

TRP 868 MHz IQ-350TL or IQ-350TLE active Tag, r/w, 131x28x21mm

→ With internal or external sensor for temperature monitoring



Product description:

- These tags provide an large communication range of up to 500m.
- The TRP 868 MHz UHF IQ-350 long range tags provide highly accurate, real-time data collection without human intervention in wireless applications such as: identification, tracking & tracing, localization and temperature monitoring.
- Using advanced UHF radio frequency technology, the TRP 868 MHz UHF IQ-350 long range tags transmit and receive data at distances of up to 250m. In addition they can be configure to beacon data at a configurable read to range of up to 500m.
- The TRP 868 MHz UHF IQ-350TL (E4000.000275) contains an internal sensor for temperature monitoring in order to measure and log the temperature of goods in definable intervals.
- The TRP 868 MHz UHF IQ-350TLE (E4000.000276) contains an external sensor for temperature monitoring.

Features & Benefits:

- Tag operates in response mode → In this standard operation mode data can be written onto or read from the tag over a range of up to 250m.
- Tag operates in beacon mode → In this configurable operation mode the tag can automatically transmit data over a range of up to 500m.
- 2000-Tags simultaneous identification → Large numbers of tags can be identified virtually simultaneously.
- LED → Provides visual identification of an addressed tag ("pick by light").
- Industrial housing → Durable in demanding environments.
- Temperature logging → Measures and logs the temperatures of goods in definable intervals.
- 10.000 Bytes memory → Stores user and process information as well as temperature data onto the tag to provide real-time tracking and tracing. Can be used as an electronic packing slip or as an electronic shop traveler.
- UHF operating frequencies → Allows low-power, long communication range and high data transmission rates with minimal interference due to local conditions.
- 6 year battery lifetime → Delivers long-time maintenance-free operation, without battery replacement.
- Non-line-of-sight data transmission → Allows tags to be identified without the need of visual contact.
- European and North American versions

<u>Technical Specification:</u>	
<u>Operating Data</u>	
Operating frequency:	868 MHz (EU) or 920 MHz (NA)
Maximum transmission power:	0.75 mW (EU/NA)
Compatibility:	READ 868 MHz IRE 350-CF Card Reader (E4002.000122), READ 868 MHz IRE 350-iPort-Ethernet (E4002.000125)
Standards/Certification:	ETSI EN 300 220 (EU), FCC Part15 (US)
<u>Communication Data Long Range RFID – Response Technology</u>	
Multiple tag handling:	Up to 2.000 tags in the read zone
Read/write range response mode:	Up to 250m @ free air *
Data rate response:	19.2 to 115.2 kbits/s
<u>Communication Data Long Range RFID – Beacon Technology</u>	
Read range broadcast:	Up to 500m @ free air *
Operation mode:	Transmits marker information in at regular intervals
Repetition rate (ping rate):	0,5 – 300 seconds, adjustable in steps of 0,5 seconds
Data rate broadcast:	115.2 kbits/s
<u>Communication Data Inductive Loop (Marker)</u>	
Read range:	Up to several meters
Operating frequency:	125 kHz (world-wide approved)
Operation mode:	Receives marker ID number and transmits marker information several times
<u>Electrical</u>	
Power source:	Lithium battery (not replaceable)
Battery monitoring:	Yes
<u>Temperature Logging</u>	
Number of samples:	10.000
Logging interval:	User definable in intervals from 1 to 255 min
Measuring interval:	User definable in intervals from 0s to 255 min
Metering range:	1) -40°C to +85°C with std. internal sensor 2) -80°C to +100°C with std. external sensor
Resolution:	0.1 °C
Accuracy:	± 0.5 °C from -20°C up to +50°C
<u>Data</u>	
Data retention:	> 10 years without power
Write cycles:	100,000 writes to a tag
Memory size:	10,000 Bytes user definable
Identification code:	48 bit fixed ID
<u>Environmental Conditions</u>	
Operating temperature:	-40°C to +85°C
Humidity:	10% to 95% relative humidity @ 30°C
Shock:	50 G, 3 times DIN IEC 68-2-27; Multiple drops to concrete from 1m
Vibration:	3 G, 20 sine wave cycles, 5 Hz to 150 Hz, DIN IEC 68-2-6 5G, noise 5 Hz to 1000 Hz, 30 minutes; DIN IEC 68-2-64
<u>Physical</u>	
Dimensions:	131 x 28 x 21 mm (cable length external sensor 3m)
Enclosure:	Plastic (Qinnacryl)
Weight:	50 g
Enclosure rating:	IP 65
<u>Order No.:</u>	
E4000.000275	TRP 868 MHz IQ-350TL with internal temperature sensor
E4000.000276	TRP 868 MHz IQ-350TLE with external temperature sensor, cable length 3m

* The communication range depends on the antenna type, the antenna cable runs and the environmental conditions.