

Ascendent ID offers a full range of RFID solutions with specific market focus on vehicle access control (AVI), yard management, toll roads, load tracking, and commercial fueling. For more information about how Ascendent ID's RFID technology can benefit your business, visit our web site at www.ascendentid.com

Ascendent ID's TempTag™ is a member of our SensorTag family of products. SensorTags integrate Ascendent ID's RFID tags with numerous sensor options for use in a variety of chain of custody security and cold-chain compliance applications. Ascendent ID's TempTags are designed to be attached directly to metal shipping containers, refrigerated trailers, or other movable assets. Our SensorTags feature an auxiliary processor which is capable of communicating with almost any type of sensor to monitor parameters of interest via multiple protocols and standards.

Features

- **Long-Range RFID with Integrated Sensor** • • • • • Eliminates the need to manually retrieve sensor readings.
- **Multiple sensor options** • • • • • Provides an automated means of capturing relevant events.
- **Rugged construction** • • • • • Important asset data is protected, even under heavy vibration and impact, extreme temperatures, exposure to sunlight, wind-driven rain, fuels, and solvents.
- **User defined monitoring intervals** • • • • • Documented record of compliance without the hassle of paperwork.
- **Lithium battery power** • • • • • 5 year typical tag life translates to low cost per use.
- **2.45 GHz operating frequency** • • • • • Enables data collection in a well-defined zone.
- **Compatible with all Ascendent ID readers** • • • • • Can be read by stationary readers at yard entry or exit or by mobile, vehicle-mounted reader for in-yard inventory and sensor data capture.
- **Partitionable memory** • • • • • Flexible system design allows multiple levels of access to asset data.

Applications

- » Cold chain compliance
- » Container shipping
- » Yard management



Parameters

Operating Frequency

Nominal Read/Write Range¹

Typical Read/Write Range²

Physical Dimensions

Weight

Operational Temperature

Storage Temperature

Service Life³

Battery Type

Specifications

2.400-2.483 GHz

70 ft (21 m)

50 ft (15 m)

4.92 x 1.74 x 1.13 in
(12.5 x 4.42 x 2.87 cm)

4.17 oz (118 g)

-40 to +185°F

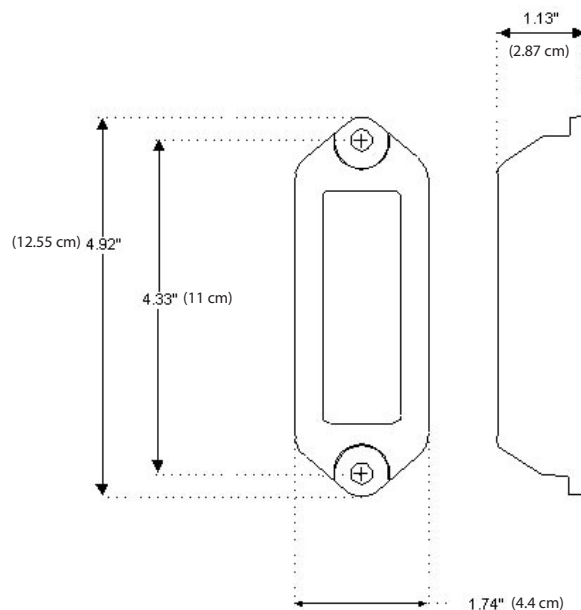
(-40 to +85°C)

-40 to +185°F

(-40 to +85°C)

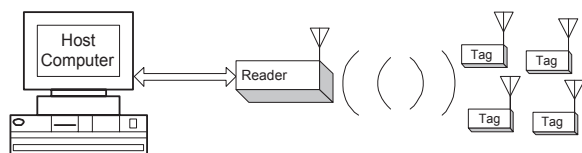
5 years expected

Lithium battery



TempTag™ Dimensions

1. Nominal Read/Write Range is typical average line-of-site range of the tags when illuminated at the US FCC allowable power level of +36 dBm (28 dBm into a 8.5 dB gain antenna and > 3' cable) in an anechoic chamber with optimum antenna polarization match. (Actual performances will vary depending upon ambient conditions and power level.)
2. Typical Read/Write Range is average line-of-site range of the tags when installed in a typical application. (Actual performance will vary depending upon ambient conditions and power level.)
3. Service life dependent on sensor type and typical usage conditions.



Typical Configuration

A typical system configuration includes a host computer, a reader, and RFID tags (SensorTag).

Temperature Logger Specifications

Temperature Limits: -40 to 176°F (-40° to +80°C)

Maximum Sample: 2048 (Other options available)

Sample Rate: 1-255 minutes per sample

Digital Thermometer

Increments: 0.9°F (0.5°C)

Accuracy: 1.8°F (1°C) from 22°F to +158°F
(-5.6°C to +70°C)

Clock: Built-in real-time clock (RTC) and timer has accuracy of +2 minutes per month between 32°F (0°C) and 113°F (45°C)

Selectivity: Programmable to record samples only when out of user defined range limits