



## OWL 100

### Single-Channel Temperature Data Logger

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.

#### APPLICATIONS

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

#### GENERAL SPECIFICATIONS

Size:	60mm x 48mm x 19mm (2.4" x 1.9" x 0.7")
Weight (Plastic Version):	54 g (1.9 oz)
Weight (Water-Resistant Version):	80 g (2.8 oz)
Case Material (Plastic Version):	Noryl® Plastic
Case Material (Water-Resistant Version):	Polyurethane
Battery:	3.6 volt Lithium
Resolution:	8-bit (1 part in 256)
Mounting:	Magnetic backing or locking eyelet
Clock Accuracy:	± 2 seconds per day
Sampling Methods:	Continuous (First-in First-out)*, Stop When Full (Fill-then-stop) *Not available with sample rates faster than eight seconds
Operating Limits:	-40°C to 70°C (-40°F to 158°F)
Submergence Rating:	IP67 - 1M (3.28") in fresh water for 30 minutes (OWL-100 Poly)
PC Requirements:	Windows PC with at least one free USB or serial port (depending on interface)
Software Requirements:	TrendReader® 2 (Compatible with Windows 2000 SP4, XP SP1 and Vista 32 bit)
Communication:	Optical data transfer; data can be transmitted through glass, water or any transparent medium up to 25mm (1") away.
Memory Size:	32 KB (capable of storing up to 32,767 readings)
Sampling Rates:	User selectable rates from 5 seconds to once every 12 hours
Number of Channels:	One (one internal channel for ambient temperature)



#### SENSOR SPECIFICATIONS

##### Temperature Sensor:

Type:	NTC Thermistor
Range:	-40°C to 70°C (-40°F 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*:	0.5°C @ 25°C (0.9°F @ 77°F); better than 1°C (1.8°F) between -25°C and 70°C (-13°F and 158°F); better than 2.0°C (3.6°F) between -40°C and -25°C (-40°F and -13°F) *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])