



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 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 | 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. | |

| 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 |