

Active UHF Beacon Tag i-B2



The i-B2 series is the **beacon** generation of IDENDEC SOLUTIONS' Intelligent Long Range® (ILR®) active RFID tags. Built on IDENDEC SOLUTIONS' patented high-performance technology, the i-B2 tag provides impressive long-range capabilities for wireless applications that require the benefits provided by beacon tags. Static data is written on an i-B tag and is continuously sent at a programmable interval (ping rate) without being requested by a reader.

The i-B2 series offers an attractive price for continuous tag collection in specific scenarios such as:

- Access control
- Tracking of Vehicles and Containers
- Online inventory
- Localization of assets or personnel at specific areas (i.e. gates, dock doors)

Using advanced UHF radio frequency technology, i-B2 tags send data at distances of up to 100 meters (300 feet) to either a mobile (handheld) or fixed reader (interrogator).

Due to the ultra-low power consumption and configurable ping rate (one second to four minutes), the i-B2 tag can effectively operate maintenance-free for many years.

The i-B2 tag is the most economical choice for basic long-range technology and is ideal for tracking mobile assets in more stable, predictable environments.

Features

- 100-meter read range
- Long battery lifetime
- UHF operating frequencies
- Non-line-of-sight data transmission
- Automatic transmission
- Industrial housing
- Customizable ping rate
- Low cost

Benefits

Allows the longest read-range for identification and tracking using beacon technology.

Delivers long time maintenance-free operation, without battery replacement. The battery lifetime depends on the ping rate, which is configurable.

Ping-Rate	Durability (Years)
1 s	2
2 s	4
3 s	> 5

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.

Durable in demanding environments.

Ensures that the frequency band is not busy.

Economical choice for tracking assets with active RFID technology.

IDENDEC SOLUTIONS

IDENDEC 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 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.identecsolutions.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.

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

"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

Performance

Read range to i-PORT MB	Up to 100 m (300 ft) (free air)*
Read range to i-CARD CF B	Up to 100 m (300 ft) (free air)*
Operating frequency	868 MHz (EC) or 915 MHz (NA) ISM band
Operation	Transmits in regular intervals a pre-programmed data string
Repetition rate (ping rate)	0.5 – 60 seconds in 0.5 second steps
Transmit power	< 1 mW
Certification	CE (EN 300 220-1, -3; ETSI EN 301 489-1, -3), FCC part 15 (US), Industry Canada

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

Electrical

Power source	Lithium battery (not replaceable)
Expected battery life	4 Years @ 2 second intervals

Data

Programming and activation	Wireless by proximity device over a distance of maximum 5 cm
Data size	9 Bytes (user definable)
Identification code	32 bits fixed ID

Environmental

Operating temperature	-30 °C to +70 °C (-22 °F to +158 °F)
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 × 28 × 21 mm (5.2 × 1.1 × 0.85 in.)
Case Material	Plastic (Luran® S)
Mass	50 grams (1.75 ounces)
Enclosure rating	IP 65 — Protected against dust and low-pressure jets of water
Color	royal blue

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