Infinea Tab M (CTLS, ICCR and MSR)
User Manual

LEGAL NOTICE

"Made for iPhone" mean that an electronic accessory has been designed to connect specifically to the iPhone and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with an iPhone may affect wireless performance

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REVISION HISTORY

Version	Data	Change description
1.0.0	11.07.2016	First Release
2.0.0	16.01.2016	All Document
3.0.0	04.07.2017	All Document
3.1.0	02.08.2018	Added Section "REGULATORY"

REGULATORY

FCC ID: YRWITMC

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.

No changes shall be made to the equipment without the manufacturer's permission as this may void the user's authority to operate the equipment.

This device has been designed and complies with the safety requirements for portable RF exposure in accordance with FCC rule part 2.1093 and KDB 447498 D01.

CONTENTS

TECHNICAL SPECIFICATIONS

Processor	ARM Cortex® M3 Security Microcontroller
Memory	64KB Internal ROM 256KB Internal RAM 1MB Internal Flash
Application Memory	4MB Serial Flash
Keypad	• 1 button for device turning ON/OFF • 1 button for scanning barcodes
Magnetic Card Reader	• 3-track bi-directional reading • ISO 7810, 7811 and 7813
Smart Card Reader	ISO7816, EMV L1 certified
Contactless Card Reader (option)	ISO/IEC 14443 Type-A/MIFARE: - MIFARE MINI - MIFARE CLASSIC-1K, MIFARE CLASSIC-4K - MIFARE ULTRALIGHT, ULTRALIGHT-C - MIFARE PLUS 2K/4K - MIFARE DESFire - and others ISO/IEC 14443 Type-B - supports most of the cards ISO/IEC 15693 - supports most of the cards JIS X 6319-4 - compatible with FeliCa
Contactless Card Reader for payment applications (option)	• AMEX ExpressPay MagStripe and EMV • Discover ZIP and D-PAS • MasterCard PayPass MagStripe and M/Chip • VISA PayWave MSD and qVSDC
Barcode Reader (option)	Newland EM3096* – image sensor 752x480 CMOS, High Performance 2D Imager Scan Engine Newland EM3296 - image sensor 640x480 CMOS, High Performance 2D Imager Scan Engine Newland EM3396 - image sensor 752x480 CMOS, High Performance 2D Imager Scan Engine (Laser AIM) Opticon MDI-3000 - image sensor 752x480 CMOS, High Performance 2D Imager Scan Engine Zebra SE4710 - image sensor 1280x800 CMOS, High Performance 2D Imager Scan Engine Zebra SE4750 - image sensor 1280x960 CMOS, High Performance 2D Imager Scan Engine (Laser or LED AIM)
Supported Barcode Types	2D* Imager Supported Symbologies: PDF 417, Data Matrix （ECC200,ECC000,050,080,100,140, QR Code Code 128, EAN-13, EAN-8, Code 39, UPC-A, UPC-E, Codabar, Interleaved 2 of 5, ITF-6, ITF-14, ISBN, Code 93, UCC/EAN-128, GS1 Databar, Matrix 2 of 5, Code 11, Industrial 2 of 5, Standard 2 of 5, Plessey, MSI-Plessey, etc.
Battery	Rechargeable Li-Ion Battery 3.6V / 2330 mAh Fuel Gauge microcontroller for precise battery management

Connectivity	• Serial communication (with Apple device)
	• USB
	• BT 3.0 Class 2
	  - SPP - Serial Port Profile
	  - iAP - iPod Accessory Protocol

Audio indication	Electro-Magnetic Buzzer
Apple devices compatibility	iPhone 8 Plus
Reliability	• 500 000 chip card cycles • 1 000 000 magnetic card swipes • 1 000 000 single button clicks
Certifications	CE, FCC, EMV Level 1, EMV Level 2, EMV Level 1 Contactless ,PCI PTS 4.1, Apple® MFi
Dimensions (LxWxH), mm	112.4 x 88 x 27
Weight, g	168
Environmental	Operating: -10℃ to +40℃ / 5 to 90% RH Storage: -15℃ to +50℃/ 5 to 90% RH
Drop Test	1.5 m, 6 faces + 4 edges on concrete
Power Supply	• 5V through micro USB connector • 5V through single or 5 station charger
Accessories	• Single station charger - SC-1 • 5 stations charger - GC-5 • Holster

*** Specification can be change without any notice.**

Use only original equipped DATECS cable (SYI-0120/SYI-0120A) for charging Apple device.

Use only UL approved USB adapters. The minimum requirements of USB adapter is 5V/2.1A!

Waste Electrical & Electronic Equipment

The symbol means that according to local laws and regulations your product shall be disposed of separately from household waste at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

GENERAL VIEW

1. **On/Off Button**
2. **Button for starting scanning barcodes**
3. **Opening for inserting smart card**
4. **Contactless reader**
5. **LEDs indication for Contactless transaction**
6. **Magnetic stripe reader**
7. **Barcode engine**
8. **Lightning connector**
9. **Micro USB port**
10. **Indication LEDs**
11. **Charging pads**

1. **On/Off Button**
2. **Button for starting scanning barcodes**
3. **Opening for inserting smart card**

GETTING STARTED

Infinea Tab M has rechargeable Li-ion battery. Can be charge from USB port or Charging pads.

⚠️ **Before first use, battery must be fully charged.**
If the device is fully discharged, charging time to fully charged would be approx. 6 hours.

Depends of the settings, Infinea Tab M can pass-through input power supply from USB connector or Charging pad to Apple device. Charging current to Apple device can be selected.

Charging form USB adapter:

Table for Infinea Tab M status LED:

LED1 indication		Description
◯	No indication	Device is turned off/sleep mode
☀	Blue Indication (blinking)	Device is in active mode/wake up
LED2 indication		**Description**
☀	Green indication (blinking)	Infinea Tab M is charging from outside power supply (from USB connector or Charging pads)
🟢	Green indication	Infinea Tab M mini is fully charged, can be disconnect the outside power supply
◯	No indication	Not charging(no outside power) or Device is turned off

ATTACHING APPLE DEVICE TO INFINEA TAB M

Infinea Tab M and Apple device must be turn to top side, showed on picture below. After that Apple device must be sledded to Infinea Tab M lightning connector.

OPERATION MODES

For start operating with Infinea Tab M is need to be attached Apple device and installed application for iOS. For downloading the latest SDK please contact with your distributor:

For turn On Infinea Tab M press On button and unlock Apple device screen.
When the Infinea Tab M is active blue LED on front side will blink. If the blue LED is not blinking Infinea Tab M is turned off.

Scanning barcodes

Infinea Tab M can scan 1D and 2D barcodes. To scan barcode first, activate the scanner (by pressing and holding the scan button). Then position the scanning engine to the center of the barcode by aiming and the illumination box is over the outer edges of the barcode, as shown on the picture below. Slowly pull back or forward the unit, while increasing or decrease the distance between the barcode and the scanning head, until the barcode has been read by the scanner. Barcode data will have shown on the use application for iOS.

Infinea Tab M support different types of scanning modes:
- Single Scan
- Multi Scan
- Motion Detect
- Multi Scan without duplicates

Magnetic cards reading

The Infinea Tab M has a built-in magnetic card reader. The card reader incorporates a (3) track magnetic read head, requiring a single swipe to read field data from all three tracks.

The magnetic reading head faces up, towards the top of the bottom cover of the cradle. When swiping the card into the reader, the magnetic stripe must be facing down, as shown in the figure below. Keep the edge of the card flat on the inner base of the reader to ensure that the magnetic stripe passes over the reading head evenly.

Contactless cards reading

The Infinea Tab M has a contactless card reader. Contactless card reader is located on the bottom side. Contactless card must be placed there (showed on the picture below).

Smart cards reading

The Infinea Tab M has a smart card reader. Smart card insertion direction is showed on the picture below.

CARE, MAINTENANCE AND WARRANTY

- **Keep the Infinea Tab M side of the reach of small children.**
- **Keep the Infinea Tab M dry. Precipitation, humidity and liquid contain minerals that will corrode electronic circuits.**
- **Do not use or store in dusty or dirty areas.**
- **Do not drop or knock Infinea Tab M**

- **Do not open the Infinea Tab M. Only qualified personnel can open the device and make repair. If the Infinea Tab M is not working, please contact with your dealer.**
- **Allowing unqualified personnel to service your Infinea Tab M may result in damage to your Infinea Tab M and will void your warranty.**