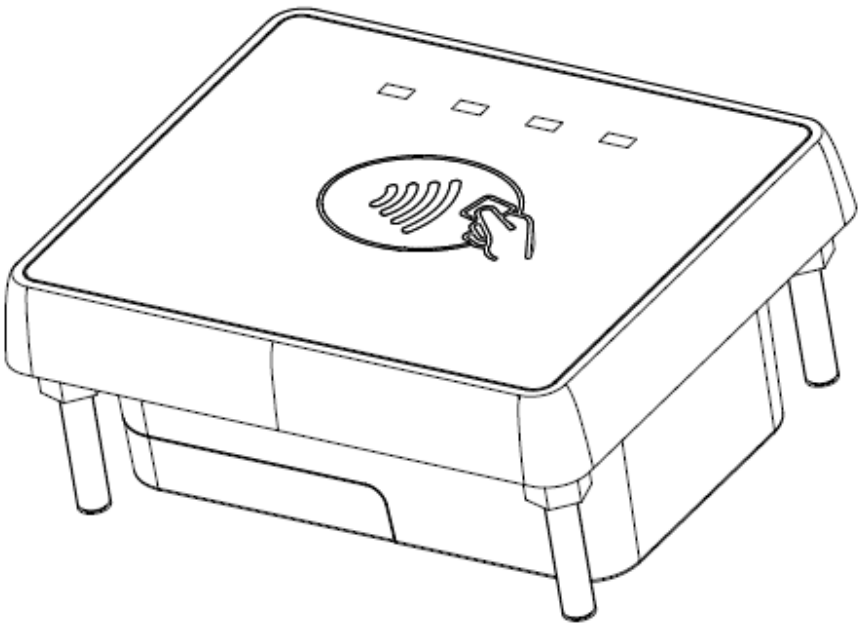
Installation Manual

IM700
CONTACTLESS CARD READER



PAX TECHNOLOGY LIMITED

PAX TECHNOLOGY LIMITED reserves the right to change product specifications without prior notification.

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1. Product Description

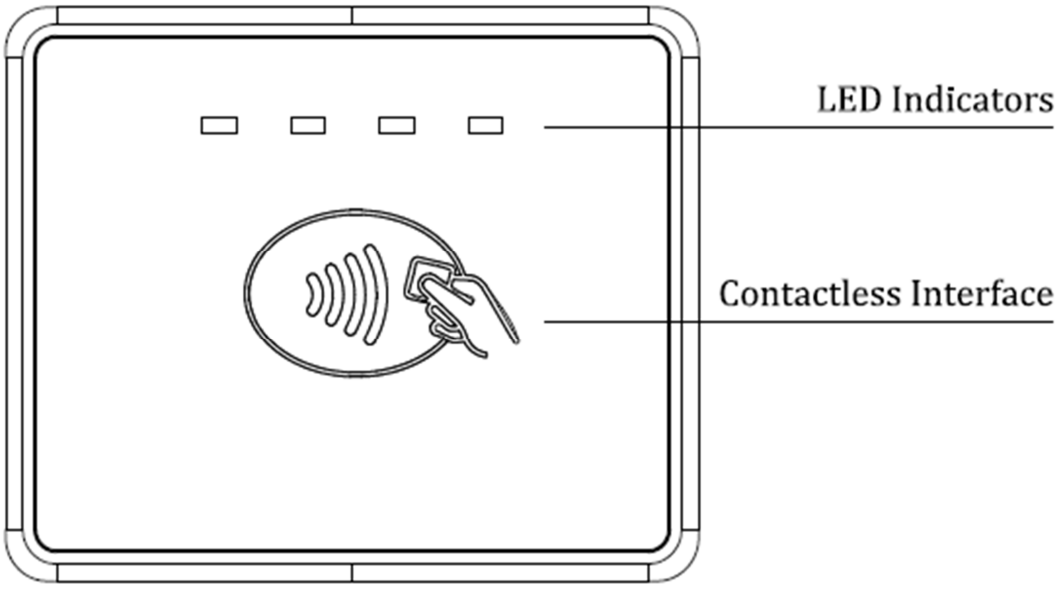

Figure 1: Front view

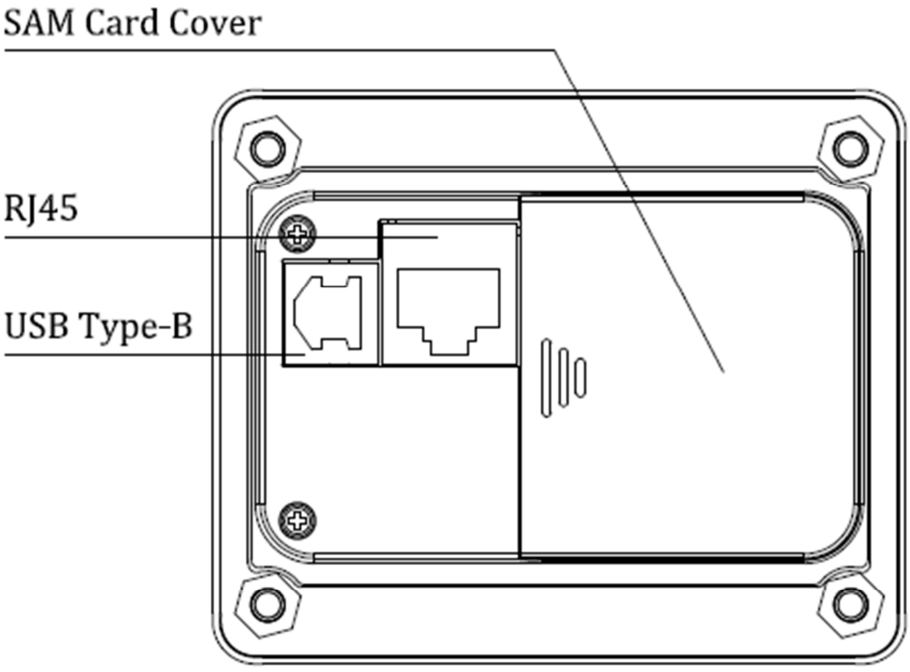

Figure 2: Back view

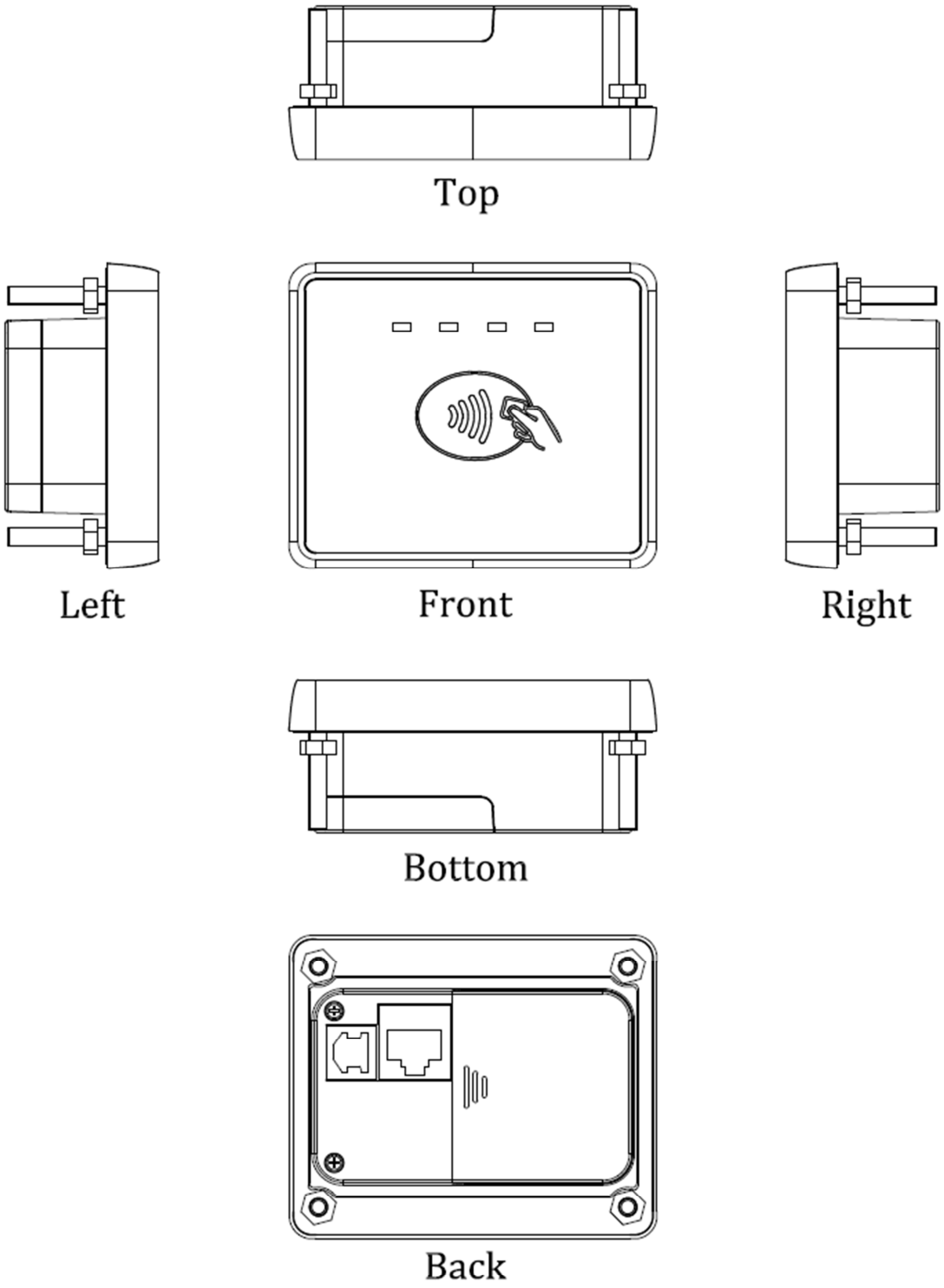

Figure 3: View from all angles

2. Installation

1) SAM Card

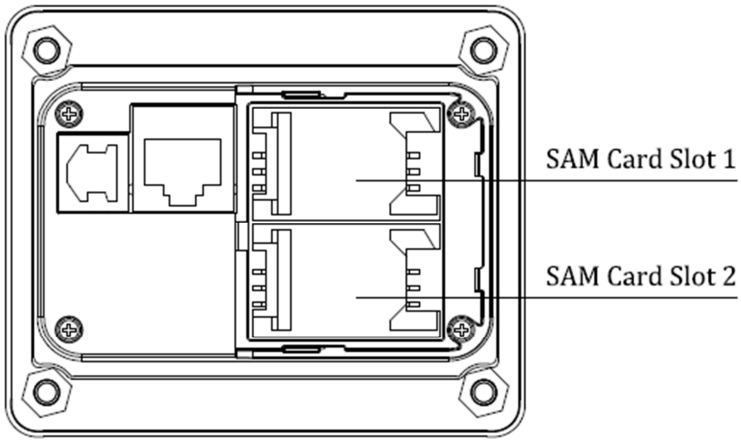

Figure 4: IM700 SAM card slots

Slide the SAM card cover to the side to remove it, then open the mount and insert the card into the slot with the contact facing down and the clipped edge oriented to the top right. Afterwards, lock the mount with the card inside and replace the cover.

2) Device Connection

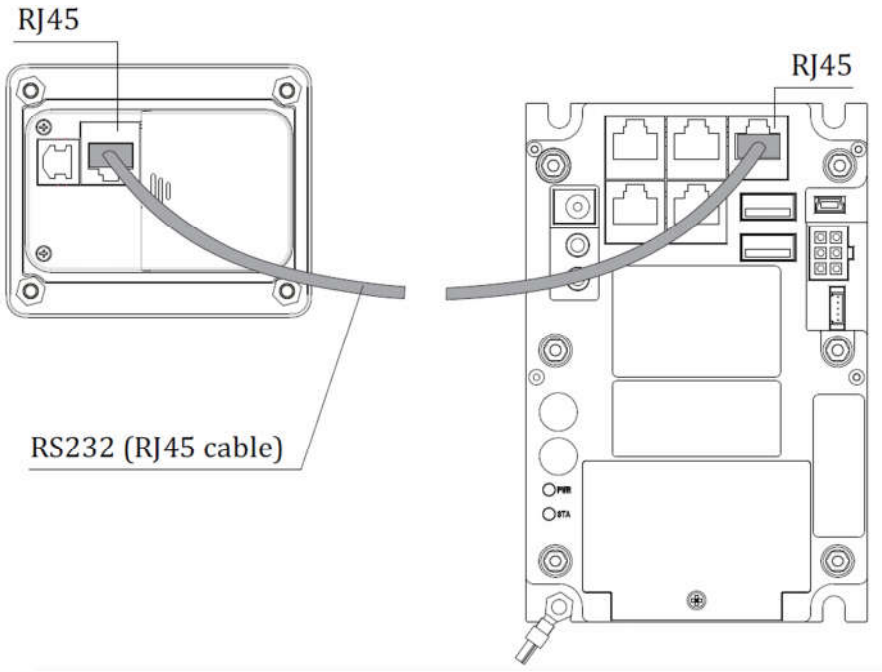

Figure 6: Connecting the IM700 to an IM300 unit

The IM700 is connected to an IM300 encrypted PIN pad through a RS232 serial port using a RJ45 cable as indicated in Figure 6. The IM300 both controls and powers the IM700. Note that the upper right RJ45 port on the IM300 is reserved for the use of the IM700, do not connect the IM700 through the other ports.

3. Instructions

1) Switching the device on and off
   Switch on: Connect the IM700 to an appropriate power terminal either via USB or RJ45 (make sure to have the appropriate voltages and pinouts).
   Switch off: Disconnect the IM700 from whatever power terminal(s) it is connected to.
2) Detecting contactless cards

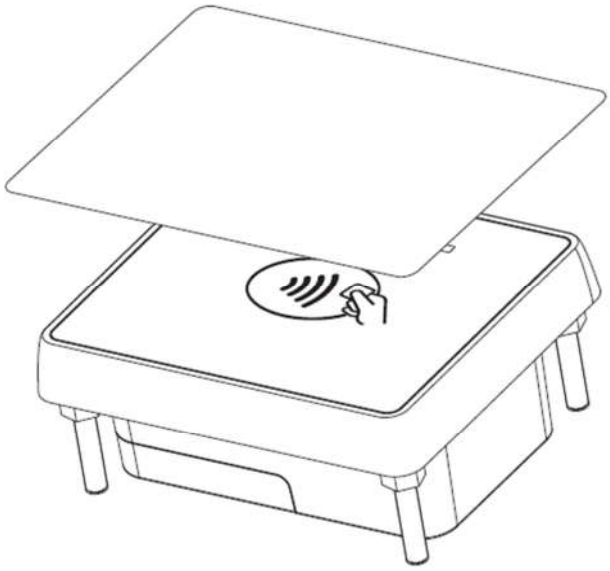

Figure 7: IM700 interfacing with a contactless card

In order for the IM700 to detect and interface with contactless cards, the user holds a contactless card with the face of the card roughly 4 cm or less from the face of the device as shown in Figure 5. The orientation of the card does not matter so long as it is roughly facing the front of the device.

3) LED indicators

The different LED indicators show the following states for the IM700:

① All LEDs being in the off state means that the device is unpowered or powering up and connecting to a terminal.

② The blue LED indicates that the device is idle or ready for transaction.

③ The yellow LED indicates that the device is processing payments or other services.

④ The green LED indicates that the device has completed processing the transaction.

⑤ The red LED indicates that the device has encountered an error.

4. Specifications

CPU:	528MHz Application Processor
Operating System:	Linux
Memory:	2Gb DDR3 SDRAM 1Gb NAND Flash
Contactless Reader:	ISO/IEC 14443 Type A and Type B, Mifare ®, and Felica
SAM Slots:	2 slots, ISO/IEC 7816
Peripheral Ports:	1 RS232 (RJ45) 1 USB 2.0 (USB Type-B)
Battery:	1 Nickel button battery, 200mAh, 3.0V
Power Supply:	Input: 5VDC (USB2.0 Type-B) 12VDC (RS232 via RJ45) Output: none
Buzzer:	≥75dB
Operating Environment:	Temperature: -30°C~70°C RH: 5%~95% (without condensation)

Storage Environment:	Temperature: -30°C~70°C RH: 5%~95% (without condensation)
Dimensions:	32.4mm x 82mm x 68mm (L x W x H)

5. Maintenance and Usage

1) Do not damage the USB or RJ45 cables; if either is damaged, immediately discontinue their use and seek a replacement.
2) Make sure the terminals the USB or RJ45 cables connect to provide the appropriate voltages at the proper pins.
3) Do not insert unknown materials into any port on the IM700, this may cause serious damage to the device.
4) If the IM700 becomes defective, please contact a professional technician for repairs instead of attempting them on your own.
5) The IM700 contains hardware tamper-proofing measures; disassembly of the device will trigger the tamper circuits, at which point it will have to be rearmed by qualified personnel before the device is ready to resume operation.
6) The IM700 is designed for outdoor use; however, during normal use its surface should still be keep clear of dirt and possible liquid contaminants.
7) While the IM700 is designed to resist ingress of dust and liquids from the front face, it is not designed to resist pressurized liquids such as water hoses. Keep the back of the device away from dust and liquids as much as possible.

6. Federal Communication Commission Interference Statement

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.

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 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.

FCC Caution:

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

RF Exposure Information

This device meets the government's requirements for exposure to radio waves.

This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.