

Tinytag Plus Radio Temperature Data Logger for 2 x Thermistor Probe



a logging products designed for outdoor and industrial use.
that forms a robust data network that allows a user to see
across a LAN or the Internet.

ta logger that is ideal for temperature monitoring in a

Popular Applications

Used for temperature monitoring in:

- Warehouses and product storage
- Fridges and freezers
- Industrial processes
- Outdoor applications

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Reading Specifics

The TGRF-4022 is a battery powered, temperature radio data logger.

Temperature Range is used with two thermistor probes suitable for use in

Sensor Type up to 125°C. Thermistor (external probe)

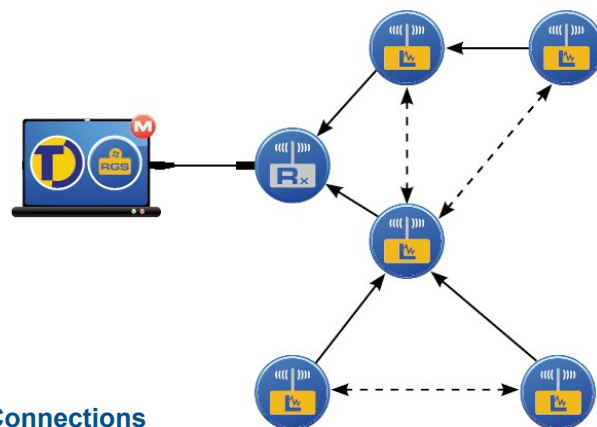
Logger Resolution 0.02°C or better

Temperature Stability part of a Tinytag Connect system that uses a

receiver and the Connect version of the Tinytag Explorer software.

Logger Accuracy

After the installation of the software and the configuration of the receiver, the logger is turned on and will establish itself as part of the mesh network the system creates.



Connections

The typical range of the logger on a clear line of sight is 200m

The logger is the
from once every

The data recorded
by a Windows se
across a LAN or

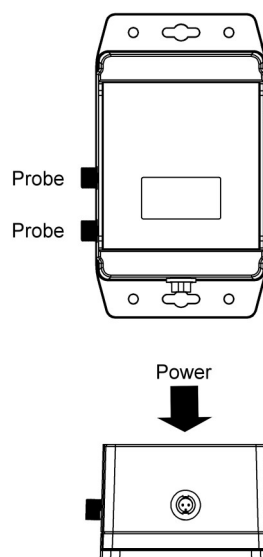
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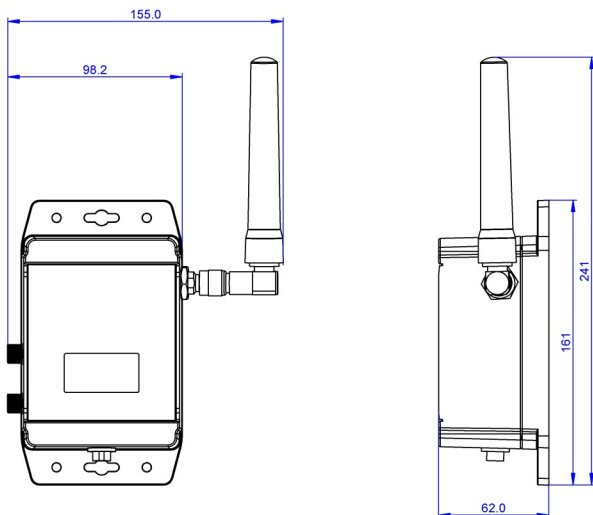
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Physical Specification

Logging Interval	2 minutes to 10 days
Off-line storage Capacity*	2 weeks typical, at a 10 minute logging interval
Operational Range*	-20°C to +55°C
Case Dimensions (excluding antenna)	
Length/Height	155mm / 6.1"
Width	98.2mm / 3.9"
Depth	62mm / 2.44"
Weight (inc. antenna)	55g / 1.95oz

*The Operational Range indicates the physical limits to which the unit can be used. Communications with the gateway service are interrupted, by a power failure to the computer running the gateway service or an obstacle causing a

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can be used to send SMS messages using the

Mounting/Positioning Instructions

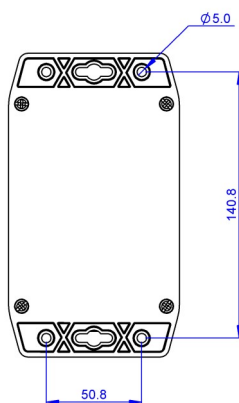
Radio Frequency	EU 869.88MHz
Radio Power	AUS 917.8MHz
Radio Range	EU <5mW (-)
Radio License	AUS <3mW (-)

The logger uses FSK modulation, with +/-32 dB

These frequencies will easily penetrate most buildings (though signal strength may be reduced to between 30% and 80% (however, increased, maybe up to double the nominal range in some cases, e.g. through gaps in walls, doors, windows and air vents etc.).

Although the radio waves cannot penetrate a metal shed etc.) the signal will often still get through. The logger can also be positioned on a non-metallic surface, such as a wooden desk or table. These frequencies will not be absorbed by the metal, but the signal will not be as strong as with a metal surface. The logger can be used with a metal mesh network, for example.

The advantage of the mesh network is that long ranges will often be able to relay data though the network.



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Power Information

Battery Power

Battery Type 2 x Duracell Industrial ID1400
C (LR14) 1.5V (supplied)

The logger will operate with other C cell batteries but performance cannot be guaranteed.

Battery Life Typically 12 months

When the logger's batteries start to run flat, a low battery warning will be displayed in the Tinytag Explorer Connect software and the LED on the front of the logger will flash red. The low battery warnings will start to flash when the logger has approximately two weeks of battery power remaining.

Before replacing batteries the logger must be turned off.

Alkaline batteries should always be replaced in pairs.

Data stored in the radio system will be retained after batteries are replaced.

A lithium battery powered version of the logger is also available, that provides a wider working temperature range and a longer battery life. Please contact your supplier for further details.

Mains Power

The logger can also be powered from the mains using a plug-in power supply.

If the power supply is interrupted, the logger's batteries will power the logger and continue recording until the supply is restored.

Note: This logger should only be used with an ACS-0044 Tinytag Plus Radio power supply.

Calibration

This logger is configured to meet Gemini's quoted accuracy specification during its manufacture.

We recommend that the calibration of this unit should be checked annually against a calibrated reference meter.

A traceable certificate of calibration can be supplied for an additional charge either at the point of purchase, or if the unit is returned for a Service Calibration.

Warranty

This product carries a manufacturing defects warranty of 12 months from the date of purchase. Units returned under warranty will be repaired or replaced at the manufacturer's discretion. This warranty does not cover mishandling, modification or battery replacement and is subject to our standard Terms and Conditions of Sale, a copy of which can be found at www.tinytag.info.