

# Active UHF Beacon Tag i-Q350L M–Microtag



This IDENDEC SOLUTIONS' tag is intended for tracking personnel in hazardous environments such as:

- chemical plants
- petrol or gas stocks
- oil rigs

It is an ideal tool for safety of personnel.

Using advanced UHF radio frequency technology, i-Q350L M tags send data at distances of up to 150 meters (500 feet) to either a mobile (handheld) or fixed reader (interrogator).

The marker technology allows control if someone moves in or out through a gate or another specific locations. Here the inductive marker field informs the transponder about the current location. In the same moment the transponder sends its location information several times to the reader. For this data transmission it uses its long range RFID abilities. Even after the transponder has left the marker field it transmits this data steadily at a configurable ping rate.

Due to the ultra-low power consumption and configurable ping rate (one second to 300 seconds), the i-Q350L M tag can effectively operate maintenance-free for many years.

The i-Q350L M tag is the most economical choice for basic long-range technology and is ideal for tracking personnel.

## Features

- 150 m (500 ft) read range
- Customizable ping rate
- UHF operating frequencies
- Non-line-of-sight data transmission
- Automatic transmission
- Cost-effective
- Wearability

## Benefits

- Allows the longest read-range for identification and tracking using beacon technology.
- To optimize battery consumption, dynamic appearance and RF band use.
- Tags are available for both standard North American and European ISM band frequencies.
- Allows tags to be identified without the need of visual contact.
- Tags do not have to be "woken"—they transmit automatically.
- Creates the economical conditions for the usage of active high performance RFID technology to track and trace objects.
- Small form factor

## IDENDEC SOLUTIONS

IDENDEC SOLUTIONS is the global leader in active wireless tracking solutions. A commitment to developing groundbreaking, industry-specific tracking solutions featuring proprietary patented technology has placed IDENDEC 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, IDENDEC SOLUTIONS' award-winning technology portfolio offers robust, highly effective tracking solutions that manage critical process and optimize supply chain flow. Privately held since 1999, IDENDEC 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 Hong Kong, Germany, Australia and Norway. For more information, please visit: [www.idendec.com](http://www.idendec.com).

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

"IDENDEC 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 IDENDEC SOLUTIONS, Inc. and/or IDENDEC SOLUTIONS AG.

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## 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 5 m (16 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 150 m (500 feet) 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

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

### Communication Data Inductive Loop (Marker)

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

### Electrical Data

Power supply	Lithium battery
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### Configuration

Ping rate	Configurable from 0.5 to 300 seconds in steps of 0.5 seconds
Number of Bursts	Configurable from 0 to 15

### Environmental Conditions

Operating temperature	-30 to +70 °C (-22 to +158 °F)
Shock	50 G, 3 times acc. DIN IEC 68-2-7 several times onto concrete floor from 1 m height
Vibration	3 G, 20 sine wave cycles, 5 to 150 Hz, DIN IEC 68-2-6 5 G, noise 5 to 1.000 Hz, 30 minutes DIN IEC 68-2-64

### Mechanical Data

Dimensions	56 mm × 30 mm × 14 mm
Casing	Plastics
Mass	40 g
Protection class	IP 65

### Certifications

EMC	CE (EN 300 220-1, -3; ETSI EN 301 489-1, -3), FCC Part 15 (US), Industry Canada
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### WARNING:

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



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