



Long-term Deployment Water Quality Sonde

- **Product type**
Unattended
- **Parameters measured**
Temperature, Pressure, Dissolved Oxygen, Conductivity, pH, Turbidity and Chlorophyll
- **Product highlights**
Designed specifically for long-term deployments of up to three months
- **Interface**
SDI-12, RS232

The newest member of the HydroCAT family of water quality Sondes can also measure pH, turbidity and chlorophyll. By plumbing the pH sensor inline with conductivity, temperature and optical dissolved oxygen the HydroCAT-EP is capable of deployments up to three months without requiring data processing to correct for drift.

Conductivity	
Range	0 ... 70 mS/cm (0- 70,000 μ S/cm)
Accuracy	\pm 0.003 mS/cm (3 μ S/cm)
Typical Stability	0.003 mS/cm (3 μ S/cm) per month
Resolution	0.0001 mS/cm (0.1 μ S/cm)

Temperature	
Range	-5 ... 45°C
Accuracy	± 0.002°C/± 0.01°C (over 35°C)
Typical Stability	0.0002°C per month
Resolution	0.0001°C

Pressure	
Range	0 ... 20 m/ 0 ... 100 m/ 0 ... 350 m
Accuracy	± 0.1% of full scale range
Typical Stability	0.05% of full scale range
Resolution	0.002% of full scale range

Optical Dissolved Oxygen	
Range	200% of surface saturation in all natural waters
Accuracy	± 0.1 mg/L (3 µmol/kg) or ± 2% whichever is greater
Typical Stability	< 0.03 mg/L (1 µmol/kg)/ 100,000 samples (20°C)
Resolution	0.007 mg/L (0.2 µmol/kg)

pH	
Range	0 ... 14 pH
Accuracy	± 0.1 pH

Typical Stability	0.1 pH over 90 days
Resolution	0.01 pH

Turbidity	
Range	0 ... 3,000 NTU
Accuracy	± 1%
Resolution	0.06 ... 0.17 based on range

Chlorophyll	
Range	0 ... 400 µg/L
Accuracy	± 3%
Resolution	0.007 ... 0.037 based on range

Electrical	
Clock Stability	5 sec/month
External Power	(optional) 0.25 Amps at 9 ... 24 VDC
Internal Power	7.8 AMP battery pack (AA Lithium)

Communication	SDI 12/RS232
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Memory	16 MB non-volatile FLASH 215,000 samples
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Service	Annual service and factory calibration
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Technical Data

Sea-Bird Scientific HydroCAT-EP



Warranty	5 years (some exclusions see full Warranty Statement)
Housing	350 m plastic housing
Weight	4.05 kg (9.0 lbs) in air
Length	722 mm (28.45 in)
Diameter	139.5 mm (5.49 in)