

LAQUAtwin 4EC series

Conductivity / TDS pocket meters

HORIBA introduces a series of RoHS compliant conductivity meters

Features

- Selection of 3 different instruments
- Onsite, simple, easy, and fast measurement.
- Wide measurement range of 0 to 199.9 mS/cm.
- Measurement results within seconds.
- Small, 0.12ml, sample volume required.
- Simple 3 or 4-point calibration.
- High 2% accuracy.
- Replaceable sensor.
- Back light display.
- IP67 – waterproof.



Functions:

- Auto stable / Auto hold
- Auto power off (30 minutes)
- Low battery indicator
- Stability indicator

Additional for 4EC-33:

- TDS measurement
Linear: TDS factor (0.4-1.0),
Custom curve: 442, NaCl,
EN27888

Applications:

- Semiconductor industry
- Pharmaceutical industry
- Boiler feed water
- Drinking water
- General laboratory
- Food and beverage
- Agriculture
- Aquaculture
- Arts
- Many more



Calibration

The instrument is supplied with two calibration solutions (1.413 μS and 12.88 mS/cm) and conditioning solution.



User Replaceable Sensor

The replacement of the LAQUAtwin sensor is easily done. No tools needed.



Protective cover

The sensor cover provides protection against impact, reduces external interferences and acts as a light shield, improving the accuracy.



Order Information

Part number	Model	Description
3201077522	LAQUAtwin-4EC-11	LAQUAtwin 4EC-11 pocket meter
3201077523	LAQUAtwin-4EC-22	LAQUAtwin 4EC-22 pocket meter
3201077524	LAQUAtwin-4EC-33	LAQUAtwin 4EC-33 pocket meter
3201079162	S073-4EC	Replacement sensor for 4EC meters
3999960110	514-22	Conductivity Standard 1413 $\mu\text{S/cm}$, 6 x 14 ml
3999960111	514-23	Conductivity Standard 12.9 mS/cm , 6 x 14 ml
3201081522	514-4EC-CON	Conditioning solution 6 x 14 ml for 4-EC

Specifications

Model	4EC-11	4EC-22	4EC-33
Part Number	3201077522	3201077523	3201077524
Measurement principle	4 AC bipolar method		
Minimum sample volume	Minimum 0.12 mL		
Measurement range (EC)	0 to 199 $\mu\text{S/cm}$	0 to 199 $\mu\text{S/cm}$	0 to 199 $\mu\text{S/cm}$
	200 to 1999 $\mu\text{S/cm}$	200 to 1999 $\mu\text{S/cm}$	200 to 1999 $\mu\text{S/cm}$
	2.00 to 19.99 mS/cm	2.00 to 19.99 mS/cm	2.00 to 19.99 mS/cm
		20.0 to 199.9 mS/cm	20.0 to 199.9 mS/cm
Measurement range (TDS)			0 to 99.9 ppm
			100 to 999 ppm
			1000 to 9990 ppm
Resolution	1 $\mu\text{S/cm}$, 0.01 mS/cm	1 $\mu\text{S/cm}$, 0.01 mS/cm , 0.1 mS/cm	
Calibration	Up to 3 points	Up to 4 points	
Standard solution	84 μS , 1413 μS ,12.88 mS	84 μS , 1413 μS , 12.88 mS , 111.8 mS	
Accuracy	$\pm 2\%$ F.S. (for each range)	$\pm 2\%$ F.S. (0~19.99 mS/cm) / $\pm 5\%$ F.S. (20.0~199.9 mS/cm)	
Waterproof	IP67 Waterproof		
ATC	Yes		
Temperature display	No	Yes	
Temperature display range		0-50 $^{\circ}\text{C}$	
Temperature resolution		0.1 $^{\circ}\text{C}$	
Temperature accuracy		± 2 $^{\circ}\text{C}$	
Temperature Calibration		Yes, offset of ± 2 $^{\circ}\text{C}$	
Operating temperature/humidity	5 $^{\circ}\text{C}$ to 40 $^{\circ}\text{C}$, 85% relative humidity max. (no condensation)		
Display	Custom (monochrome) digital LCD with backlight		
Power	CR2032 batteries (x2)		
Battery life	Approx. 400 hours continuous operation (no backlight)		
Material	ABS epoxy (main material)		
Dimensions meter	164 mm $\times$ 29 mm $\times$ 20 mm (excluding projections)		
Dimensions boxed	182 mm $\times$ 143 mm $\times$ 34 mm		
Weight	Approx. 55gr		

Flip open

Fully opening the cover provides easy access for cleaning, calibration and placement of the sample.



4-Cell Electrode

The 4-Cell conductivity probe is RoHS compliant. It possible to measure samples down to 0.12 ml.

Packing

The instruments is supplied with all parts needed to start immediate measurement. The small plastic case keeps everything together and safe.



Other LAQUAtwin instruments



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RoHS
CE