



Conservation Logger

Four-Channel Temperature, Relative Humidity and 0-5 VDC (2X) Data Logger

The Conservation Logger is a self-contained temperature and relative humidity logger with two external channels for use with a variety of sensors. It is equipped with an LED light that will alert the user if measurements fall above or below user set limits.

APPLICATIONS

Monitoring indoor air quality, conserving and/or preserving precious artifacts and paintings (when combined with a light sensor)

GENERAL SPECIFICATIONS

Size:	107mm x 74mm x 22mm (4.2" x 2.9" x 0.9")
Weight:	110 g (3.75 oz)
Case Material:	Noryl® Plastic
Battery:	3.6 volt Lithium, 1 Amp-Hour
Resolution:	12-bit (1 part in 4096)
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) <i>*Not available with sample rates faster than eight seconds.</i>
Operating Limits:	-40°C to 70°C (-40°F to 158°F) and 0 to 95% RH (non-condensing)
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)
Memory Size:	128 KB (capable of storing up to 87,000 readings)
Sampling Rates:	User selectable rates from 25 per second to once every eight hours (BP-101 battery pack or PS-201 power supply required for sampling rates faster than eight seconds)
Number of Channels:	Four (one for the internal temperature sensor, one for the internal RH sensor and the remaining two channels are reserved for external sensors with 0-5 VDC output)



SENSOR SPECIFICATIONS

Internal Temperature Sensor

Type:	NTC Thermistor
Range:	-40°C to 70°C (-40°F to 158°F)
Accuracy:	±0.2°C over the range of 0 to 70°C (± 0.3°F over the range of 32 to 158°F)
Resolution:	0.03°C (0.05°F) @ 25°C; better than 0.07°C (0.12°F) between -25°C and 70°C (-13°F and 158°F); better than 0.13°C (0.23°F) between -40°C and -25°C (-40°F and -13°F)

Internal Relative Humidity Sensor

Type:	Capactive thin polymer film
Range:	0 to 95% RH (non-condensing)
Accuracy:	±3% RH from 10 to 90% RH (-20°C to 40°C [-4°F to 104°F])
Resolution:	Better than 0.04% RH between 25% and 60% RH @ 25°C (77°F)

External Sensors (2)

Range:	Any 2 sensors with a 0-5 VDC output
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