OPERATIONAL DESCRIPTION

1.1. EUT description

PIN Pad

iPP200 series Banking

Payment Solutions

Get the top rate in unbeatable performance and security

Ingenico unveils a payment terminal for banking unmatched in today's marketplace. It guarantees the visibility, security and transaction speed required in the financial sector. High-performance yet value for money, it ensures intuitive use and effortless access to applications. Connected to an iCT220/iCT250 countertop, the advanced, compact design and outstanding versatility make this PIN Pad a truly compelling, next-generation solution.

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PIN Pad

iPP200 series Banking

Security

Built around Ingenico's industry-proven, highly secure core, the iPP200 series provides assured secure data and application management, and top-notch secure transactions. EMV and PCI PTS 2.x fully certified and supporting the latest international security algorithms (DES, TDES, RSA, DUKPT and Master/Session), the iPP200 series features an optional PIN privacy shield for additional peace of mind.

Performance

The iPP200 series makes fast-paced transactions a reality. Ingenico's Telium2 architecture and its EMV level 2 kernel enable these PIN Pads to process powerful cryptographic algorithms at high speed. Easy to integrate into the POS platform, the iPP200 series increase the security and versatility of your payment system, providing additional confidentiality at the PIN entry stage.

Design/ergonomics

Trim and lightweight, the iPP200 series offers ease-of-installation and handling. Its state-of-the-art design, with a large 16-key ergonomic keypad and LCD display simplify and secure PIN-entry, providing fast and intuitive transaction processing. Some models feature an integrated, industry-approved contactless reader, guaranteeing maximum payment versatility.

Communications

Equipped with a powered USB connection, the iPP200 series makes integration with iCT terminals simplicity itself. Merchants can now take confidential PIN entry to the heart of their customer service assurance.

Software development

Ingenico delivers incremental revenue today and future proofs the terminal investments of tomorrow. Uniquely, the iPP200 series is backward compatible with all 800+ Ingenico services and applications, while providing the rapid development environment on which to build a compelling portfolio of targeted, new generation services.

Field Services

To reduce total cost of ownership and enable banks and 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			iPP220 Regular	iPP220 Contactless	iPP250 Regular	iPP280 Contactless
Processor	Crypto processor	Booster (ARM7), 50 MIPS	●	●	●	●
Memory	Internal	512 K Flash, 96K SDRAM	●	●	●	●
OS		Telium 2	●	●	●	●
Display	Color background display	2 lines of 16 characters Backlit RGB LED			●	
		4 lines of 16 characters Backlit RGB LED				●
	Monochrome	2 lines of 16 characters	●	●		
Keypad		15 keys, raised Marking	●	●	●	●
Audio		Buzzer		●		●
Connectivity	USB device	USB2.0 - Device	●	●	●	●
Power supply	Powered USB	5V 500 mA	●	●	●	●
Size		132 x 74 x 37 mm	●	●	●	●
Weight		145 grs	●	●	●	●
Environment	Operating temperature	+5°C to +40°C	●	●	●	●
	Storage temperature	-20° to +55°C	●	●	●	●
	Relative humidity	85% RH at +40°C	●	●	●	●
Optional Privacy shield	PCI compliant	Additional privacy shield	●	●	●	●
	IXA, PCI+ compliant	Factory option	●	●	●	●
PCI PIN transaction security	PCI PTS	2.xx certified	●	●	●	●

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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:

- **Equipment under test (EUT):**

- **E.U.T.** : **iPP250-01T1168B**
Serial number: **10217PP70112151**
Model with all options

*Screen display reference :*VLFM1659

Power supply interface :
1: 5Vdc
2: 8-14Vdc

- Internal max frequencies: 57MHz

- **Input/output:**

- 1 x Power supply "Type RJ45"

- **Auxiliaries used for testing:**

- 1 x Laptop TOSHIBA SATELLITE   PS141E-04YC (Configuration n°3)   sn : 13594938G
- 1 x Payment Terminal ICT 220   01T1036C   (Configuration n°1 & 2)   sn : 10204CT70252285
- 1 x Power supply   SAGEM   AD5632   (Configuration n°4)   sn : None

- **I/O cables used for testing:**

- **Configuration 1**: 1 x USB cable "untwisted" (2m) shielded, Ref: 296110769 (16/10)
- **Configuration 2**: 1 x USB cable "Twisted" (2m) (POE) shielded, Ref: INGH-296101129
- **Configuration 3**: 1 x USB cable (2m) (AC/DC adapter input), shielded, Ref: 296107803 (11/10)
- **Configuration 4**: 1 x RS232 cable (2m), unshielded, Ref: 296110706 (16/10)

1.4.   RUNNING MODE

A continous serial communication on COM0 is performed

1.5.   EUT EXERCISE SOFTWARE

IPP2XX : 8203700108
Appli test CEM: APPLI CEM V1.1

1.6. EUT Configuration

Configuration 1 :   *Communication access :*   - USB
                        Power supply :   - (5Vdc) Provided by ICT220 Equipment (Auxilliary Equipment)
                                                   ICT220 is powered by a Power supply adapter Type: 152810 (SAGEM MONETEL)
                        Option Cable: - Ref: 296110769 (16/10) "Untwisted"

Configuration 2 :   *Communication access :*   - USB
                        Power supply :   - (5Vdc) Provided by ICT220 Equipment (Auxilliary Equipment)
                                                   ICT220 is powered by a Power supply adapter Type 152810 (SAGEM MONETEL)
                        Option Cable: - Ref: INGH-296101129 "twisted"

Configuration 3 :

Communication access : - USB

Power supply : - Power supply adapter Type FW7650L/05 (SAGEM MONETEL) "5Vdc"

Option Cable: - Ref: 296107803 (11/10)

Configuration 4 :

Communication access : - RJ11

Power supply : - Power through AC/DC power supply adapter type "8Vdc"

Option Cable: - Ref: 296110706 (16/10)

Remark :
Power supply (SAGEM AD5632)
In this configuration permits to
emulate a 8Vdc power supply
source

1.7. 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.

1.8. Test facility

Tests have been performed from September 7th to November 23rd , 2010.

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.