myndar

USER GUIDE
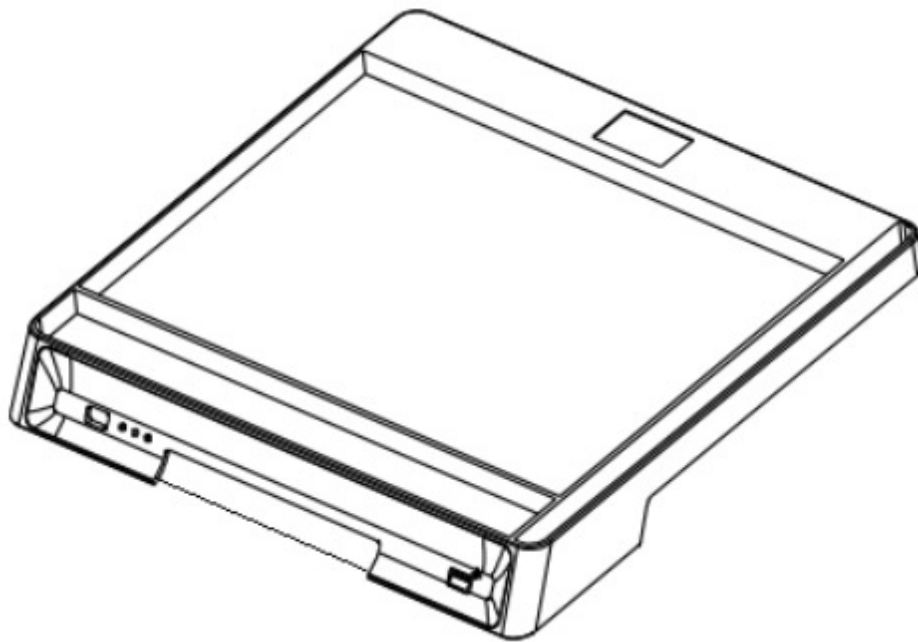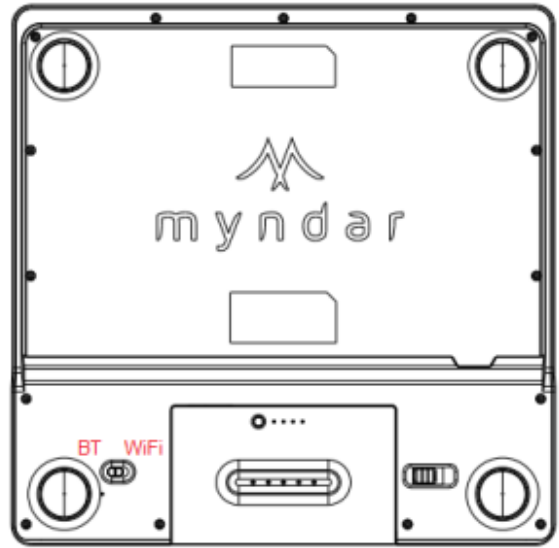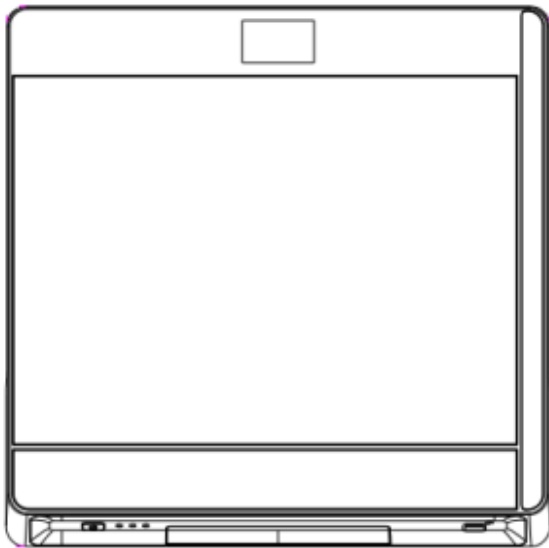
MTRAY

Model：MTRAY-F1-39-BW

Introduction

MTRAY-F1 is an UHF EPC C1G2 mobile RFID smart tray with Bluetooth and WiFi technologies, the plug and play Bluetooth and WiFi connectivity increase the flexible on the RFID item reading through Bluetooth or WiFi enabled mobile device. Lightweight and OS independent, the ergonomic design with enhanced reading sensitivity.

• The MTRAY-F1 intelligent RFID Reader supports protocols, UHF CLASS 1 GEN2 EPC C1G2/ISO 18000-6C, in Europe (865-868 MHz), China (902.5 – 924.5MHz), as well as in US (902-928 MHz).
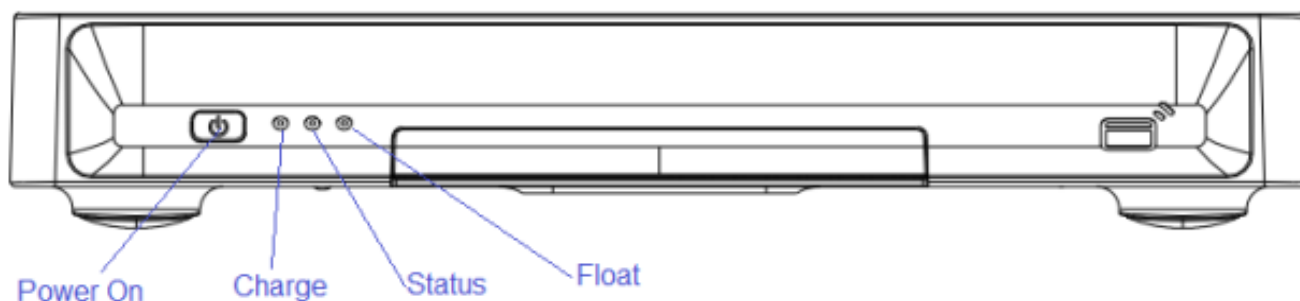

Note:
Before powering on and start using the unit, the wireless connectivity between BT and WiFi should be selected by using the slider switch at the bottom side of the unit.

Specification

Item	Specifications
Input	* 1 x power key button * 1 x USB C port
LED indicators	* Red LED stands for charging * Green LED stands for fully charged. * White LEDstands for BT is on but not connected * Blue LED stnads for BT connected * Yellow LED stands for connected WiFi * Red LED for item is floating
Wireless connectivity	BLE 4.0 Dual band WiFi (802.11 a / b / g / n)
Battery	Standard rechargeable battery : 5000 mAh
AC-DC adapter	5V/2A
Operating/Standby Time	Maximum of 15 hours continuous operation
Charging Time	Charging completion <5 hours
Operating Temperature	0 to +40 degree C
Storage	-20 to +60 degree C
Operating Humidity	20% to 90%
Features	* Adjustable RFID Tx power level : 13 至 20 dBm * High durability in harsh environment * Easy installation and maintenance * All-in-one compact design * Support EPC C1G2 / ISO 18000-6C (UHF) tag interface * Rechargeable battery * Light weight

Technical parameter	Frequency Range	BW	EIRP
Index Value	BT:2400-2483.5MHz WLAN:2400-2483.5MHz 5150-5250MHz 5725-5850MHz RFID: 920.5-924.5MHz	BT: ≤ 2 MHz 2.4G WLAN ≤20MHz 5.1G WLAN ≤40MHz 5.8G WLAN ≤40MHz RFID: ≤250kHz	BT: ≤20dBm(EIRP) 2.4G WLAN ≤20dBm(EIRP) 5.1G WLAN ≤23dBm(EIRP) 5.8G WLAN ≤33dBm(EIRP) RFID: ≤20dBm

LED Indications

Power On   Charge   Status   Float

The MTRAY-F1 has different LEDs to indicate the reader status.

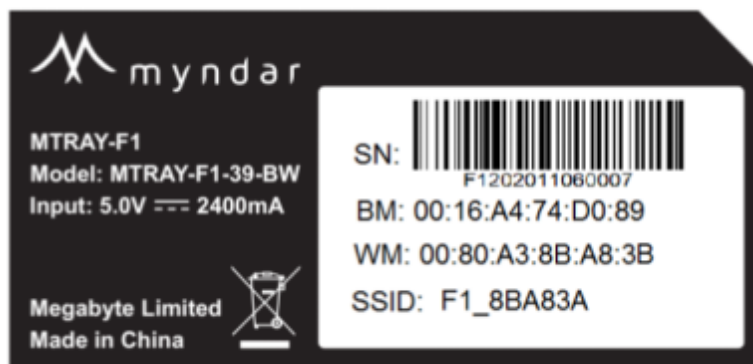| Charge	Red LED stands for charging. Green LED stands for fully charged.
Status	WHITE LED stands for unit has powered on, BT is ready, but not connected. Blue LED stands for BT is connected. Blinking Yellow LED stands for WiFi is ready, but not connected, solid color stands for WiFi is connected.
Float	Red LED stands for item has been lift.

Set Up Procedure of MTRAY-F1

This section will explains how to set-up MTRAY-F1 and connect the unit to your notebook/computer.

Bluetooth (BT) Connection

1. Select the "BT" wireless connectivity by the slider switch.

2. Power on the unit by pressing the Power On button.

3. White LED will light up, which indicates the BT is ready

4. Search and pairing the BT with your computer.

- Startup manual, select "Control Panel".
- "Control Panel", select "Devices and Printers"
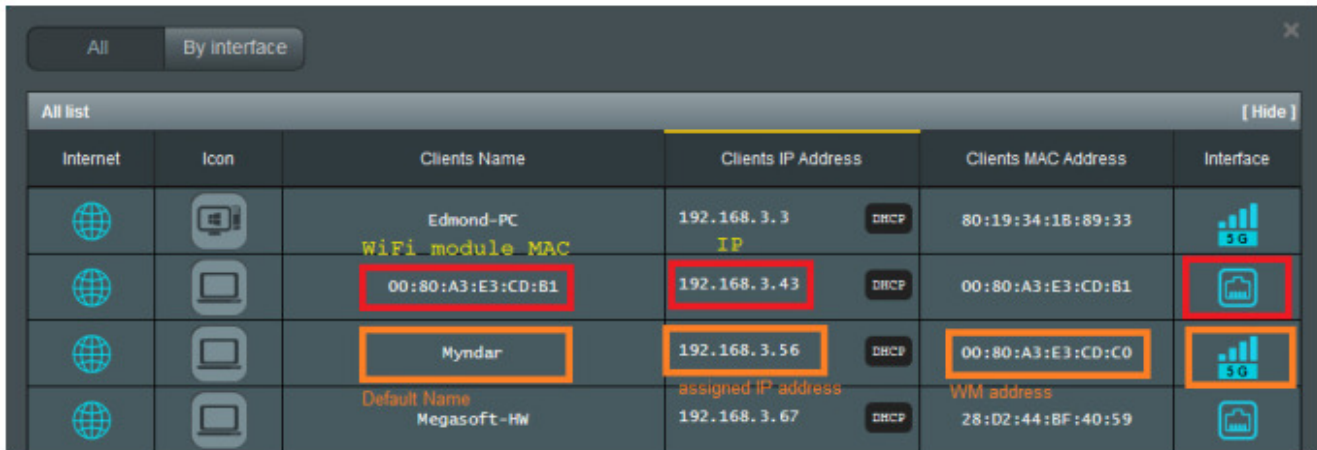- "Devices and Printers", press the button "add a device", then select MTRAY-F1 BT address to pair.

In general, the MTRAY-F1 BT name is called "F1_XXXXXXXXXXXX".
And it has also printed on the product label at the bottom side, indicated by "BM".

5. When the BT is connected, White LED will be off while Blue LED will be on.

6. Set the corresponding "COM" port number in the application program which is generated after paired. The "COM" number can be found in the "Device Manager".。
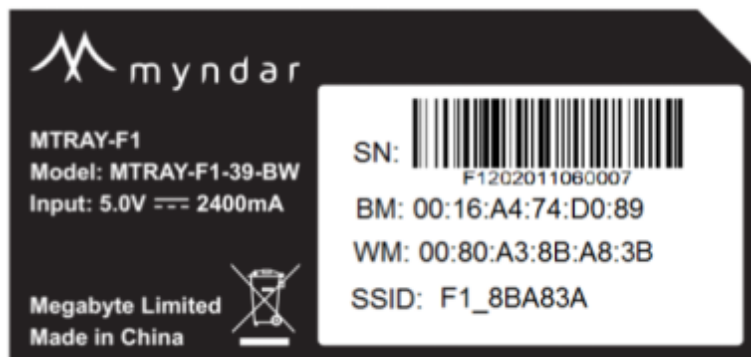
WiFi Connection

1. Select the "WiFi" wireless connectivity by the slider switch.

2. Power on the unit by pressing the Power On button.

3. White LED will light up, after 20 seconds, Yellow LED will be blinking while White LED is off indicates that WiFi is ready.

4. Identify the IP address with the camped router admin page.

The unit has its WiFi address also printed on the product label at the bottom side, indicated by "WM".

5. When the WiFi is connected, blinking Yellow LED will be stayed on.

6. Set the IP address in the application program then connected with the notebook/computer.

Regulatory Information

Federal Communications Commission (FCC) Compliance

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Consult the dealer or a qualified radio/TV technician for assistance

FCC NOTICE: To comply with FCC part 15 rules in the United States, the system must be professionally installed to ensure compliance with the Part 15 certification. It is the responsibility of the operator and professional installer to ensure that only certified systems are deployed in the United States. The use of the system in any other combination (such as co-located antennas transmitting the same information) is expressly forbidden.

RF Exposure Information and Statement :

The SAR limit of USA (FCC) is 1.6 W/kg averaged over one gram of tissue. Device has also been tested against this SAR limit. This device was tested for typical body-worn operations with the back of the handset kept 10mm from the body. To maintain compliance with FCC RF exposure requirements, use accessories that maintain a 10mm separation distance between the user's body and the back of the handset. The use of belt clips, holsters and similar accessories should not contain metallic components in its assembly. The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided.

This device complies with part 15 of the FCC rules . 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.

5G WIFI statement:
The device is restricted to indoor use when operated in 5150MHz~5350MHz to reduce the potential for interference.

WARNING: DO NOT ATTEMPT TO SERVICE THE WIRELESS COMMUNICATION DEVICE YOURSELF. SUCH ACTION MAY VOID THE WARRANTY. THE MTRAY-F1 IS FACTORY TUNED.

NO CUSTOMER CALIBRATION OR TUNING IS REQUIRED. CONTACT MEGABYTE LTD. TECHNICAL SUPPORT FOR INFORMATION ABOUT SERVICING YOUR WIRELESS COMMUNICATION DEVICE.

Note:
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Disclaimer Notice

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Warranty

1. Megabyte Ltd warrants to the User that the Products sold to the User will comply with their published specifications and will be of satisfactory quality and that Megabyte Ltd is entitled to sell the Products to the User. Megabyte Ltd warrants that for a period of twelve (12) months from date of purchase ("the Warranty Period"), the products will be free from defects in materials and workmanship.

2. During the Warranty Period, Megabyte Ltd will repair, or if in Megabyte Ltd's opinion necessary replace, the defective product returned to Megabyte Ltd's head office in Hong Kong. The defective production must be returned in its original packaging and all shipping and handling charges shall be borne by the Users.

3. The Warranty Period shall not be extended by reason of any repair or replacement.

4. Megabyte Ltd shall have no liability to the User for any damage to or defects in any of the Products caused by fair wear and tear, improper use, negligent handling, failure to observe this User Manual and the instructions accompanying the Products or any alterations maintenance or repair to the Products by any person other than Megabyte Ltd, use of non-Megabyte Ltd parts, accessories or equipment, or third party software which would damage the Products.

5. Unless in the case of any damage to or defect in the Products which would have been apparent on reasonable visual inspection, the User notifies Megabyte Ltd of the same in writing within 7 days after the date of purchase thereof, or in the case of any damage to or defects in the Products which would not have been apparent on reasonable visual inspection the User notifies Megabyte Ltd of the same in writing 7 days after the defect becomes apparent to the User, the User shall not be entitled to reject the Products concerned.

6. The User shall be responsible for properly storing and making backup copies of all data which may be stored in the Products. Megabyte Ltd shall not be responsible for any lost of data as a result of any repair or replacement.

7. Except as expressly provided in this User Manual no warranty, condition, undertaking, or term, express or implied, statutory or otherwise, as to the condition, quality, performance, durability or fitness for purpose of the Products is given or assumed by Megabyte Ltd and all such warranties, conditions, undertakings and terms are hereby excluded to the fullest extent permitted by