M200 Introduction

V1.0

Feitian Technologies Co., Ltd.

www.FTsafe.com

Content

Chapter 1. M200 Product Introduction

1.1   Product Introduction

Feitian M200 is a smart mobile POS product with PCI PTS6.2 certification. It has a stylish and smart design.

Connect with smart phone or tablet via Bluetooth interface, you can easily and quickly complete the

payment process. It can achieve payment progress anytime anywhere which provides end users with a new

experience of payment.

This product is developed based on Linux operating system, software including Linux system and secure system, the function is simple and easy to use.

Both Linux system and secure system can be upgraded remotely or upgraded by TF card/OTG+U disk, lower the following cost of development and maintenance.

The features of this product:

■   Portable

The appearance is suitable for use.

■   Powerful

Support magnetic stripe card, contact card and contactless card. Support WiFi and Bluetooth.

■   Certified

CE,FCC,ROHS,PCI,EMV L1&L2,EMV CL1, Paypass, PayWave, Discover, JCB, Amex,TQM,qUICS,PURE certified.

■   Remote upgrading

Firmware can be upgraded remotely, reducing the cost of late development and maintenance.

1.2   Product Appearance

The M200 product appearance is shown as follows:

Size : 105x146x57mm

Figure 1 M200 appearance figure

1.3 Specifications

1.3.1 Dimensions

Size: 146mm x 105mm x 57mm

1.3.2 Screen

5.0-inch TFT full color LCD display, resolution of 720 x 1280 Optional resistive touchscreen

1.3.3 Communication Interface

■ RF Band

SKU1:Only WIFI
SKU2 (optional) :LTE-FDD B1/B3/B7/B8/B20/B28 ALTE-TDD B38/B40/B41 WCDMA B1/B8 GSM B3/B8
SKU3 (optional) :LTE-FDD B2/B4/B5/B12/B13/B14/B66/B71 WCDMA B2/B4/B5

■ Type-C USB port

When the device is connected to the host (for example, PC) through this interface, this interface provides functions such as transmit data.

■ WiFi

This device can be connected to 2.4G/5G network, support 802.11 b/g/n/ac.

■ Bluetooth 4.2+BLE

This device can be connected to smart phone or bluetooth headset through this interface.

- **GPS**

    This device supports GPS, as well as GLONASS、Beidou、GPS

- **NFC**

    NFC is a POS function, which supports 13.56MHz，ISO/IEC 14443，ISO18092， Type A&B、Felica，Mifare card

1.3.4 Audio

- **Speaker**

This device can play audio through this interface.

- **Mic**

This device can record through this interface.

- **Buzzer**

 Notify the user by beeping when needed.

1.3.5 Camera

- **Front Camera**

A front camera: 2M，FF

1.3.6 SIM card

This device can insert into sim card.

1.3.7 PSAM card

This device can insert into PSAM card.

1.3.8 TF-card

This device can insert into TF card.

1.3.9 Contact IC card Reader

 Support contact IC card (ISO/IEC 7816 Chip Card), When inserting the IC card,

please let the chip side toward the side of the screen.

1.3.10 Magnetic Stripe Card Reader

The magnetic stripe card must be compliant with ISO/IEC 7811, ISO/IEC 7813 standard. The magnetic strip card reader can

read data from magnetic track 1, 2, 3 at the same time, support bi-directional swipe, swipe speed ranges

from 10mm/s to 100mm/s. The life cycle is over 400,000 times. The magnetic stripe must be backward when

swiping card.

1.3.11 Contactless IC Card Reader

Support contactless IC card (Type A, Type B, Meet the EMV Contactless L1 standard, can pass the international 6 major card organizations non-connection certification (paypass, Paywave, etc.)), working frequency 13.56MHz

1.3.12 Features

● Tamper-proof and anti-power-down protection

● Support MK/SK and DUKPT key systems

● RSA、AES、3DES、SHA-1、SHA-256；Support RSA, AES, 3DES, SHA-1, SHA-256

● Support SM2, SM3, SM4

● Physical tamper-proof has self-destruction function

● Support redevelopment

1.4 Certifications

● PCI

● EMV L1/L2

● EMV Contactless L1

● Paypass(V3.0 or higher)

● payWave(v2.1 or higher)

● CE

● QUICS

- Amex
- MSDS
- TQM
- Discover
- PURE

1.5 Installation

Step 1. Turning on the device

• Connection power adapter, the system will start.

• If required, remove the protective film from the display.

Step 2. Mobile payment application

Please follow the instructions provided by your bank or service provider to download the mobile application onto this device.

Step3. Performing a chip card sale transaction with PIN

• When prompted, insert the customer's chip card into the slot at the down hand side of the device with the chip facing upwards.

• Follow the instructions provided by your bank or service provider to complete the transaction.

Step 4. Performing a magnetic stripe transaction

• During device operation you may be prompted to read a presented card by means of the magnetic stripe.

• The magnetic stripe reader is a slot positioned on the top of the device. Swipe the card in a single smooth motion from left to right.

• Follow the instructions provided by your bank or service provider to complete the transaction.

Step 5. Performing a contactless transaction

• Transactions may be completed using a contactless card or enabled product. The contactless symbol is

printed on the top of the device.

• To read a contactless card it must be positioned in close proximity to the device over the contactless symbol.

• Follow the instructions provided by your bank or service provider to complete the transaction.

Troubleshooting

In the unlikely event you experience issues with this product, please follow the guidelines below. If this does not resolve the issue, please contact your solution provider for further assistance.

No display

• Ensure the power adapter being used is powered.

Cannot read Cards

• Ensure the magnetic stripe card has been swiped in the correct orientation.

• Ensure the chip card has been inserted in the correct orientation.

• Ensure the contactless card has been placed at a distance of 0 to 4 cm from the device.

• Test with another card of the same type.

Caution and Safety Instructions

• Do not attempt to disassemble, modify, service or repair any part.

• Do not use if damaged or with signs of tampering.

• Only use the device with supplied or manufacturer-certified accessories.

• To avoid the potential hazard of electrical shock do not use in wet environments or during an electrical storm.

• Do not use in proximity of potentially flammable gases or substances.

• Ensure cables used do not cause a trip hazard or risk the device being dropped on to a hard surface.

• Do not expose to excessive heat or cold. Only operate between -20 °C and 70 °C.

• Before cleaning, disconnect from the electrical outlet. Use only a dry or dampened soft cloth.

• Do not immerse, use liquids, sprays or aerosol cleaners. Clean all spillages quickly.

• This device is intended for handheld use only or in an approved cradle/stand.

• Dispose any part in an environmentally sound manner and in accordance with local laws.

• M200 product will not be held liable for any damage resulting from user operation that does not comply with the above-stated guidance.

Frequency bands and power

• Maximum radio frequency power transmitted in the frequency bands in which this equipment operates is below the limit values specified in the corresponding Harmonized Standards.

• The frequency bands and power limits applicable to this equipment are: Bluetooth:BLE+BLE4.2 ; NFC: 13.56 MHz, Type A&B、Felica， Mifare card

1.6　FCC Statement

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

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

(2) This device must accept any interference received, including interference that may cause undesired

operation.

FCC Radiation Exposure Statement:
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment .This equipment should be installed and operated with minimum distance 20cm between the radiator& your body.

Note : 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.