OPERATIONAL DESCRIPTION

1.1. EUT description

Incorporating electronic secure payment into your unattended solution has never been easier thanks to the new UNattended Series from Ingenico (iUN). Featuring the iUC150 and the iUC180 UNattended contactless readers, the iUP250 UNattended PIN Pad with RGB backlit display, and a separate iUR250 Hybrid Card Reader (HCR) to ensure maximum design integration into any kiosk chassis, the iUN series is designed to reach latest standards, such as **EMV and PCI PTS 3.x** – it delivers all the necessary **security certifications and hardware safeguards**. Tough enough to meet the demands of any **indoor or outdoor self-service scenari** – including parking, ticketing, petrol, transport and vending – these iUN compact modules are resistant enough to cope with inclement weather, vandalism and truly challenging climate conditions.

With the iUC150, **adding the latest in contactless payment to your unattended solutions** is simplicity itself. It is compliant with **EVA (European Vending Association) requirements** for maximum peace of mind and can easily be integrated to **metallic front facings kiosk without any disruption to the contactless feature.**

This state-of-the-art, sturdy reader revolutionizes interaction with customers, ensuring high-speed payments and increasing selling convenience. It supports the **latest EMV contactless payment standards, including PayPass™, PayWave™**, etc. and is ready for future evolutions.

Security   Contactless   Color Backlit Display

iUC150

Security

Ingenico's trusted Telium® architecture enables the iUC150 to provide assured, secure data and application management. It is MasterCard PayPass™ and Visa PayWave™ certified (in progress) and supports all EMV contactless cards in accordance with international regulations.

Performance

Thanks to its 32-bit architecture and EMV level 2 kernel, the iUC150 delivers super fast authentication and contactless transaction processing (payment in 80 ms). What's more, it manages all contactless payment EMV cards and supports NFC mobile phone payments.

Design/Ergonomics

With exceptional integration capabilities, the iUC150 is designed to be easy to customize and compatible with any chassis. It complies with EVA (European Vending Association) specifications and features a backlit landing area, 4 well visible transaction indicator LEDs, buzzer and is shock, water and dust resistant (IP65/IK10). Performing in highly demanding environmental conditions, it operates in an extended range of temperatures from -20°C to +65°C. The iUC150 is easy to customize; layout sheet may be changed in the field.

Communication

The iUC150 features a basic range of integrated communications – RS232 and USB – to deliver flexibility and non-stop operation. It can be easily integrated in the field to existing unattended solutions – for a simple and fast rollout of the very latest in contactless payment features.

Software development

Ingenico delivers incremental revenue today and future proofs the terminal investments of tomorrow. Compatible with all previous Ingenico applications, the iUC150 can support today's applications with ease, as well as tomorrow's next generation services.

Field Services

To reduce total cost of ownership and enable merchants to maximize their terminal investments, Ingenico provides a comprehensive range of terminal and software update and management services – both remotely and in the field. Fully certified professionals and local language helpdesks operate in every territory to ensure Ingenico is on hand to support customers 24 hours a day, seven days a week, 365 days a year.

NAME		iUC150
Processor	Type	RISC 32-bits ARM9
	Speed	450 MIPS
Memory	SDRAM + Flash	16MB + 16MB
Card readers	Contactless	ISO 14443 A/B
SAM		2
Buzzer		●
Connections	RS 232	1
	Powered by USB Slave	1
Size (in mm)	l x W x H	132 x 120 x 53 mm
Weight (in gr)		550 g
Customization		Layout sheet
Environment	Operating humidity	90% HR at +55°C
	Operating temperature	-20°C to +65°C
	Storage temperature	-20°C to +65°C
	IP Level	IP65
	IK Resistance	IK10

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1.2. Related Submittal(s) / Grant(s)

All host equipment used in the test configuration are FCC granted, when relevant.

1.3. Tested System Details

The FCC IDs for all equipment, plus description of all cables used in the tested system are:

- Internal max frequencies: 387MHz

- **Power supply:**
- Configuration N°1: IUC150 supplied by the USB of the laptop
- Configuration N°2: IUC150 supplied by AC/DC switching power supply: ingenico P/N: 192011331 ;
model: PSAC05R-50 ; SN: Z11480039A1
- Rating: 5VDC.
- Frequency: DC

- **Input/output:**
- 1 x USB port
- 2 x SAM
- 1 x Earth connection
- 1 x COM
- 1 x Wake up function

- **Auxiliaries used for testing:**
- 1 x Laptop TOSHIBA SATELITE S1410-704 (PS141E-04YCM-3V), sn: 13594938G
- 1 x contactless card
- 2 x SAM

- **I/O cables used for testing:**
- 1 x USB cable, shielded, length: 1.5m
- 1 x COM cable, unshielded, length: 1.5m
- 1 x Earth cable, unshielded, length: 1.5m
- 1 x Wake up cable, unshielded, length: 15cm (specified by provider)

1.4. Test Methodology

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4-2003, FCC Part 15 Subpart B.
Radiated testing was performed at an antenna to EUT distance of 10 meters. During testing, all equipment's and cables were moved relative to each other in order to identify the worst case set-up.

1.5. Test facility

Tests have been performed from *from May 14th to November 12th, 2013*.

This test facility has been fully described in a report and accepted by FCC as compliant with the radiated and AC line conducted test site criteria in ANSI C63.4-2003 in a letter dated March 25th, 2008 (registration number 94821). This test facility has also been accredited by COFRAC (French accreditation authority for European Union test lab accreditation organization) according to NF EN ISO/IEC 17025, accreditation number 1-1633 as compliant with test site criteria and competence in 47 CFR Part 15/ANSI C63.4 and EN55022/CISPR22 norms for 89/336/EEC European EMC Directive application. All pertinent data for this test facility remains unchanged.