

ATR-31 Ambient Temperature Recorder



Telog's R-31 series data recorders simplify your monitoring procedures from set up to data reporting. Battery-operated Telog recorders sample inputs from a variety of sensors, store them in solid-state wraparound memory and print them out in report-ready hardcopies.

A Telog R-31 series recorder fits into the palm of your hand or any tight installation site. To put a programmed Telog recorder in service, you need only a convenient location at the recording site and perhaps a couple of screws for mounting. All 31 series recorders are weather resistant and can be placed wherever the sensors are located. The components are sealed in a compartment protected from the elements. Long lasting batteries free you from any site requirements for wires and conduits.

The ATR-31 measures ambient temperature as sensed by an external thermistor temperature sensor. The thermistor is embedded within a submersible, stainless steel probe assembly that can be used in submersible monitoring applications. The AT-5 temperature sensors are field interchangeable to ± 0.2 °C accuracy without factory re-calibration.

The ATR-31 may be programmed to measure temperature up to 4 samples per second. The user may configure the recorder to sample often and compute statistical data at less frequent intervals. For example, the ATR-31 may be configured to sample temperature at 5-second intervals and save to memory the minimum, maximum and average temperature values at 10-minute intervals. The recorder's memory with this storage regimen example will be 185 days. Once the recorder's memory fills, it continues recording new information by over-writing the oldest data in memory.

For more information on this product or other Telog data recording products, call us at **585.742.3000**, email TelogSales@telog.com, or visit us at www.telog.com.



Replace Chart Recorders

**Large Memory—
128Kbtes**

Rugged, Water Tight

High Accuracy

5 Year Battery Life

**Windows® Software
Support**

ATR-31 Specifications

Measurement

Measurement Range (Sensor Only)	-40 to +100°C
Measurement Resolution	0.05°C
Measurement Accuracy	
0 to 50°C	±0.3°C
-20 to +70°C	±0.4°C
-40 to +85°C	±0.5°C
-40 to +100°C	±0.6°C

Sensor

Model	AT-5
Type	Thermistor 10,000 ohm
Standard Length	1 meter (contact factory for custom lengths)
Size	100 x 6.4 mm (4 x 1/4 inch)
Material	304 Stainless Steel
Environmental	Submersible to NEMA 6P (IP-68)

Recording

Sample rate	4 per second to 1 every 8 hours
Clock accuracy	0.01%
Memory size	80,000 data values (128K RAM)

Serial Interface

Type	RS-232C compatible, requires RTS
Baud rates	300, 1200, 9600, 19,200; auto-selected
Bit format	1 start, 8 data, 1 stop
Connector	9-pin sub "D" socket

Power

Battery	one 3.6V, 2.1 Ahr AA Lithium
Operating life	5 years nominal
Battery shelf life	8 years

Environmental and Mechanical

Temperature	
Operating	-40° to 70°
Storage	-40° to 70°C
Humidity	5-95%, non-condensing; with short-term complete immersion in water.
Enclosure	
Material	aluminum
Environmental Rating	NEMA 4x (IP-65)
Size	3.85" x 2.51" x 1.33"
Weight	1 lbs

Programmable Parameters

Sample rate	1/4 second to 8 hours
Interval period	1 second to 8 hours
Calendar/time	mm/dd/yy; hr:min:sec
Data stored	any combination of the avg., min., or max per interval
Unit ID number	8 alpha-numeric characters

Support Software

S-3PC	Telogers for Windows
S-3PCL	Telogers for Windows Lite

Communications

Direct connect	RS-232—IBM-PC compatible computers
Indirect	via Telog Palm Pilot Data Transfer Unit (DTU)

Computer Requirements

For S-3 PC or S-3PCL	IBM compatible computer with a 586/133 MHz or higher processor running on Microsoft Windows 95/98/NT/2000, at least 32 MB of RAM, a hard disk with at least 200 MB of free space and a pointing device.
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