

GTD-Pro™

Features

- High accuracy, long-term stability
- Multiple data outputs
- Superior response rate with the hurricane model, HGTD
- Easily integrated into any system
- Patented tubular interface (HGTD provides unique biofouling resistance)
- Internal data logger and controller with 2GB flash memory

Sensor Applications

- Air-sea gas transfer rates
- Net biological production estimates
- Near-surface flux studies
- Correction of other dissolved gas measurements

GTD-Pro™ Submersible Sensor

The GTD-Pro™ is the most accurate and stable total dissolved gas sensor on the market. It measures the sum of the partial pressures of all dissolved gases, i.e. gas tension.

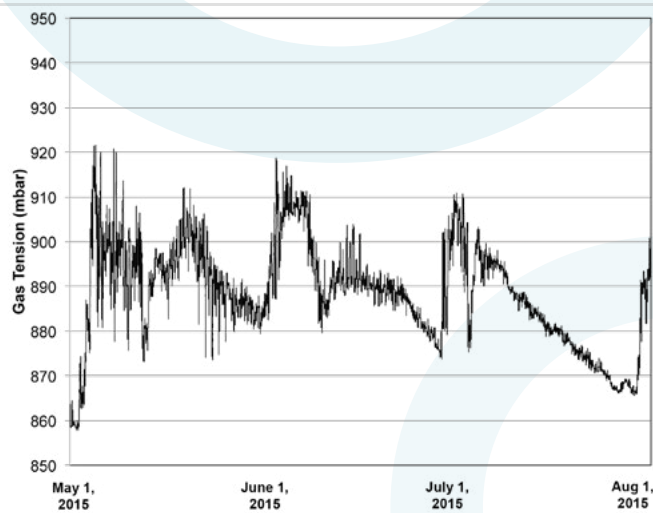
In most natural waters N_2 and O_2 are the dominant dissolved gases. When oxygen is measured independently, N_2 can be determined from gas tension. These gases measured together can be used to make substantially improved estimates of net biological production.

Additionally, gas tension measurements are used to study air-sea gas exchange and upper-ocean physical, chemical, and biological processes.

Also available is the HGTD-Pro hurricane model that uses a patented supported tubular interface for faster equilibration than the GTD-Pro™.



Right:
GTD-Pro™ measurements of total dissolved gas pressure in Saanich Inlet as part of the Ocean Networks Canada, www.oceannetworks.ca.



GTD-Pro™

Sensor Specifications

Sensor Performance

Accuracy	0.01%
Resolution	0.0001%
Stability	< 0.02 mbar/yr drift
Range (other ranges available)	800-2000 mbar
Equilibration time (t₆₃)	GTD-Pro: 3 min HGTD: 1 min

Physical

	GTD-Pro	HGTD
Length	35 cm	25.4 cm
Diameter	10 cm	11.7 cm
Weight air	2.8 kg	1.6 kg
Weight water	0 kg	0.6 kg
Housing	Acetal Plastic	
Depth	0-600 m	0-50 m

Electrical

Input voltage	10-24 VDC
Power consumption	0.55 W (45mA @ 12V)
Data output	RS-232, ASCII format
Sample rate	1 second (user selectable with datalogger/controller)

Optional Accessories

Titanium Housing

Rated to 4000 meters depth

External battery pack

76, 134, or 247 Amp-hour capacity

Internal battery power

Water-pumped interface head

Reduces biofouling and improves response rate

Mooring cage or frame with instrument brackets



Mooring cage



Oceanus Battery Pack