For longterm water quality monitoring with proven anti-fouling technology

- **Product type**
  Unattended

- **Parameters measured**
  Temperature, Pressure, Dissolved Oxygen, Conductivity

- **Product highlights**
  Ideally suited for extended deployments in remote, biologically rich environments

- **Interface**
  SDI-12, RS-232, RS-485 (optional)

Field proven sensors measure conductivity, temperature, pressure and optical dissolved oxygen. Depending on the application, the HydroCAT can collect high quality data for up to a year. Excellent bio-fouling protection is provided by US EPA-approved anti-foulant devices, integral pump, and unique internal flow path provides stable measurements throughout a deployment.

Measured Parameters

Conductivity	
Range	0 ... 70 mS/cm (0 ... 70,000 µS/cm)
Accuracy	± 0.003 mS/cm (3 µS/cm)
Typical Stability	0.003 mS/cm (3 µS/cm) per month
Resolution	0.0001 mS/cm (0.1 µS/cm)

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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	120% 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)

Electrical

Clock Stability	5 seconds/month

Acquisition Time	2.3 ... 3.2 seconds/sample (see manual)

Power Supply

Internal	7.8 Amp-hour (nominal) battery pack, 257 Kjoules (derated for calculations)
Optional External Power	0.25 Amps at 9 ... 24 VDC
Power Consumption(all with pressure) *	
Quiescent	0.0004 Watts
CTD-DO Sample Acquisition (excluding pump):	Real-time data enabled - 0.17 Watts No real-time data - 0.155 Watts
CTD-DO Sample Waiting (not sampling, pump running, excluding pump):	Real-time data enabled - 0.056 Watts if receive line valid, 0.016 Watts if receive line not valid No real-time data - 0.016 Watts
CTD-DO Between Samples	Real-time data enabled - 0.056 Watts if receive line valid 0.0004 Watts if receive line not valid No real-time data - 0.0004 Watts
Pump	0.12 Watts
Communications	0.065 Watts
* Power consumption values are for standard RS-232 interface; for optional interfaces, see corresponding manual.	

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General	
Housing Material	Plastic
Depth Rating	350 m (1148 ft)
Weight	3.4 kg (7.5 lbs) in air, 1.5 kg (3.3 lbs) in water