

Product Data Sheet



Eureka-811 Active RFID High Speed Tag

Eureka-811 High Speed Tag

one of the most advanced high performance tags on the market today, incorporating advanced anti-collision, read and write at 2.5 metres, fast and accurate data transfer.

Versatile Tag

The Eureka-811 132kHz long range tag is used in numerous industrial, logistics and asset tracking systems. Ideally suited for the tracking of trains, vehicles, freight, and assets moving at speed.

Advantage

An advantage of this tag is its ability to both read and write up to 119 alphanumeric characters at a range of 2.5 metres at 110kph from a standard Eureka antenna.

Operation

The 811 tag is an active tag operating on two frequencies. A tag is activated and transmits its data when it is within range of a RF field produced by a Eureka reader. To extend battery life, the tag is placed into a quiescent state when it is not in an RF field allowing a tag to be operational for up to five years.

Harsh Environments

The RF communications of the tag can function through most non-conducting materials allowing tag operations in very difficult or harsh environments.

Enclosure

The 811 tag has a bespoke high impact rubber enclosure, ensuring correct mounting and providing excellent protection from extreme environmental conditions.

Tag

Type	Active
Receive Frequency	132kHz
Transmit Frequency	66kHz
Write Speed	50 Characters/second
Transmit Speed	1000 Characters/second
Read/Write Range	2.5m at 110kph
Data Capacity	119 Byte addressable characters
Programming	ASCII (20 to 7E hex)
Battery Life	7 Years (shelf Life)
Tag Life	5 Years / Up to 1 million tag reads
Anti-collision	Yes
Error Detection	Yes

Environmental

Operating Temperature	-65°C to +60°C
Storage Temperature	-20°C to +70°C

Physical

Case Size	90mm x 60mm x 23mm
Weight	147 grams
Protection	Case with rubber housing
Colour	Black
Case Material	ABS (resin potted)

Electrical

Power	Internal lithium coin cell
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Excellent read/write distance

- Read & write distance at 2.5m
- Common read/write antenna simplifies installations

Ability to write to the tag

- Character data sent using ACK/NAK handshaking
- Characters can be written to tag from a specified start address
- Write protected fields can be incorporated

Reliable operation

- Low frequency device, operation through a variety of materials
- Effective hands-free data collection