

Features

- Wireless identification at up to 60 metres (200 feet) range
- 40 bit read only Unique Identification (UID)
- 20 byte read/write memory
- Barcode label with UID
- IP54 enclosure
- Safe to be used in food distribution and most asset management and supply chain applications
- Replaceable battery
- Configurable blink rate vs. battery life



Applications

- Asset tracking
- Materials handling
- Inventory tracking
- Tracking of trolleys and carts
- Zone locking of objects

General Description

The F2M08-S00 RFIDS tag has a small form factor with a flanged enclosure that can easily be fixed to various types of assets.

The tag uses the 2.4 GHz ISM band and can reach an F2M07-series RFIDS reader at up to 60 metres with only 1 mW (0 dBi) output power.

Use of frequency hopping brings the robustness needed to ensure good read rates in metal and interference rich industrial environments.

The tag communication protocol allows the reader to read the identity of up to 150 tags per second.

Technical Data

Dimensions:	40 x 40 x 15 mm (56.30 x 40 x 15 mm with flanges)
Protection type:	IP54 (default)
Operating temperature:	-20...+70 °C
Powered:	F2M08-S00: via CR2032 Lithium cell battery (in battery holder) F2M08-S01: via CR2450 Lithium cell battery (soldered)
Operating frequency:	2.4GHz ISM band
Spectrum:	Frequency Hopping
Read distance:	Up to 60 meters Line of Sight with omni directional antenna
Wireless configuration:	Via RFID reader.
Identification code:	40 bit unique for every TAG. Every TAG is labelled with this code both in memory and on the housing.
Read/Write memory:	20 byte = 160 bits
Radio modes:	Reader Talks First (RTF) Tag Talks First (TTF)
Output power:	Max 1 mW (0 dBi), settable to -5 dBi, -10 dBi and -20 dBi
Update interval:	User defined in 1 second steps from 1 second to 1000 minutes.

Power consumption

The following table assumes using a VARTA, CR2032 and CR2450 3V lithium batteries with 220 mAh and 570 mAh respectively.

Update interval	Lifetime F2M08-S00 RTF	Lifetime F2M08-S00 TTF	Lifetime F2M08-S01 RTF	Lifetime F2M08-S01 TTF
2 sec	100 days	200 days	300 days	500 days
3 sec	150 days	285 days	400 days	700 days
5 sec	250 days	400 days	650 days	1000 days
10 sec	450 days	700 days	1100 days	1800 days
15 sec	625 days	900 days	1500 days	2000 days
30 sec	900 days	1200 days	2000 days	3000 days

Ordering information

Part number:	Description
F2M08-S00	RFIDS Tag in IP54 enclosure with flanges
F2M08-S01	RFIDS TAG in IP54 enclosure with flanges

Accessories

Part number:	Description	Applicable products
FA-08-B2032a	CR2032 lithium cell battery in pack of 100 pcs	F2M08-S00, F2M08-C00 F2M08-100, F2M08-200 F2M08-S10

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