

Features

- Long range
- Reads up to 150 tags per second
- Built-in antennas
- Bluetooth™ v2 Class 1 for up to 500 metres range
- Battery driven
- Robust air protocol
- Works in the licence free ISM band.
- Low output power for minimised interference
- Belt with clip included

Applications

- Fast stock check
- Pick-to-light applications
- Sensor monitoring, e.g. collection of temperature and humidity logs
- Status collection
- Environmental control



General Description

The F2M07-PB0A is intended for pairing with Bluetooth™ enabled handheld host, for instance a PDA, notebook or programmable phone.

With a range of up to 30 metres, the F2M07-PB0A is ideal for fast asset inventory checks and pick-to-light applications.

The F2M07-PB0A can be used together with the F2M08 series RFIDS tags and sensor modules.

For pick-to-light applications, the recommended pick-to-light TAGs are F2M08-CL0 and F2M08-BL0. In a pick-to-light application, the TAG to be picked is selected on the handheld, after which the selected TAG will reveal its position by its light indicator.

The F2M07-PB0A is powered by its own battery.

1 Technical Data

Dimensions

Reader Unit: 155 x 100 x 55 mm black
Belt: 1,200 x 30 mm black

Weight: <250 grams

Enclosure: ABS

Protection type:

Reader Unit: IP54

Antennas

RFIDS: Two built in dipole antenna with 1.5 dBi gain
Bluetooth™: One built in dipole antenna with 1.5 dBi gain

Operating temperature: -18...+70 °C

Powered: 2 x 9 Volt batteries (PP3 size) for approx 8 hours usage.
(Rechargeable batteries can be used)

Operating frequency: 2.4GHz ISM band

Max output power: 0 dBm (1 mW)

Modulation: Frequency hopping

Reading distance: Up to 30 metres line of sight

Wireless configuration:

Tag Talks First (TTF)
Reader Talks First (RTF)
Output power
Blink rate
TAG status flag
(Available parameters depend on the type of TAG).

Host interface options: Bluetooth™ Class 1, Serial Port Profile



Figure 1 - Battery compartment of F2M07-PB0A

2 Host interface

The host interface is used to configure the F2M07 reader as well as TAGs within range. The reader host interface protocol uses a set of commands for configuration, reading identity and other types of information from the TAG's.

The Host Interface Protocol is described in a separate document.

3 Compatible RFIDS Tags

The F2M07 Reader works with the F2M08 family of RFIDS™ tags and sensor modules. Some examples are listed below.

RFIDS Tag	Description
F2M08-S00	Tag for identification
F2M08-S10	Tag for identification and temperature sensing
F2M08-200	Small tag for office assets
F2M08-C00	Card tag
F2M08-B00	Identification tag for assets
F2M08-B10	Tag for logging of temperature variations
F2M08-B20	Tag for logging of temperature and humidity
F2M08-BS0	Asset security wireless lock tag
F2M08-BL0	Pick-to-light tag for larger assets
F2M08-CL0	Pick-to-light tag in card shape

4 Applications

Free2move can offer applications which been developed by Free2move's technology partners for the RFIDS™ system. Among those are:

- Asset tracking and management systems
- Attendance management systems
- Asset security systems

5 Ordering information

The F2M07 is available for delivery with the following part numbers:

Part no:	Description
F2M07-PB0A	RFIDS Reader for belt-mounting with Bluetooth™ and built-in antennas

Please indicate quantity for best price quotation.

6 Accessories

Part no:	Description
N/A	N/A

7 Contact information

Free2move Scientific

Url: www.free2move.us

Email: sales@free2move.us

Tel: +60 3 20268188

Fax: +60 3 20260388

The information given herein includes text, drawings, illustrations and schematics that are believed to be reliable. However, Free2move makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. Free2move will in no case be liable for any incidental, indirect or consequential damages arising out of sale, resale, use or misuse of the product. Users of Free2move products should make their own evaluation to determine the suitability of each such product for the specific application.