OPERATIONAL DESCRIPTION

1.1. EUT description



WireLess

iWL200series

Convenient payment on the spot

The iWL200 range is the lightest and smallest on the market. Compact, easy to handle and to carry, it ensures top-notch payment convenience for cardholders and merchants alike. With the iWL200, Ingenico allows you to keep a full set of payment capabilities, including card readers - smart card, magnetic card, embedded contactless - signature capture on iWL280, and all 800+ Ingenico Telium applications and services in your pocket. As the world leader in secure transaction and payment systems, Ingenico's wireless terminal solutions are all designed to meet state-of-the-art security standards such as EMV and PCI PTS V2, providing the ultimate in secure data and application management. The iWL200 series user interface provides an unmatched customer experience. It guarantees effortless use in any environment thanks to perfect display readability, even outdoors in sunlight, and a comfortable touch screen on the iWL280.

No trade-off on performance

The iWL200 series is a platform designed for mobility and benefits from the latest technologies, reaching an outstanding battery life. In any use case it supports a full and intensive working day processing payments, enhancing merchant productivity. Boasting a wide array of wireless connectivity including GPRS, Bluetooth or even both in the iWL280, the iWL200 series delivers faultless 24/7 communications and slashes operational costs. Combined with the connectivity embedded in the docking station, it provides the most compelling and comprehensive solution for payment and beyond. Built around the industry-proven, powerful Ingenico Telium2 platform the iWL200 series also boasts the fastest printer ever integrated in a payment device. With its 30 lines per second, it almost halves the printing time and improves efficiency on the spot.

Enabling solutions

From an efficient, mobile Point of Sale to an advanced Point of Affinity with multimedia video and sound capabilities, the iWL200 series is the perfect platform to enable solutions for today and tomorrow. With its Telium2 architecture it offers a rapid development environment on which to build a compelling portfolio of targeted, new generation services. It increases business opportunities and delivers an operational response to challenges in vertical markets like delivery, hospitality or transportation.

What's more, Ingenico offers a full range of off-the-shelf solutions: Incendo Online - new and compelling services can be developed rapidly and deployed at the Point of Sale using standard web tools Ingenico Terminal Estate Management - powerful estate-wide remote terminal and software management across any geography, anywhere in the world

Connectivity Management - Delivering the flexibility to send transaction data over any telecoms network, anywhere in the world e-Portal - Featuring customisable dashboards and multiple profile management, Ingenico's unique customer e-Portal delivers the visibility today's businesses need to ensure their financial health and to manage the strategic direction of their infrastructures

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Payment Solutions







NAME		iWL220	iWL250	iWL280
Processor	ARM9 & ARM7	•	0	
Memory	16MB Flash/16MB RAM	0		
	128MB Flash/32MB RAM	option	0	
	128MB Flash/64MB RAM			
	SD Card reader	option	0	
os	Telium2	0	0	0
Terminal connectivity	GPRS	GPRS or Bluetooth or Off-Line	GPRS or Bluetooth or Off-Line	GPRS or GPRS + Bluetooth
	Micro USB A/B	•	0	0
SAM slots		2		
	Smart card	1 + 1 optional	1 + 1 optional	1 + 1 optional
Card readers	Magnetic stripe	Track 1/2/3	Track 1/2/3	Track 1/2/3
	Contactless	optional	optional	optional
Keyboard	Number of keys	15	15	16
	Function & navigation keys	7	7	Touch screen
Display	Display	Monochrome Graphical 128x64 pixels White Backlit 2.53*	TFT Colour QVGA 320x240 pixels 4k colours 2.81"	TFT Colour QVGA 240x320 pixels 256k colours 3.5*
	Touch screen			
Audio	Buzzer		0	0
	Audio speaker		option	
Thermal printer	Speed in lines/second	30lps		
	Factory option	25 or 40mm	25 or 40mm	25 mm
Battery		Li-Ion 2050mAh		
Terminal size & weight	25mm paper roll option	150 x 78 x 44mm - 285a		
	40mm paper roll option	165 x 78 x 54mm - 300g		
Base connectivity	Dial-up Modem	•		
	Ethernet 10/100 Base T	•		
	Bluetooth	0		
	R5232	1 or 2		
	USB A (Host)	0		
	USB B (Slave)	0		
Environnement	Operating temperature	+5 to +45°C		
	Storage temperature	-20 to +55°C		
			85% HR at +40°C	
	Operating humidity		85% HR at +40%	0



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):

Maximum internal frequencies: 400MHz

<u>Terminal</u>	Base		
IWL221-01T1537A	IWL200-01B1326A		
Serial number: 10255WL4000183	Serial number: none		

Power supply interface :

1: 5Vdc (Through Micro-USB side connector)

2: 5Vdc (Through Base IWL 200)

ID Power supply	<u>Trademark</u>	Ref	<u>Connector</u>	<u>Cable</u>
PWS 1	SAGEM MONEL	FW 7650/151965	Jack	Length : 200mm
PWS 2	PHIHONG	PSA 105A-050	μUSB	Length : 200mm
PWS 3	INGENICO	FW 7601/152171	μUSB	Length : 200mm
PWS 4	INGENICO	FW 7650L/05	μUSB	Length : 200mm
PWS 5U	INGENICO	PSA C05R-050	μUSB (with adapter Jack <->μUsb)	Length : 200mm
PWS 5J	INGENICO	PSA C05R-050	Jack	Length : 200mm
PWS 6	INGENICO	FW 7601/152171	Jack	Length : 200mm
PWS 7	INGENICO	PSA 105A-050	Jack	Length : 200mm

- Input/output - Terminal:

- 1 x DC power input Micro USB (5Vdc)

- 2 x SAM ports
- 1 x SIM port
- 1 x Base connector (4 Pins)

- Auxiliaries equipment used during test:

- 2 x SAM Card
- 1 x SIM Card
- 1 x Smartcards (EMV card)

- Input/output - Base:

- 1 x DC power input Jack (5Vdc)

I/O cables used for testing:

- See Power supply description tab

1.4. Test Methodology

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4-2009 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 April 12th to May 27th, 2011.

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 C63.4-2009 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.