

Wireless Temperature Measuring RFID Sensor

GTherm belongs to the advanced GTelemetry RF Sensor product family. It is used for remote temperature data collection and monitoring.

The GTelemetry family uses low cost, ultra low power RF technology ideally suited for many industry sectors such as Facility Management and Building Automation, Construction, Cold Room & Oven monitoring, Meteorological & Environmental monitoring, etc.



BENEFITS

GTherm is internally powered and housed in an environmentally protected housing. Built for drop and deploy operation mode, it brings immeasurable benefits in terms of rapid deployment because there is minimal installation work. The unit can also be redeployed simply by relocating the device to a new location.

- Cost-effective monitoring of 2 sets of temperature with one radio transmitter
- Continuous data collection even when not communication with central node
- Flexible data acquisition
- Flexible alert control mode
- Extend coverage of secondary telemetry network
- Extensive time-dependent control
- Self-monitoring mode reduces maintenance work load
- Effective guard against abuse
- Reduce deployment tasks
- Extend usage life according to site needs.

FUNCTIONAL FEATURES

- Able to support two temperature sensors
- Programmable internal data logging
- Programmable measuring period
- Programmable threshold alarms
- Operation modes:
 - Periodic frame transmission with a programmable period
 - Data measure transmission on frame request
 - Can be programmed to act as a radio repeater for other devices.
- Time and Date management with day and night configuration
- End battery life detection
- Wire cut detection (Anti-Tamper)
- Easy Plug and Play installation
- Average consumption optimized by a sophisticated management of the awakening period allowing more than 10 years battery life duration

TECHNICAL CHARACTERISTICS

- 1 wire digital thermometer Dallas DS 18S20 integrated
- Sensor operating temperature range of -55°C to +100°C (-67°F to 212°F) with ±0.5°C accuracy
- Radio range: up to 1 km in line of sight
- ISM 433/868/915 MHz Bands single channel or frequency hopping spread spectrum
- Gaussian Frequency Shift Keying Modulation (GFSK)
- Data Rate: up to 32Kbits/s
- Half duplex operation
- Receiver sensitivity: -110 dBm (BER =1%, 9.6kbps)
- Output power: +14 dBm with integrated antenna
- Full Compatibility with the high reliability GT&T ULP RF network
- Approved to: EN300-220-1
- EMC conformity with EN 300-683

REMOTE ACCESS

Protocol Compatibility with:

- GPort™: radio modem
- GCard™: transceiver board
- GCell™: GSM/ULP concentrator
- Hand Held Computer: ULP RF network has been embedded on Husky and Palm 5xx
- All the GT&T GTelemetry family products
- Depending on application profile, GT&T provides:
 - Data Management Software
- Technical support to achieve your own implementation of the radio transceiver
- Development of specific wireless applications with customized specifications

ENVIRONMENTAL AND MECHANICAL CHARACTERISTICS

- Functional temperature range (module): [-20°C; +70°C]
- IP 65 or IP68 casing
- Dimensions (H x L x W): 12 x 4 x 3 cm
- Weight: from 110g to 160