

Active UHF Tag i-Q350T SL



The brand new i-Q350 series of tags combines the features of IDEN TEC SOLUTIONS' well-established i-Q and i-B series. In addition the i-Q350 series tags provide an even larger communication range of up to 500 m.

ILR provides highly accurate, real-time data collection without human intervention in wireless applications such as:

- identification
- tracking and tracing
- localization and
- temperature monitoring.

Using advanced UHF radio frequency technology, i-Q350T SL tags transmit and receive data at distances of up to 250 m (800 feet). In addition they can be configured to beacon data at a configurable rate to a range of up to 500 m (1600 ft).

The i-Q350T SL tag contains an internal sensor for temperature monitoring in order to measure and log the temperature of goods in definable intervals. It is also available with external sensors.

With its LED, the tag supports visual recognition, such as, for example, for "pick by light" applications.

Features

- Tag operates in beacon mode
- Tag operates in response mode
- 2000-tag simultaneous identification
- LED
- Industrial housing
- Temperature logging
- 10,000 Bytes memory
- UHF operating frequencies
- 6 year battery lifetime
- Non-line-of-sight data transmission
- European and North American versions

Benefits

- In this configurable operation mode the tag can automatically transmit data over a range of up to 500 m (1600 ft).
- In this standard operation mode data can be written onto or read from the tag over a range of up to 250 m (800 ft).
- Large numbers of tags can be identified virtually simultaneously.
- Provides visual identification of an addressed tag ("pick by light").
- Durable in demanding environments.
- Measures and logs the temperature of goods in definable intervals.
- 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.
- Allows low-power, long communication range and high data transmission rates with minimal interference due to local conditions.
- Delivers long-time maintenance-free operation, without battery replacement.
- Allows tags to be identified without the need of visual contact.

IDEN TEC SOLUTIONS

IDEN TEC SOLUTIONS is the global leader in active wireless tracking solutions. A commitment to developing ground-breaking, industry-specific tracking solutions featuring proprietary patented technology has placed IDEN TEC SOLUTIONS in the international forefront as a technology provider for innovation and as a complete solution provider in the automotive, oil, gas and mining industries.

Utilized by the world's leading organizations and system integrators, IDEN TEC SOLUTIONS' award-winning technology portfolio offers robust, highly effective tracking solutions that manage critical process and optimize supply chain flow. Privately held since 1999, IDEN TEC SOLUTIONS has provided asset management solutions and support to a variety of organizations, including an impressive roster of Fortune 500 clients such as Volkswagen, Audi, Deutsche Post and General Electric. Headquartered in Lustenau, Austria, the company's North American headquarters are located in Dallas, Texas, with customer service centers in Germany, Australia and Norway. For more information, please visit:

www.identecsolutions.com.

Information in this document is subject to change without notice and becomes contractual only after written confirmation by IDEN TEC SOLUTIONS.

This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada.

Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

WARNING: Changes or modifications not expressly approved by manufacturer could void the user's authority to operate the equipment.

"IDEN TEC SOLUTIONS", "Intelligent Long Range", "ILR", "i-LINKS", "i-Q", "i-D", "i-B", "i-CARD", "i-PORT", "Solutions. It's in our name.", "Smarten up your assets." and the stylized "i" are trademarks or registered trademarks of IDEN TEC SOLUTIONS, Inc. and/or IDEN TEC SOLUTIONS AG.

Copyright © 2010 by IDEN TEC SOLUTIONS.
All rights reserved.

Technical Data

Operating Data

Operating frequency ILR-RFID	868 MHz (EU) or 920 MHz (NA), further frequencies on request
Maximum transmission power	0.75mW (EU / NA)
Compatibility	i-PORT M 350, i-CARD CF-350
Standards/Certification	FCC Part 15 (US), ETSI EN 300 220 (EU)

Communication Data Long-Range RFID (ILR, Response Technology)

Multiple tag handling	Up to 2,000 tags in the read zone
Read/write range response mode	Up to 250 m (800 feet), free air*
Data rate response	19.2 to 115.2 kbits/s

Communication Data Long-Range RFID (ILR, Beacon Technology)

Read range broadcast	Up to 500 m (1600 feet) free air*
Operation mode	Transmits marker information in at regular intervals
Repetition rate (ping rate)	15 – 300 seconds, adjustable in steps of 0.5 seconds
Data rate broadcast	115.2 kbits/s

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

Electrical

Power source	Lithium battery (not replaceable)
Battery monitoring	Yes

Temperature Logging

Number of samples	10,000
Logging interval	User definable in intervals from 1 to 255 min
Measuring interval	User definable in intervals from 0 s to 255 min
Metering range	-40 °C to +85 °C (-40 °F to +176 °F) with std. internal sensor -80 °C to 100 °C (-112 °F to +212 °F) with std. external sensor Other metering ranges are available on request
Resolution	0.1 °C (0.2 °F)
Accuracy	±0.5 °C (1 °F) from -20 °C up to +50 °C, ±1 °C (2 °F) in the remaining temperature range

Data

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

Environmental Conditions

Operating temperature	-40 °C to +85 °C (-40 °F to +185 °F)
Humidity	10 % to 95 % relative humidity @ 30 °C
Shock	50 G, 3 times DIN IEC 68-2-27 Multiple drops to concrete from 1 m (3 ft)
Vibration	3 G, 20 sine wave cycles, 5 Hz to 150 Hz, DIN IEC 68-2-6 5 G, noise 5 Hz to 1000 Hz, 30 minutes, DIN IEC 68-2-64

Physical

Dimensions	131 mm × 28 mm × 21 mm (5.2 in. × 1.1 in. × 0.85 in.)
Enclosure	Plastic (Qinnacryl)
Weight	50 g (1.75 ounces)
Enclosure rating	IP 65

US Patent Technology

United States Patent No. 6,563,417
United States Patent No. 7,053,777



Distributed by

SOFTWAREWORK SrL
Via Zanardelli, 13/A
25062 Concesio (BS) Italy
Tel. +39 030 200 81 49
www.rfidglobal.it