

This RFID temperature tag provides highly accurate, real-time data collection without human intervention in wireless applications

This RFID temperature tag provides highly accurate, real-time data collection without human intervention in wireless applications such as identification, tracking, cold chain, localization of high value assets and temperature monitoring.

This temperature tag transmits and receives data at distances of up to 250 m (800 feet). It can also be easily configured to beacon data at a range of up to 500m (1600 ft). The long range tag contains an internal temperature monitoring sensor in order to measure and log the temperature of goods in definable intervals. It is also available with external sensors. Using an integrated LED, the sensor provides visual recognition. This tag is able to store user and process information as well as temperature data to provide real-time tracking.





Key Features

- ✓ Beacon communication mode
- ✓ Response communication mode
- ✓ Spot location for gate applications
- ✓ 10,000 Bytes memory
- ✓ 2000-sensor simultaneous identification

- ✓ Temperature logging
- ✓ Non-line-of-sight data transmission
- **✓** LED
- ✓ Localization of high value assets

Applications

- ✓ Identification
- ✓ Cold chain

- ✓ Localization of high value assets
- ✓ Temperature monitoring



Technical Specifications

Communication Broadcast	
Operation Mode	Transmits Sensor ID and user data in pre-defined interval
Read Range	up to 500m (1600ft)*
Compatibility	227002, 227003, 227004
Operating Frequency	868 MHz (EU) or 920 MHz (NA
Transmit Power	<1mW
Communication Response	
Operation Mode	Bi-directional communication (reading log, blink LED, write/read data)
Read Range	up to 250m (800ft)*
Compatibility	227002, 227003, 227004
Operating Frequency	868 MHz (EU) or 920 MHz (NA)
Transmit Power	<1mW
Communication Marker	
Operation Mode	Receives Marker ID and transmits marker information several times via Broadcast 350 telegrams
Read Range	up to 5m (16ft)*
Compatibility	491013,491014
Operating Frequency	125 kHz
Temperature Sensor	
Number of logging samples	10.000
Logging Interval	user definable in intervals from 1 to 255 min
Measuring Interval	user definable in intervals from 0 seconds to 255 min
Metering Range	-40°C to +85°C (-40°F to +176°F) with integrated sensor
	-80°C to +100°C (-112°F to +212°F) with external sensor
Resolution	0.1 °C (0.2 °F)





Accuracy	+- 0.5 °C (1 °F) from -20 °C up to +50 °C (68° F up to 122°F) +- 1.0 °C (2 °F) in the remaining temperature range
Environmental Conditions	
Operating Temperature	–40 °C to +85 °C (–40 °F to +185 °F)
Shock	Multiple drops to concrete from 1m (3ft), 3 times DIN IEC 68-2-27
Humidity	10% to 95% relative humidity at30°C (86°F)
Vibrations	3G, 20 sine wave cycles, 5 to 150 Hz, DIN IEC 68-2-6
	5G, noise 5 to 1.000 Hz, 30 minutes, DIN IEC 68-2-64
Data	
Data Retention	> 10 years without power
Write Cycles	100,000 writes
Memory Size	10,000 Bytes user definable
Identification Code	48 bit fixed ID
Configuration	
Device	227002, 227003, 227004
Ping Rate	Configurable from 0.5 to 300 seconds insteps of 0.5 seconds
Number of Bursts	Configurable from 0 to 15
Broadcast User Data	Up to 50 Bytes
Electrical	
Power Source	Lithium Battery (non-replaceable)
Battery Monitoring	Yes
Standard/Certification	
Europe	CE (EN 300 220-1, -3; EN 301 489-1,-3; EN 60950)
North America	FCC Part 15 (US); Industry Canada
Physical	
Dimensions	131 × 28 × 21 mm (5.2 × 1.1× 0.85 inches)
Enclosure	Plastic (Qinnacryl)





Weight 50 g (1.75 ounces)

Enclosure rating IP 65



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