

## GENERAL INFORMATION

FCCID: XKB-IPP3V4

### 1.1. Product description

**ingenico**  
Smart  
terminals

# iPP 300 series

## Consumer facing payment solution designed for the retail market

- Optimize multilane checkout with a secure and fast POS solution.
- Improve shoppers' payment experience with an intuitive interface and contactless features.
- Expand consumer choice by accepting any preferred method of payment.
- Facilitate in-store integration thanks to compact size and plug & play installation.



security



smartcard



magstripe



contactless



color display



Designed for retailers, the iPP300 series optimizes multiline check-out with a secure & fast POS solution, while covering all payment methods.

**Highest Security**

The iPP300 series meets the latest hardware and software security requirements. PCI-PTS 2.x and 3.x certified, iPP320 & iPP350 ensure secure data and application management and enable highly secured transactions for retailers. They also comply with SRED and Open protocol modules. The optional PIN privacy shield guarantees confidentiality of PIN entry.

**All Payment Options**

Offering EMV Chip & PIN, MagStripe and Contactless, the iPP300 series also supports new use cases such as NFC, loyalty programs, couponing & wallets.

**Designed for Retail**

Robust for intensive use and optimized for fast checkout, the iPP300 series is designed to meet all retail environment needs. Very compact, the iPP300 series takes up minimum counter space and fits perfectly in customer's hand. Large 16-key backlit keypad, large LCD display and function keys allow quick and simple access to different applications providing day-to-day convenience and comfort.

**All Connectivity & Communication**

The iPP300 series connects to an ECR, a POS or a PC via direct connections such as Ethernet, RS232 or Tailgate. The Plug & Play iPP300 series is equipped with a single multipoint mono connector cable for easy integration.

**Brand Promotion**

Brand promotion is empowered by a color graphic display, software customization and various possibilities to personalize hardware (top casing or lens).

**Telium 2**

Powered by Ingenico, Telium 2 technology is the result of 30 years' experience in the payment industry. Secure, highly integrated and fast, Telium 2 is the world best platform to provide payment services and applications.



iPP300 series	iPP320	iPP350
<b>Processor</b>	ARM 9 & ARM 7	●
<b>Memory</b>	128 MB Flash 16 MB SDRAM μSD supporting up to 8GB	● ● ●
<b>SAM</b>	Up to 3	Up to 3
<b>Card readers</b>	Smart card Magstripe Contactless	● ● Option
<b>Display</b>	LCD 128 x 64 White backlit	TFT color display QVGA 2.7" 320 x 240
<b>Terminal connectivity</b>	USB RS232 Ethernet Tailgate factory option	USB RS232 Ethernet Tailgate factory option
<b>Keyboard</b>	Backlit operational keys	15
<b>Audio</b>	Buzzer	●
<b>Power supply</b>	Powered USB Powered RS232 Powered Ethernet External power supply	5V 500 mA 5V or 12V POE compliant with 802.3af Option
<b>Terminal size</b>	L x W x H	168 mm x 83 mm x 40 mm
<b>Weight</b>		267 g
<b>Environment</b>	Operating temperature Storage temperature Operating humidity	+5°C to +45°C -20°C to +70°C 85% HR to +55°C
<b>Optional privacy shield</b>	PCI compliant ZKA compliant	Additional or factory mounted privacy shield Factory option
<b>Environnement</b>	Operating temperature Storage temperature Relative humidity	0°C to +45°C -20 to +55°C 85% HR at +40°C
<b>Security</b>	Online & offline	PCI-PTS 3.x



## 1.2. Tested System Details

### Equipment under test (EUT):



### Power supply:

During all the tests, EUT is supplied by  $V_{nom}$ : 5VDC or 8-12VDC or 48VDC  
 For measurement with different voltage, it will be presented in test method.

Name	Type	Rating	Reference / Sn	Comments
Friwo	<input type="checkbox"/> AC <input checked="" type="checkbox"/> DC <input type="checkbox"/> Battery	8VDC	153051 / 179901469	For configuration 1*
USB	<input type="checkbox"/> AC <input checked="" type="checkbox"/> DC <input type="checkbox"/> Battery	5VDC	-	For configuration 5*
Phihong POE	<input type="checkbox"/> AC <input checked="" type="checkbox"/> DC <input type="checkbox"/> Battery	48VDC	PSA16-480 / -	For configuration 4*
Phihong	<input type="checkbox"/> AC <input checked="" type="checkbox"/> DC <input type="checkbox"/> Battery	8VDC	PSC16E-080 / 192011097	For configuration 2*
Phihong	<input type="checkbox"/> AC <input checked="" type="checkbox"/> DC <input type="checkbox"/> Battery	8VDC	PSM24W-080(IN)-R / -	For configuration 3*

\*See the running mode §2.2

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**LCIE****Inputs/outputs – EUT:**

Access	Type	Length used (m)	Declared <3m	Shielded	Under test	Comments
Configuration 1/3/4*	HDMI	1.8	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Cable with ferrite near to EUT (5 centimeters)
Configuration 2/5*	HDMI	1.8	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-

\*See the running mode §2.2

**Inputs/outputs – Power supply:**

Access	Type	Length used (m)	Declared <3m	Shielded	Under test	Comments
Friwo	DC	1.8	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Configuration 1*
USB	DC	1.8	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Configuration 5*
POE	DC	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Configuration 4*
Phihong PSC16E-80	DC	1.8	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Configuration 2*
Phihong PSM24W	DC	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Configuration 3*
Ethernet	RJ45	2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-
RS232	RS232	0.01	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-

\*See the running mode §2.2

**Auxiliary equipment used during test:**

Type	Reference	Sn	Comments
LAPTOP DELL	LATITUDE	-	-
Power supply DC	-	-	-
Contactless Card	-	-	Class B

**Equipment information:**

<b>RF module:</b>	-		
<b>Frequency band:</b>	[13.553 – 13.567] MHz		
<b>RF mode:</b>	<input type="checkbox"/> Transmitter	<input checked="" type="checkbox"/> Transceiver	<input type="checkbox"/> Receiver <input type="checkbox"/> Standby
<b>Receiver classification § 4.1.1</b>	<input type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input type="checkbox"/> 3
<b>Antenna type:</b>	<input type="checkbox"/> External:		<input checked="" type="checkbox"/> Internal:
<b>Antenna gain:</b>	NC dBi		
<b>Extreme temperature range:</b>	<input checked="" type="checkbox"/> Category I (General) -30°C to +55°C	<input type="checkbox"/> Category II (Portable) -10°C to +55°C	<input type="checkbox"/> Category III (Indoor) +5°C to +35°C
<b>Extreme test source voltage:</b>	<input checked="" type="checkbox"/> ±10%: Vmin 207Vac Vmax 253Vac		<input type="checkbox"/> other:

## 1.1. EUT CONFIGURATION

There are 5 configurations tests, each configuration is tested in Conducted emission data, radiated emission data and the worst case is tested for the others tests.

### Configuration 1:

EUT is powered by the FRIWO, model 153051.

A reading and writing process are performed on:

- SAM 1
- SAM 2
- Micro SD
- CAM 0
- CLESS

In this setup, a sequence with a continuous ping process is performed between the EUT and the LAPTOP.



### Configuration 2:

EUT is powered by the Phihong, model PCS16E-080.

A reading and writing process are performed on:

- SAM 1
- SAM 2
- Micro SD
- CAM 0
- CLESS

In this setup, a sequence with a serial communication is performed (RS232 and COM 0).

Serial communication consist to performed a self-communication (RX and TX are bypassed).



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Configuration 3:

EUT is powered by the Pihong PSM24W-080(IN)-R.

A reading and writing process are performed on:

- SAM 1
- SAM 2
- Micro SD
- CAM 0
- CLESS

In this setup, a sequence with a continuous ping process is performed between the EUT and the LAPTOP.



Configuration 4:

EUT is powered by the Pihong POE.

A reading and writing process are performed on:

- SAM 1
- SAM 2
- Micro SD
- CAM 0
- CLESS

In this setup, a sequence with a continuous ping process is performed between the EUT and the LAPTOP.



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#### Configuration 5:

EUT is powered by the USB.

A reading and writing process are performed on:

- SAM 1
- SAM 2
- Micro SD
- CAM 0
- CLESS



### 1.3. Test Methodology

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4-2003, FCC Part 15 Subpart C.

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.

### 1.4. Test facility

Tests have been performed on from June 1st to 5th, 2015.

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 25<sup>th</sup>, 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.