuring Accuracy (Cond)	0,1/1 µS 0,01/0,1 mS	
Calibration points	1...5	
Selectable cell constant (cm ⁻¹)	0,1 – 1 – 10	
Temperature measuring range	0.0...100	-10 – 110
Resolution/Accuracy	0,1 / ± 0,5°C	
TDS Measuring range	0.1 mg/l...200 g/l	
GLP	No	Yes
Calibration alarm	No	Yes
Memory	No	1000 Data
Interface	No	Micro USB
IP-class	IP 57	
Dimension	185 x 85 x 45 mm / 400 g	
Warranty Instrument	3 Years	

Basic Benchtop Conductivity Meter EC-31-Cond and EC-36-Cond

In the development of the new EC-31/EC-36 series, particular focus was put on easy handling during the daily routine. The high-resolution color display guides the user intuitively through the measurement and calibration process.

EC-31 cond

- high-resolution colour display, adjustable brightness
- Display of Conductivity/TDS and temperature values
- automatic conductivity calibration up to 5 points
- selectable stability parameter (low-medium-high)
- automatic and manual temperature compensation
- Protection class IP 54



EC-31 cond with electrode holder

... additional for EC-36 cond

- GLP functions
- Data logger (automatic or manual) 1000 data records
- Connection to PC via micro-USB
- free DATA LINK +
- automatic brightness adjustment

Various sets are available

- EC-31-cond-0** Kit without cell, with standard calibration solutions, carrying case and accessories
- EC-31-cond-1** Complete kit include cond. Cell 2301T with ATC, cable length 1m and BNC plug, standard calibration solutions, carrying case and accessories
- EC-36-cond-0** Kit without cell, with standard calibration solutions, power supply, software PC-Link, USB cable, carrying case with accessories
- EC-36-cond-1** Complete kit include cond. Cell 2301T with ATC, cable length 1m and BNC plug, Standard calibration solutions, power supply, software PC-Link, USB cable, carrying case with accessories.

Model	EC-31 cond	EC-36 cond
Meas. Range(Cond-mS)	0,00...200	
Measuring Accuracy (Cond)	0,1/1 µS 0,01/0,1 mS	
Calibration points	1...5	
Selectable cell constant (cm ⁻¹)	0,1 – 1 – 10	
Temperature measuring range	0.0...100	-10 – 110
Resolution/Accuracy	0,1 / ± 0,5°C	
TTDS Measuring range	0.1 mg/l...200 g/l	
GLP	No	Yes
Calibration alarm	No	Yes
Memory	No	1000 Data
Interface	No	Micro USB
IP-class	IP 54	
Dimension	185 x 85 x 45 mm / 530 g	
Warranty Instrument	3 Years	

Portable multi meter EC-21 multi and EC-26 multi

In the development of the new EC-21/EC-26 series, a particular focus was put on easy handling during daily routine. The high-resolution color display guides the user intuitively through all measurement and calibration processes.



EC-21 cond

EC-21 multi • EC-26 multi

- high-resolution colour display, adjustable brightness
- Display of pH/mV, Conductivity/TDS, temperature values
- automatic Conductivity calibration up to 5 points
- automatic pH calibration up to 3 points
- automatic ORP 1-point calibration
- selectable stability parameter (low-medium-high)
- automatic and manual temperature compensation
- Protection class IP 57
- Supplied in a robust transport case with all accessories

... additional for EC-26 cond

- GLP functions
- Data logger (automatic or manual)
1000 data records
- Connection to PC via micro-USB
- free DATA LINK +
- automatic brightness adjustment



EC-26 cond

Various sets are available

- EC-21-multi-0 Kit without pH-electrode, with conductivity cell 2301T, with standard calibration solutions, Temperature sensor, cable S7/BNC, carrying case with accessories
- EC-21-multi-1 Complete kit include pH electrode 201T and cond. Cell 2301T with ATC, both cable length 1m and BNC plug, standard calibration solutions, carrying case and accessories
- EC-21-multi-5 Kit included pH electrode 201T-DHS, pH buffer solution, carrying case and accessories
- EC-26-multi-0 Kit without pH-electrode and cell, standard calibration solutions, power supply, software PC-Link, USB cable, carrying case with accessories
- EC-26-multi-1 Kit include pH-electrode 201T and cell 2301T with ATC, cable length 1m and BNC plug, standard cal. solutions, power supply, software PC-Link, USB-cable, carrying case with accessories.
- EC-26-multi-5 Kit included pH electrode 201T-DHS, pH buffer solution, carrying case and accessories

Model	EC-31 multi	EC-36 multi
Meas. Range/Resolution(pH)	0,00...14,00	-2,00 ... 16,00
Measuring Accuracy (pH)		0,1/0,01
Calibration points		1...3
Buffer solutions	USA, NIST and User defined	
Meas. Range(Cond-mS)	0,00...200	
Measuring Accuracy (Cond)	0,1/1 µS 0,01/0,1 mS	
Calibration points	1...5	
Selectable cell constant (cm ⁻¹)	0,1 – 1 – 10	
Temperature measuring range	0.0...100	-10 – 110
Resolution/Accuracy	0,1 / ± 0,5°C	
TTDS Measuring range	0.1 mg/l...200 g/l	
GLP	No	Yes
Calibration alarm	No	Yes
Memory	No	1000 Data
Interface	No	Micro USB
IP-class	IP 54	
Dimension	185 x 85 x 45 mm / 530 g	
Warranty Instrument	3 Years	

Basic Benchtop Multi Meter EC-31-Multi and EC-36-Multi

In the development of the new EC-31/EC-36 series, a particular focus was put on easy handling during the daily routine. The high-resolution color display guides the user intuitively through the measurement and calibration process.

EC-31 multi

- high-resolution colour display, adjustable brightness
- Display of pH/mV, Conductivity/TDS and temperature values
- automatic Conductivity calibration up to 5 points
- automatic pH calibration up to 3 points
- automatic ORP 1-point calibration
- selectable stability parameter (low-medium-high)
- automatic and manual temperature compensation
- Protection class IP 54
- Supplied in a robust transport case with all accessories



EC-31 multi with electrode holder

Various sets are available

- EC-31-multi-0** Kit without pH-electrode, with conductivity cell 2301T, with standard calibration solutions, Temperature sensor, cable S7/BNC, pH buffer solutions, electrode holder
- EC-31-multi-1** Complete kit include pH electrode 201T and cond. Cell 2301T with ATC, both cable length 1m and BNC plug, standard calibration solutions, pH buffer solutions, electrode holder
- EC-31-multi-5** Complete kit include pH electrode 201T and cond. Cell 2301T with ATC, both cable length 1m and BNC plug, standard calibration solutions, pH buffer solutions, electrode holder
- EC-36-multi-0** Kit without pH-electrode, with conductivity cell 2301T, with standard calibration solutions, Temperature sensor, cable S7/BNC, pH buffer solutions, electrode holder
- EC-36-multi-1** Complete kit include pH electrode 201T and cond. Cell 2301T with ATC, both cable length 1m and BNC plug, standard calibration solutions, pH buffer solutions, electrode holder
- EC-36-multi-5** Complete kit include pH electrode 201T and cond. Cell 2301T with ATC, both cable length 1m and BNC plug, standard calibration solutions, pH buffer solutions, electrode holder

... additional for EC-36 multi

- GLP functions
- Data logger (automatic or manual) 1000 data records
- Connection to PC via micro-USB
- free DATA LINK +
- automatic brightness adjustment

Model	EC-31 multi	EC-36 multi
Meas. Range/Resolution(pH)	0,00...14,00	-2,00 ... 16,00
Measuring Accuracy (pH)	0,1/0,01	
Calibration points	1...3	
Buffer solutions	USA, NIST and User defined	
Meas. Range(Cond-mS)	0,00...200	
Measuring Accuracy (Cond)	0,1/1 µS 0,01/0,1 mS	
Calibration points	1...5	
Selectable cell constant (cm ⁻¹)	0,1 – 1 – 10	
Temperature measuring range	0.0...100	-10 – 110
Resolution/Accuracy	0,1 / ± 0,5°C	
TTDS Measuring range	0.1 mg/l...200 g/l	
GLP	No	Yes
Calibration alarm	No	Yes
Memory	No	1000 Data
Interface	No	Micro USB
IP-class	IP 54	
Dimension	185 x 85 x 45 mm / 530 g	
Warranty Instrument	3 Years	

DHS – The digital revolution at Phoenix Instrument

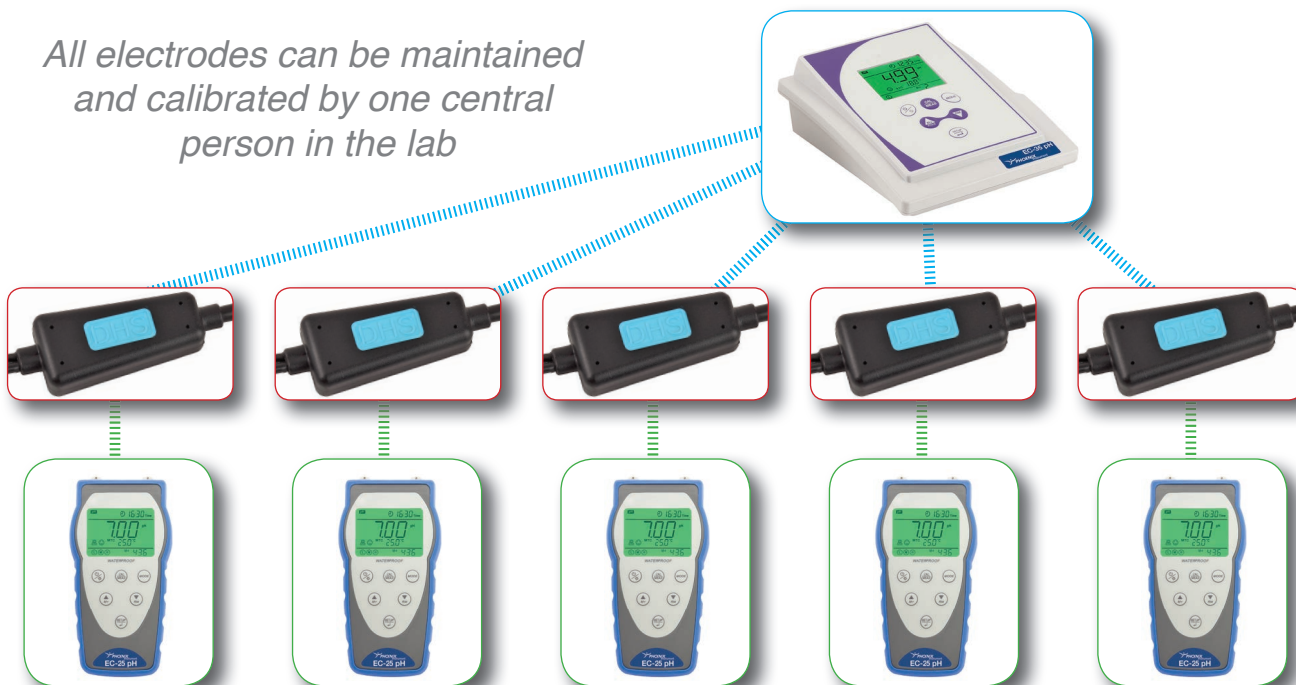
DHS, **Digital High Sensor**, is our new pH-sensor technology. These electrodes have an internal chip and stores all relevant calibration data, date of last calibration, slope, model and production batch.

If you connect a DHS-electrode with an DHS instrument, all data will be transferred from the chip into the instrument and the user can start immediately with its measurements without any additional calibrations.

The new **DHS-electrodes** do not need an internal battery and can be connected by a normal BNC-connector.

All instruments equipped with the new **DHS technology** can also be equipped with normal analog pH-electrodes. PH measurement was never easier.

All electrodes can be maintained and calibrated by one central person in the lab



In use, every electrode will be allocated to one pH-meter



DHS - Digital High Sensor pH Elektrode

pH - Standard electrodes

1000203	Gel	pH-electrode, gel-filled with ceramic diaphragma
1000223	Polymer	pH-electrode, polymer-filled with open pore diaphragma
1000443	Polymer Tip	pH-electrode, polymer-filled with double open pore diaphragma
1000363	Standard	pH standard electrode with ceramic diaphragma
1000423	Standard HA	like standard, minimal Alkali error
1000433	Standard HF	like standard, for samples with HF
1000263	STANDARD BNC	like standard, with fix cable BNC
1000273	STANDARD DIN	like standard, with fix cable DIN
1000473	STANDARD T - BNC	like standard, with fix cable BNC and Temperature sensor
1000463	STANDARD T DIN	like standard, with fix cable DIN and Temperature sensor
1000493	Polymer Plast	Polymer electrode with 1 ceramic and 1 x open pore diaphragma, epoxy body
1000503	Polymer Plast BNC	like Polymer, with fix cable BNC
1000513	Polymer Plast DIN	like Polymer, with fix cable DIN
1002002	201T	pH-electrode with epoxy body, temperature sensor and fix cable BNC
1002042	201 T DIN	pH-electrode with Temperature sensor and fix DIN-cable
1000413	Flat	pH-electrode for surface measurements, 3-hole diaphragma with Teflon
1000373	Flow	pH-electrode for viscous samples and low ion media, Teflon sleeve diaphragma
1000383	Semi-Micro	pH-electrode for test tube measurements
1000213	Micro	pH-electrode for small volume samples
1000253	Micro P	pH-electrode for small volume samples with protein, Electrolyte Glycerin
1005223	GEL Plast BNC	pH-electrode with epoxy body, fix BNC-cable and double diaphragma
1000393	FOOD	pH-electrode with Glycerin KCl electrolyte and 3 ceramic diaphragm
1000333	2 PORE	pH-electrode with 2 open pore diaphragma

More pH-electrodes on request

Electrodes with DHS-function

1100103	201T DHS	pH-electrode with epoxy body, temperature sensor and fix cable BNC, DHS-function
1100123	STANDARD T - BNC DHS	pH standard electrode with ceramic diaphragma, fix BNC-cable and Temperature sensor, DHS-function
1100113	2 Pore T DHS	pH-electrode with 2 open pore diaphragma, Temp.-sensor and fix BNC-cable, DHS-function

Electrodes for ORP measurement

2000233	Standard ORP	electrode with platinum ring for ORP/Redox
2000663	Plast ORP	electrode with platinum pin for ORP/Redox
2000673	Plast ORP/BNC	electrode with platinum pin for ORP/Redox, fix cable BNC

Conductivity cells

3004062	VP8	conductivity cell, cell constant c=1, fix cable BNC
3003352	VPT 80/1	conductivity cell, cell constant c=1, fix cable BNC, temperature sensor
3004012	VPT51/01	conductivity cell, cell constant c=0,1, fix cable BNC, temperature sensor for ultrapure water
3004072	VPT 80/10	conductivity cell, cell constant c=10, fix cable BNC, temperature sensor for sea water
3004002	2301T	conductivity cell, cell constant c=1, fix cable BNC, temperature sensor

Buffer solution

800033	Buffer pH4, $\pm 0,01$ / 25°C, 250ml bottle, red
800133	Buffer pH4, $\pm 0,01$ / 25°C, 500ml bottle, red
800233	Buffer pH4, $\pm 0,01$ / 25°C, 5 Liter red
800043	Buffer pH7, $\pm 0,01$ / 25°C, 250ml bottle, green
800143	Buffer pH7, $\pm 0,01$ / 25°C, 500ml bottle, green
800243	Buffer pH7, $\pm 0,01$ / 25°C, 5 Liter green
800073	Buffer pH9,21, $\pm 0,02$ / 25°C, 250ml bottle, blue
800173	Buffer pH9,21, $\pm 0,02$ / 25°C, 500ml bottle, blue
800273	Buffer pH9,21, $\pm 0,02$ / 25°C, 5 Liter blue
800063	Buffer pH10, $\pm 0,02$ / 25°C, 250ml bottle, colorless
800163	Buffer pH10, $\pm 0,02$ / 25°C, 500ml bottle, colorless
800263	Buffer pH10, $\pm 0,02$ / 25°C, 5 Liter colorless



DAKKS certified buffer solutions are available as well

Buffer solutions

800613	Conductivity standard 84 $\mu\text{S}/\text{cm} \pm 1\%$ / 25°C, 500 ml bottle
800633	Conductivity standard 1.413 $\mu\text{S}/\text{cm} \pm 1\%$ / 25°C, 500 ml bottle
800643	Conductivity standard 12.880 $\mu\text{S}/\text{cm} \pm 1\%$ / 25°C, 500 ml bottle
850513	Conductivity-Standard 5 $\mu\text{S}/\text{cm} \pm 0,1$ / 25°C, 300 ml bottle with N.I.S.T Certificate
850313	Conductivity-Standard 5 $\mu\text{S}/\text{cm} \pm 0,1$ / 25°C, 300 ml bottle with DFM Certificate
850303	Conductivity-Standard 1,3 $\mu\text{S}/\text{cm} \pm 0,1$ / 25°C, 300 ml bottle with DFM Certificate

Redox- buffer

800303	250 ml Redox/ORP 200 mV $\pm 5\text{mV}$ / 25°C
800313	250 ml Redox/ORP 475 mV $\pm 5\text{mV}$ / 25°C
800323	500 ml Redox/ORP 475 mV $\pm 5\text{mV}$ / 25°C



Buffer solutions



Cond-Solutions



Printer 1001502

More accessories

1001733	Cable S7 / BNC 1 meter
1001743	Cable S7 / DIN 1 meter
1002012	Temperature sensor NT55
1000112	Elektrode holder
1001502	Printer for EC-35 and EC-45

Explore more ... visit

www.phoenix-instrument.de

