



# 4000T

## DATA SHEET

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The 4000T series of temperature data loggers and radio transmitters units are well established as the most flexible units on the market today. Each unit has been designed to be compatible with a wide range of temperature probes to provide accurate and reliable measurement specifically selected for the user's requirements.

Additionally, depending on the format required by the user, temperature data can either be downloaded directly to a local PC using a USB cable or wirelessly transmitted directly to a local PC for automatic and immediate notification and analysis. Most wireless devices include the logging facility to guarantee against data loss in the event of radio communication loss.

The units are powered by a single 3.6 Volt AA Lithium battery, which can be replaced by the user as and when required. The battery life will be dependent on the method of data collection, but can last up to 3 years, with notification of when a change is required.

## Product Features

- Data logging and radio transmitter formats
- High performance technology with accurate probes
- LCD display with data readings and battery life
- Superior performance hardware with high accuracy sensors
- Logger memory capacity 100,000 readings
- Easily accessible battery and USB socket
- Supports (optional) hidden wall brackets
- Low power radio for long distance transmission (Over 3km over open ground)
- Up to 3 years battery life (depending on format of data retrieval, see below)
- Complies with RoHS, EU and WEEE directives
- Carries CE Mark

## Benefits

- Assists with national regulatory compliance
- Provides users with the tools to maintain a stable environment
- Reduces the risk of damage to stock caused by temperature fluctuations
- Radio transmitters eradicate errors caused by manual checks
- Vast range of units and probes provide users with multiple temperature related applications
- Easily calibratable hardware ensures accurate and reliable data for years

## Format

Data Logger	✓
Radio Logger	✓
GPRS	✓

## Data Logger Functions

**Memory:** 256k EEPROM

**Logging intervals:** Programmable from 10 seconds to 24 hours.

**Record Capacity:** 100,000 records

**PC Interface:** USB communications

**Battery Life:** Up to 3 years

**Software required:** W200 – HanLog 4.5+

W300 – HanLog 4.5+ Validated software for: Industrial, Food, Pharma & Hospital

**Accessories:** 88706 – 3.6V AA Lithium battery  
Y055 –USB cable

Y119 – Wall mount bracket

*This product can be calibrated to your specifications, contact us for further details.*

**N.B Instrument operating range -20°C to +60°C in a non-condensing RH environment**

## Radio Transmitter Functions

**Frequency Options:** A range of frequencies are available between 433-458MHz. Country specific regulations apply.

**Radio Power:** 10mW

**Radio Range:** 3km over open ground

**Battery Life:** Up to 18 months

**Software required:** W400 – RadioLog 8.4+

W500 – RadioLog 8.4+ Validated software for: Industrial, Food, Pharma & Hospital

**Hardware required:** SR2 – Smart Receiver

CR2 – Controller

REP – Repeater

**Accessories:** 88706 – 3.6V AA Lithium battery

Y119 – Wall mount bracket

*This product can be calibrated to your specifications, contact us for further details.*

**N.B Instrument operating range -20°C to +60°C in a non-condensing RH environment**

## Disclaimer

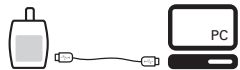
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# In Building Monitoring

The 4000T series are available as data loggers or radio transmitters depending on the relevant application. Each unit has durable hardware for a long-term monitoring solution and the most accurate sensors on the market. Both data collecting formats keep a record of historical data for regulatory compliance purposes.

## Standalone data logger






## Radio system

(requires radio receiver)



### Parameters

-  Fridge temperature monitoring 2°C - 8°C
-  Freezer temperature monitoring -20°C, -30°C, -40°C & -80°C
-  Cryogenic temperature monitoring -150°C & -200°C



### Instrumentation Specification

**Dimensions:** 110 x 80 x 35mm  
**Weight:** 200 grams  
**Power Supply:** 3.6V AA Lithium battery  
**Case Material:** ABS & PC  
**Memory Capacity:** 100,000 readings  
**IP Rating:** IP50



See next page for individual unit options or contact us to discuss your application.

# In Building Monitoring continued

## Technical Specifications

Description	Single channel Thermistor unit with 2 pin lemo socket. LCD display.	Dual channel Thermistor unit with 2x 2 pin lemo socket. LCD display.	Single channel Thermistor unit with 2 pin lemo socket. 2K49 load resistor for high temperature range & LCD.	Dual channel Thermistor unit with 2 pin lemo socket. 2K49 load resistor for high temperature range & LCD.	Single channel thermistor unit . Fitted with internal temperature sensor and LCD.	Single channel 3-wire PT100 unit fitted with 5 pin-lemo socket for temperature sensor and LCD.	Dual channel 3-wire PT100 unit fitted with 2 x 5 pin-lemo metal socket for temperature sensor and LCD.	Single channel 4 wire PT100 unit. Fitted with 5 pin metal lemo socket for temperature sensor and LCD.	Dual channel 4 wire PT100 unit. Fitted with 2 x 5 pin metal lemo socket with temperature sensors and LCD.
Data Logger Code	HL4001	HL4002	HL4005	HL4006	HL4007	HL4301	HL4302	HL4401	HL4402
Radio Transmitter Code	RL4001-434.075 (other frequencies available)	RL4002-434.075 (other frequencies available)	RL4005-434.075 (other frequencies available)	RL4006-434.075 (other frequencies available)	RL4007-434.075 (other frequencies available)	RL4301-434.075 (other frequencies available)	RL4302-434.075 (other frequencies available)	RL4401-434.075 (other frequencies available)	RL4402-434.075 (other frequencies available)
Product Probe Options	<b>Option 1: Y300</b> Plug in temperature probe <b>Option 2: J095-05</b> Remote temperature probe 3mtr cable <b>Option 3: J097-05</b> Remote temperature probe 5mtr cable	<b>Option 1: Y300</b> Plug in temperature probe <b>Option 2: J095-05</b> Remote temperature probe 3mtr cable <b>Option 3: J097-05</b> Remote temperature probe 5mtr cable	<b>Option 1: Y300</b> Plug in temperature probe <b>Option 2: J095-05</b> Remote temperature probe 3mtr cable <b>Option 3: J097-05</b> Remote temperature probe 5mtr cable	<b>Option 1: Y300</b> Plug in temperature probe <b>Option 2: J095-05</b> Remote temperature probe 3mtr cable <b>Option 3: J097-05</b> Remote temperature probe 5mtr cable	N/A	<b>PT100</b> Client to supply probe	<b>PT100</b> Client to supply probe	<b>Option 1: J094-01</b> 4-wire PT100 probe, 3mtr cable with 5-pin lemo plug <b>Option 2: J099-01</b> 4-wire PT100 probe, 5mtr cable with 5-pin lemo plug	<b>Option 1: J094-01</b> 4-wire PT100 probe, 3mtr cable with 5-pin lemo plug <b>Option 2: J099-01</b> 4-wire PT100 probe, 5mtr cable with 5-pin lemo plug
Temperature Sensors					Precision Thermistor				
Range					-20°C to +60°C				
Accuracy					+/- 0.1°C between -10°C to +40°C +/-0.3°C outside these extremes				
Resolution					0.1°C				
External Temp. Probe	Precision Thermistor	Precision Thermistor	Precision Thermistor	Precision Thermistor		3 wire PT100	3 wire PT100	4 wire PT100	4 wire PT100
Range	-40°C to +60°C	-40°C to +60°C	0°C to +125°C	0°C to +125°C		-100°C to +110°C	-100°C to +110°C	-200°C to +110°C	-200°C to +110°C
Accuracy	±0.1°C between -10°C to +40°C. ±0.3°C Outside these extremes	±0.1°C between -10°C to +40°C. ±0.3°C Outside these extremes	±0.1°C between 0°C to +40°C ±0.3°C Outside these extremes	±0.1°C between 0°C to +40°C ±0.3°C Outside these extremes		±0.1°C	±0.1°C	±0.1°C	±0.1°C
Resolution	0.1°C	0.1°C	0.1°C	0.1°C		0.1°C	0.1°C	0.1°C	0.1°C

\*All specifications above refer to unadjusted units, custom adjustment can be performed to order to improve stated accuracies



Intelligent monitoring and control solutions:  
**In Buildings | In Transit | Outdoor/Remote**

