

Introduction

Ingenico’s iSC250 secure electronic payment devices consist of the following:

- ADA style illuminated keypad
- Dual-head bi-directional magnetic stripe reader
- 4.3” color touch WQVGA screen supporting full motion video, with finger and stylus touch input
- Signature capture
- Optional integrated contactless card reader
- Smart card reader

For details on these features, see the *Specifications* section in this document.

Device Installation

The installation procedure includes:

- Selecting the device location
- Connecting the stylus
- Connecting the device
- Connecting a power supply
- Securing the device

Each step is described in the sections that follow.

Box Contents



Carefully inspect the shipping carton and its contents for shipping damage. If the device is damaged, file a claim immediately with the shipping company and notify Ingenico.

1. Remove the contents from the box. You should have:
 - iSC250 device
 - Stylus
 - This guideThe box may also include the following optional items:
 - Multipoint cable (specific to your connectivity requirements)
 - Power supply
 - Kensington lock
2. Remove the protective film from the graphical display screen.
3. Save the carton and packing material for repackaging or moving the device in the future.

Selecting the Device Location

The iSC250 may be mounted on a flat surface, wall, or customer stand (recommended). Ingenico recommends physically securing the device to avoid theft. Power may be provided from a host Point of Sale system or from an Ingenico power supply. If using an Ingenico power supply, the device must be placed close to an easily-accessible power outlet.



Do not place the iSC250 on a PC monitor, adjacent to an electronically active security tag deactivation system, or near other sources of magnetic fields.

The iSC250 must be at least 12 inches away from an electronically active type of security tag deactivation pad. There are two types of security tag deactivation systems:

- An electronically active system sends out a powerful and potentially disruptive signal to deactivate the security tag. If the iSC250 is placed too close to the system’s pad, or placed above the pad, malfunction may occur.
- A passive system is a permanent magnet type that does not send out a signal. This type does not affect the iSC250.

Connecting the Stylus

1. With the stylus cable tab towards the bottom, insert the stylus connector into the iSC250 stylus port on the back of the iSC250.



Figure 1: Inserting the stylus connector into the stylus port

2. Place the stylus into the cradle on the left edge of the iSC250 device, or insert it upright into the hole in the cradle.

Connecting the Device



Do not connect power to the iSC250 device until instructed to do so.

1. Place the iSC250 device in front of you with the bottom of the unit facing up. Be careful not to place the device on a surface where the device can be scratched or damaged.
2. If appropriate, connect a peripheral device to the appropriate available port on the rear of the device.



Figure 2: iSC250 Peripheral Ports

Table 1: iSC250 Peripheral Ports

Icon	Port	Description
	USB	USB 2.0 Host high speed. 5V, 500mA max. Supports peripheral USB devices.
	Audio out	3.5 mm stereo audio jack. Use to connect external speakers.
	Stylus	Use to connect the stylus.

3. Connect the Multipoint cable (RS-232 cable, Tailgate (RS-485) cable, Ethernet cable, USB cable, or magic box) into the iSC250 HOST Multipoint port. Connect the other end into the POS or PC as appropriate (see Table 2).



Figure 3: iSC250 Multipoint Port

Table 2: iSC250 Multipoint Port

Icon	Port	Description
	Multipoint port	Use to connect RS-232, Tailgate (RS-485), Ethernet, USB, Universal cable, or magic box. Use this port to connect host devices (POS or PC) directly. The iSC250 receives power through this connection. For this device to be USB-IF compliant, only use the approved USB cable from Ingenico.

Connecting a Power Supply

A separate Ingenico DC power supply (ALI0081A) is required when connecting the iSC250 device via RS-232, USB (5V), and Ethernet. When the device is powered from a POS, power may be provided via a USB (12V or 24V) or RS-485 cable.



Connect the cable to the Multipoint port before connecting the device to power. Only use the power supply provided by Ingenico.

1. If your device came with a power supply, plug the power supply connector into the jack on the Multipoint cable.



Figure 4: Connecting a Power Supply

2. Plug the power supply into a power outlet.
3. The iSC250 initializes when power is applied.

Securing the Device

To address the issues of unsecured devices being stolen and illegally modified in the field, the iSC250 PIN pad features an optional anti-theft system. The Kensington lock mechanism is simple and universal, with key or code lock options available.

1. Secure the loop end of the cable to a permanent structure near the device.
2. Insert the cable into the secure lock port.
3. Lock the cable to the device using the key provided or by scrambling the number code.



Figure 5: Kensington anti-theft key lock

Operations

Powering On

After you apply power to the iSC250 device, the device is ready for use. The iSC250 device may be left on indefinitely, or may be disconnected from power as necessary.

Restarting the Device

To restart the device, press [Clear] and [-] simultaneously. Alternatively, disconnect and reconnect the device’s power source.

Swiping a Magnetic Stripe Card



The iSC250 device’s magnetic stripe reader (MSR) reads debit, credit, and all standard magnetic stripe cards. Slide the card in either direction. For best results, slide the card in a continuous motion.

There are two MSR heads facilitating card swipe with the stripe to the front or back and in any direction.

Signature Handling



The iSC250 device can capture an electronic image of a customer's signature for transactions that require a signature and transmit it to the POS.

The signature area displays on the screen for transactions requiring a customer signature.

The electronic stylus attached to the device must be used for signatures. Use a normal signing position to sign on the iSC250 device.

Contactless Card Reader (optional)



The iSC250 contactless card reader reads contactless payment cards. Hold the contactless payment card close to the active zone around the display. A series of green lights illuminate on the display when the contactless card has been read.

Smart Card Reader (optional)

When the application prompts for a smart card, insert the smart card into the slot on the front of the device with the chip facing up and towards the slot.



Troubleshooting

Magnetic Card Reader Does Not Work Properly

1. Slide the card through the reader as described in *Swiping a Magnetic Stripe Card*.
2. Swipe the card at a faster or slower steady speed.
3. Swipe the card in a different direction.
4. Inspect the magnetic stripe on the card to make sure it is not scratched or badly worn.
5. To determine if the problem is with the card:
 - a. If your host device has a magnetic stripe reader, try swiping the card there.
 - b. If you have another working iSC250 device, try swiping the card there.
6. If there is still a problem, contact your internal Help Desk.

No Information is Visible on Screen

1. Make sure that the iSC250 host cable connector is fully inserted into the back of the device.
2. Restart the device (see *Restarting the Device* for more information).
3. If you have another working iSC250 device, swap the devices to determine if the problem is with the device, cable, POS, or power supply.
4. Replace the Multipoint cable.
5. Reset the host by turning it off and back on again.

⚠ Changes or modifications to this device not expressly approved by Ingenico will void the warranty.

Specifications

Processors: Main Processor: RISC 32 bit ARM9 processor, 450 MIPS. Integrated Crypto Processor: RISC 32 bit ARM7, 50 MIPS.
Operating System (OS): Telium 2 with HTML GUI.
Display: Graphical active color glare-resistant TFT LCD 4.3” display. Full 16 bit color WQVGA LCD graphical multimedia with 65K colors.

Signature Capture: Electrostatic signature capture and a glass screen.

Digitizer: Electrostatic stylus digitizer. Attached inkless non-mechanical electronic stylus.

Memory: Standard: 64 MB SDRAM, 128 MB Flash NAND. Optional: Up to 2 G micro SDRAM.

Keypad: 15 keys; raised symbols enhance usability for visually impaired customers. Backlit.

SAMs: 2 SAM slots.

Video: Full video capability. All format conversion is supported through the Integration Kit.

Audio: Internal Mono Speaker. Optional internal stereo speakers with rear audio output jack.

Communications: Multipoint port: RS-232, Tailgate (RS-485), USB, and Ethernet (TCP/IP). Optional µSD slot, USB Host, and audio jack.

Dimensions: 6.6” x 5.6” x 2. 0” (168 mm x 143 mm x 50 mm)

Weight: 1.2 lb (0.56 kg).

Magnetic Stripe Card Reader: Bi-directional magnetic stripe card reader, triple track, 2 heads.

Smart Card Reader: Optional. EMV L1 approved.

Contactless Card Reader: Optional. Integrated contactless card reader.

Power: Unit can be powered from Powered USB (12V), Powered Ethernet, SDL with RS-485 connection, and standalone power supply.

Certifications: UL 60950; FCC Part 15 Class B and C, CEC, USB-IF, PCI PTS 2.x compliant.

Security: PCI PTS 2.x compliant; DES and Triple DES PIN encryption; DUKPT and Master/Session key management; Code authentication provides secure application code loading.

ANSI Standards: INCITS 92-1981 (R2003) Data Encryption Algorithm (DEA), X9.24 Key Management, X9.8-1 PIN Entry, ISO 16609 Banking - Message Authentication, X9.65 Triple DEA.

Environmental Requirements

The device is designed to operate in the following environment:

- Operating temperature of 41°F to 104°F (+5°C to +40°C)
- Operating humidity of 10% to 90% RH non-condensing
- Storage temperature of -4°F to 158°F (-20°C to +70°C)
- Storage humidity of 5% to 90% RH non-condensing

⚠ Any liquid spill must be removed immediately.

More Information

For more information on cleaning, troubleshooting, operating the device, features, specifications, and accessories, please contact your equipment’s supplier’s technical support services.

Security

The iSC250 conforms with current applicable PCI PTS 2.x security requirements.

⚠ You are strongly advised to ensure that privileged access to your terminal is only granted to staff that have been independently verified as being trustworthy.

Security Assurance

Perform the following tasks daily to ensure the security and compliance of your device:

Checking the Device’s Integrity

Ensure that no attempts have been made to tamper with the device, using the following method:

1. Check that there is NO external damage to the device, particularly around the keypad, display, and reader areas.
2. Check that the keypad is firmly in place.
3. Ensure that there are NO additional cables protruding from the device or associated equipment.
4. Check that there are NO holes drilled into the device’s housing.

Alert Irruption!

Your iSC250 device detects any “tampered state”. In this state the PIN pad will repeatedly flash the message “Alert Irruption!” and further use of the PIN pad will not be possible. If you observe the “Alert Irruption!” message, you should contact the PIN pad helpdesk immediately.

Checking the Installation Site

1. Ensure that there are NO security cameras focusing on the device.
2. Ensure that there are NO objects close by in which cameras could be hidden.
3. Ensure that the device CANNOT be observed from outside (any window or door) during PIN entry.

⚠ NEVER ask the customer to divulge their PIN. Customers should be advised to ensure that they are not being overlooked when entering their PIN.

Customer Service

If you experience trouble with your iSC250 device, or if it requires repair, contact the appropriate customer service center:

24-Hour North American Customer Support:

Tel: 888.900.8221

Fax: 905.795.9343

Email: customersfirst.us@ingenico.com

Customer Service Centers:

In the U.S.A.

6195 Shiloh Road, Suite D

Alpharetta, GA 30005

Canada

6520 Gottardo Court

Mississauga, Ontario, L5T 2A2

Compliance

US Federal Communications Commission Warning

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when this 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 installation guide, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Canadian Department of Communications Warning

This digital apparatus does not exceed the Class A limits for radio noise emissions from the digital apparatus as set out in the radio interference regulations of the Canadian Department of Communications.

iSC250 Installation and Quick Reference Guide

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