

# MTA-3080

### 8" Risc-based IoT Terminal

## **User Manual**

使用手册



Version 1.0

#### Copyright Notice

Copyright © 2018 Midas Touch, Inc. All rights reserved

This document contains proprietary information protected by copyright. All rights are reserved. No part of this manual may be reproduced by any mechanical, electronic, or other means in any form without prior written permission of the manufacturer.

#### Disclaimer

The information in this document is subject to change without prior notice in order to improve the reliability, design and function. It does not represent a commitment on the part of the manufacturer.

Under no circumstances will the manufacturer be liable for any direct, indirect, special, incidental, or consequential damages arising from the use or inability to use the product or documentation, even if advised of the possibility of such damages.

### Federal Communications Commission (FCC) Statement

#### 15.21

You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

#### 15.105(b)

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 in a residential installation. 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.
- -Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -Consult the dealer or an experienced radio/TV technician for help.

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 of the device.

#### FCC RF Radiation Exposure Statement:

For body worn operation, this phone has been tested and meets FCC RF exposure guidelines when used with an accessory that contains no metal and that positions the handset a minimum of 1.5 cm from the body. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

#### NCC警語:

根據NCC低功率電波輻射性電機管理辦法 規定: 第十二條 經型式認證合格之低功率射頻電機,非經許可,公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通信;經發現有干 擾現象時‧應立即停用‧並改善至無干擾時方得繼續使用。前項合法通信‧指依電信法規定作業之無線電通信。 低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機 設備之干擾。

「減少電磁波影響,請妥適使用」。

「SAR標準值2.0W/Kg; SAR實測值為: 0.222W/Kg」。

「EMC品質符合CNS13438限制值‧充電線組限用原廠含鐵粉芯、1米長之隔離線\_USB Cable」。

### 產品規格

產品額定電壓 / Rating Voltage: D.C. 12V~24V 操作溫度範圍 / Operate temp.: -10~50°C 防水防塵等級 / water and dust-proof.: IP65

# **Open Your Box**

### Package Contents:

MTA-3080 8" Risc-Based Panel PC

2-pin Power Terminal Block Connector

Wi-Fi/Bluetooth Antenna

1M USB Cable

User Manual



	12 10 11 10 10		
1	2.0 megapixel camera	11	Panel mounting holes
2	Microphone	12	10/100 Mbps RJ-45 LAN port
3	5-pointprojected capacitive touch screen	13	2 x USB 2.0 ports
4	Integrated 2W speaker	14	DB-9 RS-232 port
5	NFC antenna area*	15	DB-9 RS-232/422/485 port
6	4x 3.3V GPIO, 1 x CAN 2.0b / OBD-II	16	Power on/off toggle switch
7	2-pin DC terminal connector, 12V~24Vauto-detection	17	4G antenna connector*
8	microSD card slot	18	Wi-Fi/Bluetooth antenna connector
9	Micro SIM (3FF) slot	19	3G/4G antenna connector*
10	UART Connector	20	VESA75 mounting holes (M3 size)

 $<sup>^{\</sup>ast}3G,\,4G$  and NFC are optional modules and your MTA-3080 may not come with these components.

### Install microSD Card

To install a microSD card to the device, locate the microSD card slot on the side and insert the card following the direction as shown in the picture. Push the card into the slot until it locks into place.



## **Install SIM Cards & Antenna**

### SIM Card Installation

The MTA-3080 accepts micro SIM (3FF) card. To install a SIM card to the device, locate the SIM card slot on the side and insert the card following the direction as shown in the picture. Push the card into the slot until it locks into place.



#### 3G/4G Antenna Connection

According to the type of mobile network supported by your MTA-3080, attach appropriate antenna to the MTA-3080.

To use 4G mobile network, attach two 4G antennas as shown below



To use 3G mobile network, attach one 3G antenna as shown below.



### Wi-Fi/Bluetooth Antenna Connection

The MTA-3080 comes with a Wi-Fi/Bluetooth antenna to help increasing the signal strength. To use the antenna, attache the Wi-Fi/Bluetooth antenna to the Wi-Fi/Bluetooth antenna connector



## **Power Connection**

The MTA-3080 comes with one 2-pin DC terminal block connector to connect power to DC power connector on the device. To use the block connector:

- Use a wire-stripping tool to strip both of the wires from the DC-input power source. Expose the wire to the appropriate length for the DC power connector.
- Insert the wires into the DC power connector terminals and use a screwdriver to tighten the two captive screws on the connector.

	Pin	Description
ĺ	1	Power_GND
	2	+12V-



- Connect the DC terminal block connector to the power connector on the MTA-3080.
- Enable DC power by plugging in the DC power supply cord to a power source, or by enabling power at the designated circuit.



After power connection, toggle the power switch to **ON** to turn on the device.



## **Connector Pinouts**

### **PWPIN**

**Description**: Power Input Connector **Connector Type:** 2-pin Terminal Block

Pin	Description
1	Power_GND
2	+12V-



### **GPIO and CAN Bus**

Description: Digital General Purpose Signal Input/Output and CAN Connector Type: 4x 3.3V Digital GPIO connector and 1 x CAN2.0b Bus



Pin	Description	Pin	Description
1	IO_GND	6	GPIO_4
2	GPIO_1	7	IO_GND
3	GPIO_2	8	CANL
4	IO_GND	9	CANH
5	GPIO_3	10	IO_GND

Note: The pin assignments of other connectors conform to the industry standard.

# MTA-3080 概覽

### 包裝內容:

MTA-3080 8" RISC架構平板電腦 2-pin電源端子座 Wi-Fi/藍芽天線

1M USB 連接線



1	2百萬畫素相機	11	安裝孔
2	麥克風	12	10/100 Mbps RJ-45 LAN 網路連接埠
3	5點投射電容式觸控螢幕	13	2 x USB 2.0 連接埠
4	內建2W 喇叭	14	DB-9RS-232連接埠
5	NFC 天線位置*	15	DB-9RS-232/422/485連接埠
6	4x 3.3V GPIO, 1 x CAN 2.0b / OBD-II	16	電源開關
7	2-pin-pc 電源端子連接器	17	4G天線連接埠*
8	microSD 卡插槽	18	Wi-Fi / 藍芽天線連接埠
9	Micro SIM卡插槽 (3FF)	19	3G/4G 天線連接埠*
10	UART 連接埠	20	VESA 75 安裝孔 (M3)

<sup>\*3</sup>G、4G及 NFC 為選配模組·您的MTA-3080可能不包含這些元件。

## 安裝 microSD 卡

若要安裝microSD卡,請將microSD卡依右圖 所示,將卡片插入裝置側邊的microSD卡插槽 然後將卡片直推到底,確定完全插入。



# 安裝 SIM 卡及天線

### SIM卡安裝

MTA-3080所支援的SIM卡格式為micro SIM (3FF)。若要安裝SIM卡·請將SIM卡依右圖所示·將卡片插入裝置側邊的SIM卡插槽·然後將卡片直推到底·確定完全插入。



### 連接3G/4G天線

請根據您的MTA-3080所支援的無線行動網路類型 (3G或4G)·連接對應的無線 行動網路天線。

若您的MTA-3080使用4G無線行動網路,請依下圖在左右兩邊的天線連接埠各連接一支4G天線。



### 連接Wi-Fi/藍芽天線

MTA-3080隨貨附有一個Wi-Fi/藍芽天線用以加強無線訊號,請將該天線連接到MTA-3080的Wi-Fi/藍芽天線連接埠。



# 連接電源

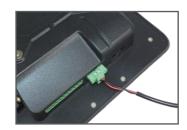
MTA-3080隨貨提供一個2-pin的DC電源端子座·用以連接裝置的DC電源端子連接器·請依下列步驟連接電源:

- 用剝線鉗將DC電源線剝去外皮,露ft可以插入端子座線孔的適當長度。
- 依腳位定義將DC電源線插入端子座的線孔,然後用螺絲起子旋緊線孔的螺 絲,將線材固定。

Pin	說明
1	Power_GND
2	+12V-



- 3. 將DC電源端子座插入MTA-3080的電源端子連接器。
- 4. 將DC電源線接上電源。



連接電源後,將電源開關撥到**ON**的位置即可開啟裝置。



# Pin腳定義

### **PWPIN**

說明: 電源輸入孔

連接埠類型: 2-pin端子座

|--|

2 1

Pin	說明
1	Power_GND
2	+12V-

### GPIO 及 CAN Bus

說明: 通用型輸入輸ft及 CAN

連接埠類型: 4x 3.3V GPIO 連接埠及 1 x

CAN 2.0b Bus

7 777	ه ده د	- <b>4</b> - <b>4</b> -	42 42	97.
1				10

Pin	說明	Pin	說明
1	IO_GND	6	GPIO_4
2	GPIO_1	7	IO_GND
3	GPIO_2	8	CANL
4	IO_GND	9	CANH
5	GPIO_3	10	IO_GND

注意: 其它連接埠的Pin腳定義皆同業界標準。