



LCIE

**LCIE SUD EST**  
Laboratoire de Moirans  
Z.I. Centr'Alp  
170, Rue de Chatagnon  
38430 MOIRANS - FRANCE

## GENERAL INFORMATION

FCCID: XKB-FIT111CL

### 1.1. Product description

**ingenico**  
Smart terminals

#### TECHNICAL DATASHEET

### FIT111CL

**Designation:**  
Embedded Stand-alone contactless card reader

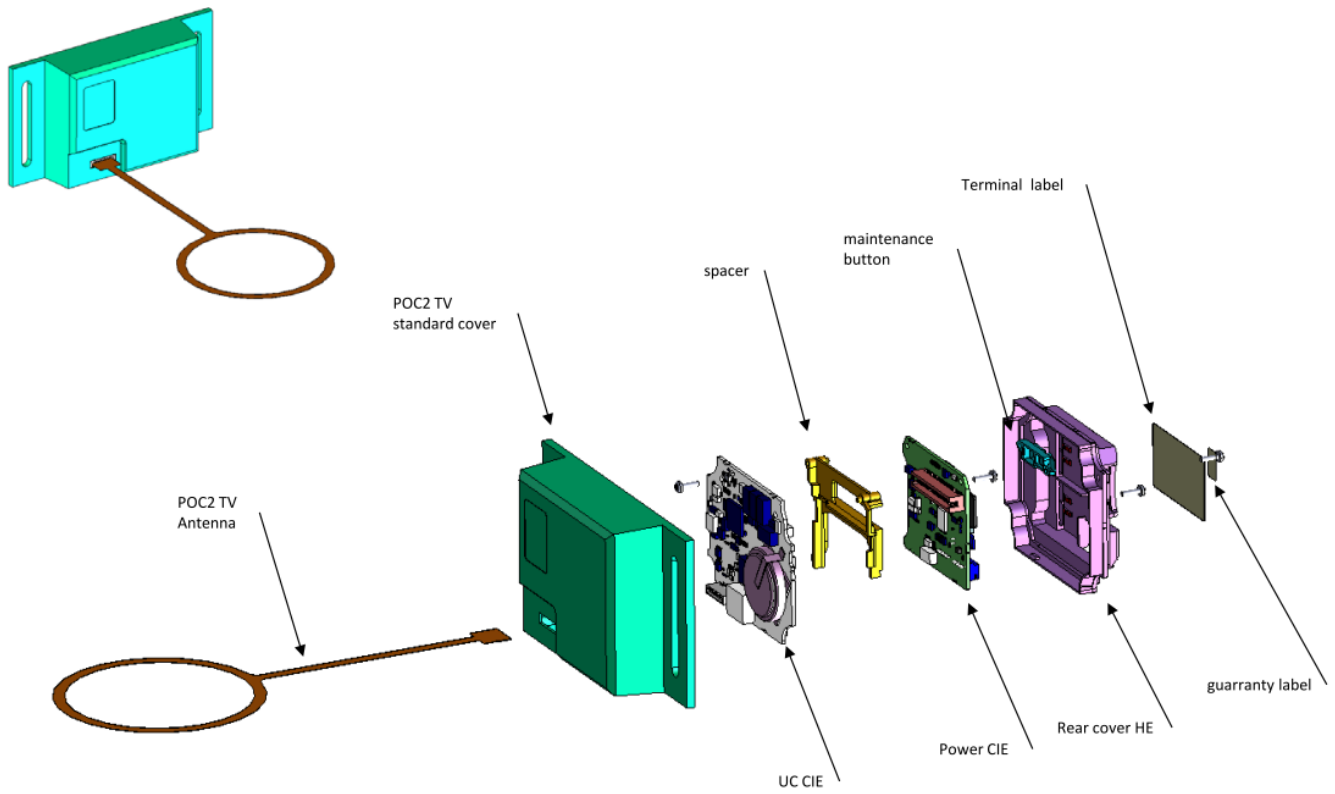


FEATURE			
Processor	Application & Crypto processor	RISC 32 bits – ARM9 – 450 MIPS RISC 32 bits – ARM7 – 50 MIPS	<input type="checkbox"/> <input type="checkbox"/>
Memory	Internal External	32 MB RAM, 128 MB Flash MicroSD up to 32GB	<input type="checkbox"/> <input type="checkbox"/>
SAM		2 SAM	<input type="checkbox"/>
Card readers	NFC/Contactless	EMV Level 1 compliant ISO 14443 A/B  Calypso rev3 type A/B/B' Mifare (Classic, Mifare Plus, Desfire; 1K, 4K, Ultralight) NFC (reader mode)	<input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Audio	Buzzer	Mono	<input type="checkbox"/>
Customization		Non possible on this device	
Terminal connections	USB Serial PIN for wake up	1 USB Slave (JST connector) Serial + wake up link Dedicated 2 pins connector	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Power supply	External power supply Standby mode	5V by USB slave	<input type="checkbox"/> <input type="checkbox"/>
Accessories (provided)	Cable	JST to USB-A ( 30 cm) included Silicon cable holder	<input type="checkbox"/> <input type="checkbox"/>
Terminal size (W/O Antenna)	Overall W x H x D mm maxi	106 x 59 x 25 mm	
Weight		102 gr	
Environment	Operating Temperature Storage Temperature Operating Humidity non condensing	-20°C to +70°C -20°C to +70°C 5 to 95% HR at +55°C	
Security	PCI PTS	4.0	
Configuration management	Can be managed by : Can manage :	Non Telium 2 intelligence (eg : PC, i9500...) None	



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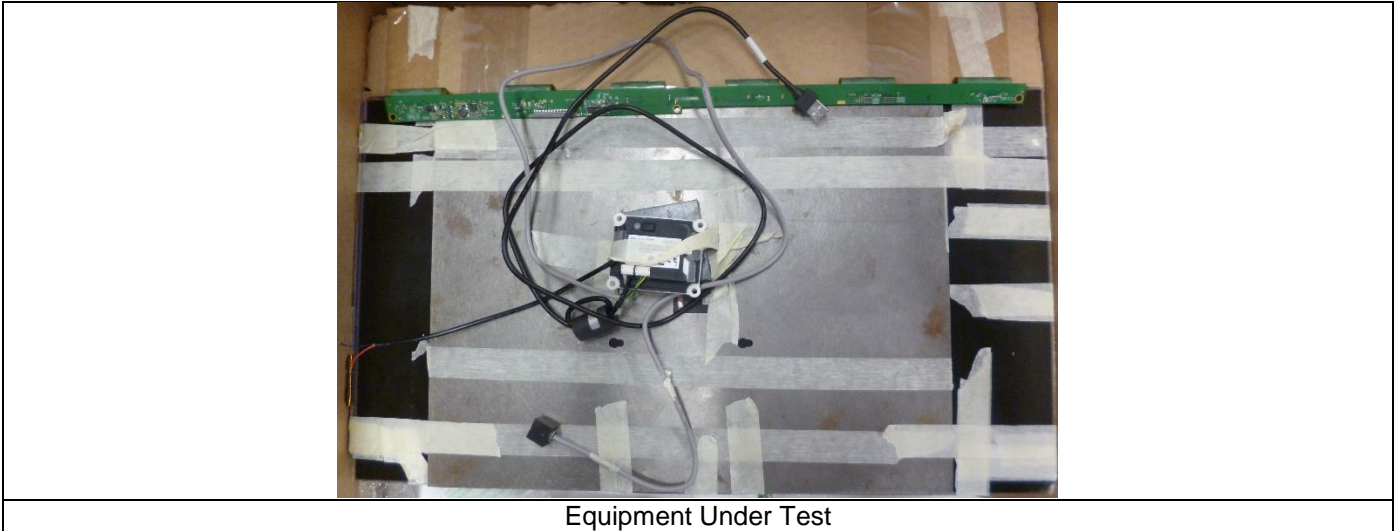




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## 1.2. Tested System Details



Equipment Under Test

### Power supply:

During all the tests, EUT is supplied by  $V_{nom}$ : 5VDC (USB Port) & 120V / 60Hz Main power supply IBM Laptop (Thinkpad)

For measurement with different voltage, it will be presented in test method.

Name	Type	Rating	Reference / Sn	Comments
Supply1	<input type="checkbox"/> AC <input checked="" type="checkbox"/> DC <input type="checkbox"/> Battery	5VDC	-	-

### Inputs/outputs - Cable:

Access	Type	Length used (m)	Declared <3m	Shielded	Under test	Comments
Supply1	USB	1.15	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-
Access1	RS232	1.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Access2	Wake up	0.2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-

### Auxiliary equipment used during test:

Type	Reference	Sn
Contactless Card	-	-
IBM Laptop	Thinkpad	-
IBM Laptop power supply	IBMP 90W 20V	11S922P1103Z1ZACP5BE0EV Rev02



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**Equipment information:**

Frequency band:	<input checked="" type="checkbox"/> [13.553–13.567]MHz	<input type="checkbox"/> [125]kHz	<input type="checkbox"/> [ - ] MHz
RF mode:	<input type="checkbox"/> Transmitter	<input checked="" type="checkbox"/> Transceiver	<input type="checkbox"/> Receiver <input type="checkbox"/> Standby
Type:	<input checked="" type="checkbox"/> RFID	<input type="checkbox"/> EAS	<input type="checkbox"/> Other:
Channelized system:	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes, channel spacing: kHz	
Equipment intended for use as a	<input checked="" type="checkbox"/> Fixed	<input type="checkbox"/> Mobile	<input type="checkbox"/> Portable
Type of equipment:	<input checked="" type="checkbox"/> Stand-alone	<input type="checkbox"/> Plug-in	<input type="checkbox"/> Combined
Antenna Type:	<input type="checkbox"/> External		<input checked="" type="checkbox"/> Internal
Antenna connector:	<input type="checkbox"/> Permanent external	<input type="checkbox"/> Permanent internal	<input checked="" type="checkbox"/> None <input type="checkbox"/> Temporary (only for tests)
Antenna Gain:	0dBi		
Duty cycle:	<input type="checkbox"/> Continuous duty	<input type="checkbox"/> Intermittent duty	<input checked="" type="checkbox"/> Continuous operation
Equipment type:	<input type="checkbox"/> Production model		<input checked="" type="checkbox"/> Prototype
Type of power source:	<input type="checkbox"/> AC power supply	<input checked="" type="checkbox"/> DC power supply	<input type="checkbox"/> Battery
Test source voltage:	Vmin:	<input type="checkbox"/> 207V/50Hz	<input checked="" type="checkbox"/> 4.75 VDC
	Vnom:	<input type="checkbox"/> 230V/50Hz	<input checked="" type="checkbox"/> 5.00 VDC
	Vmax:	<input type="checkbox"/> 253V/50Hz	<input checked="" type="checkbox"/> 5.25 VDC
Temperature range:	Tmin:	<input checked="" type="checkbox"/> -30°C	<input type="checkbox"/> 0°C <input type="checkbox"/> °C
	Tnom:	20°C	
	Tmax:	<input type="checkbox"/> 35°C	<input checked="" type="checkbox"/> 50°C <input type="checkbox"/> °C

A continuous reading process is performed between EUT and Contact less Card through RFID Protocol.

Hardware information		
Software (if applicable):	V. :	8200362104

**1.3. Test Methodology**

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4 or ANSI C63.10, 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 from **November 8, 2016 to December 14, 2016.**

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 and ANSI C63.10 (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.