

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 at 30°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 in steps 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



<p>GAO Group</p> <p>GAORFID.com GAOTek.com GAOResearch.com</p>	<p>Toll Free (USA & Canada)</p> <p>1-877-585-9555</p> <p>All Other Areas</p> <p>416-292-0038</p> <p>Dial Ext.601 for Sales Ext.602 for Other Inquiries</p> <p>sales@GAORFID.com</p>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------