OWL 100

Product Specifications

Type: *Single-Channel Temperature Thermistor - Internal*

GENERAL SPECIFICATIONS

Size:	60 mm x 48 mm x 19 mm (2.4" x 1.9" x 0.7")
Weight *(plastic version)*:	54 grams (1.9 ounces)
Weight *(water-resistant version)*:	80 grams (2.8 ounces)
Case *(plastic version)*:	Noryl® plastic
Case *(water-resistant version)*:	Polyurethane
Battery:	3.6 volt Lithium
Resolution:	8-bit (1 part in 256)
Mounting:	Magnetic backing or lock eyelet
Clock Accuracy:	+/- 2 seconds per day
Sampling Methods:	Continuous (First-in, First-out)*, Stop When Full **First-in, First-out not available with sample rates faster than 8 seconds*
Operating Limits:	-40 to 70°C (-40 to 158°F)
Submergence Rating:	IP67 - 1 m (3.28') in fresh water for 30 minutes *(OWL-100 Poly)*
PC Requirements:	IBM PC or 100% compatible with at least one free serial port, 2 MB of RAM memory, and 2 MB of hard disk space
Software Requirements:	TrendReader® 2 *(compatible with Windows® 2000, and XP)*
Communication:	Optical data transfer; data can be transmitted through glass, water, or any transparent medium up to 25 mm (1") away

Memory Size:	32KB *(capable of storing up to 32,767 readings)*
Sampling Rates:	User selectable rates from 5 per second to once every 12 hours
Number of Channels:	One *(one internal channel for ambient temperature)*

SENSOR SPECIFICATIONS

Temperature Sensor:	NTC Thermistor
Range:	-40 to 70˚C (-40 to 158˚F)
Total Accuracy:*	+/- 0.5˚C @ 25˚C (+/- 0.9˚F @ 77˚F) **Can be increased by using narrow range feature (see below)*
Resolution:*	0.5ºC at 25ºC (0.9ºF @ 77ºF); better than 1ºC (1.8ºF) between -25 and 70ºC (-13 and 158ºF); better than 2.0ºC (3.6ºF) between -40 and -25ºC (-40 and -13ºF) **Can be increased by using narrow range feature (see below)*
Measurement Range:	Over 200 software selectable ranges available (measurement spans as narrow as 10˚C [18˚F] and as wide as 110˚C [200˚F])

The OWL 100 data logger records temperature in environments that typical data loggers cannot withstand. This model is also available in a water-resistant polyurethane enclosure (OWL 100-Poly) so it can be used in hostile environments where vibration or excess moisture is present.



WARRANTY

Internal Battery:	**10 Years**
Data Logger:	**3 Years**

APPLICATIONS

Food process verification, pharmaceutical storage, laboratories, transportation of temperature-sensitive goods, equipment run time, HVAC system testing and balancing, etc.

Model#:	**Cat#:**
OWL-100 POLY	01-0050
OWL-100 PLASTIC	01-0250