

## Features

- Desktop encoder with RS232 or USB interface
- Reduced range, ca 30 cm, for improved tag selection
- Works in the licence free ISM band.
- Built-in antennas



## Applications

- Encoding and configuration of F2M08 series RFIDS™ tags
- Read out of sensor logs from F2M08-x1x and x2x series RFIDS™ tags

## General Description

The F2M07-D20A is used together with the F2M08 family of RFIDS™ tags and sensor modules.

In normal cases, RFIDS™ tags and readers work in ranges from a few metres up to 80 metres. With such long ranges, in most cases many tags are in the field at the same time. While this is expected and in many cases desirable in operating tracking, sensor and security applications, it might be very inconvenient and prone to error when configuring individual tags; or when reading out sensor logs from individual tags.

To facilitate configuration and reading out sensor logs from F2M08 series RFIDS™ tags, the F2M07-D20A offers much reduced range. It enables selection of one tag from several tags on the same table.

It's recommended that when deploying a large number of tags, the organisation should have at least one F2M07-D20A installed in the tag administration office.

## 1 Technical Data

**Dimensions**

Reader Unit: 160 x 160 x 60 mm  
Antenna: Built-in.

**Weight:**

Reader Unit: 800 grams

**Enclosure:**

Reader Unit: ABS

**Protection type:**

Reader Unit: IP54

**Operating temperature:** -20...+60 °C

**Max output power:** 0 dBm (1 mW)

**Powered:** 220-240 V / 50 Hz with power adapter

**Operating frequency:** 2.4GHz ISM band

**Modulation:** Frequency hopping

**Reading distance:** Ca 30 cm or 1 foot.

**Wireless configuration:** Tag Talks First (TTF)  
Reader Talks First (RTF)  
Output power  
Blink rate  
Sensor readings  
Initialisation of sensor logging  
Read out of result of sensor logging

**Host interface options:** RS232  
USB (via FA-07-USB01a adapter)

## 2 Host interface

The host interface is used to configure the F2M07 reader. The reader host interface protocol uses a set of commands for configuration, reading identity, sensor logs and other types of information.

The Host Interface Protocol is described in a separate datasheet "Free2move RFIDS™ API", which can be obtained when purchasing any F2M07 series reader or evaluation kit.

## 3 Antennas

The F2M07-D20A has built-in antennas. It is not possible to connect external antennas.

## 4 Compatible RFIDS Tags

The F2M07 Reader works with the F2M08 family of RFIDS tags and sensor modules.

RFIDS Tag	Description
F2M08-S00	RFIDS Tag for identification in flanged enclosure (59 x 40 x 20 mm)
F2M08-S10	RFIDS Tag for identification and temperature sensing in flanged enclosure (59 x 40 x 20 mm)
F2M08-C00	RFIDS Card tag (40 x 84 x 9 mm) with CR 2032 replaceable
F2M08-B00	RFIDS Tag with replaceable 2 x AA batteries and flanged enclosure (96.3 x 40 x 20 mm)
F2M08-B10	RFIDS Tag for identification and temperature sensing with replaceable 2 x AA batteries and flanged enclosure (96.3 x 40 x 20 mm)

## 5 Ordering information

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

Part no:	Description
F2M07-D20A	Desktop RFIDS Tag Encoder with Internal Short Range Antenna and RS232

Please indicate quantity and types of RFIDS TAGs and RFIDS Readers for best price quotation.

## 6 Other accessories

Part no:	Description
FA-07-USB01a	USB adapter for F2M07-S20 and F2M07-D20A
FA-07-VEU12a	230V AC to 12V DC Adapter (Euro-plug 2-pin)
FA-07-VUK12a	230V AC to 12V DC Adapter (UK & Commonwealth 3-pin plug)
FA-07-VUS12a	110V AC to 12V DC Adapter (US 2-pin plug)

## 7 Contact information

### Free2move Asia & Pacific

Url: <http://www.free2move.us>

Email: [sales@free2move.us](mailto:sales@free2move.us)

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.