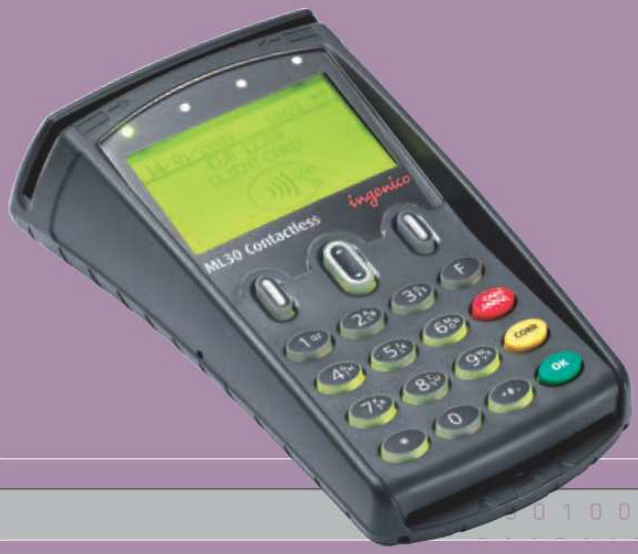
OPERATIONAL DESCRIPTION

1.1. ML30 description

Payment Solutions

PIN Pad

ML30 series



The ML30 series combines smart card, magnetic card and contactless readers, with mobile phone (NFC) payment in a single integrated package. This all-in-one intelligent PIN pad is perfect for small and mid-size merchants looking to connect to a payment terminal, or retailers who want PC or POS device connectivity. Extremely user-friendly, the ML30 series features an easily accessible contactless reader – certified by most major card associations – for card or mobile phone payments together with a front load EMV smart card reader that supports both simple (SDA) or dynamic (DDA) authentication, and an easy to use multi-directional magnetic card swipe. A backlit graphics screen helps consumers with PIN entry, while a large 16-key ergonomic keypad – complete with menu and navigation keys – guarantees fast error-free operations. All this, plus an extensive choice of communication interfaces, makes the ML30 series a truly impressive transaction powerhouse.

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PIN Pad

ML30 series

Security

Built around Ingenico's industry proven High Secure Core to provide assured secure data and application management, the ML30 series delivers the ultimate in secure transactions. Fully EMV and PCI PED approved, and supporting the latest international security algorithms (DES, TDES, RSA, DUKPT and Master/Session), the ML30 series features an optional PIN privacy shield for additional peace of mind.

Performance

Thanks to Ingenico's Telium architecture and its EMV level 2 kernel, the ML30 series delivers the super fast processing of powerful cryptographic algorithms to make fast-paced transactions a reality. Tamper resistant and tamper responsive, the ML30 series steps up the security and transaction versatility of your payment system by providing additional confidentiality at the PIN entry stage.

Design/Ergonomics

Lightweight and stylish, the ML30 series is designed to be handled. Its intuitive keypad and crisp LCD display make PIN-entry and menu navigation simplicity itself. Designed to deliver a world of payment versatility, the ML30 series features an EMV smart card reader, high performance magnetic card reader, and an integrated contactless reader.

Communication

This all-in-one PIN pad encompasses a wealth of connectivity. Alongside serial and USB ports or Ethernet connection interfaces, the ML30 series delivers truly impressive integration capabilities.

Software Development

Ingenico delivers incremental revenue today and future proofs the terminal investments of tomorrow. Simple all encompassing interface that is easily adaptable to an inventory of over 800 global applications.

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.

NAME		ML30
Processor	Type	ARM 9 & ARM 7
	Speed	200 MIPS & 50 MIPS
Memory	RAM/Flash	16/16 MB
Card Reader(s)	Magstripe	Track 1/2/3
	Smart card	●
	Contactless	
SAMs		2
Display	Yellow/Green	●
	Graphic 128 x 64	●
	Backlit	●
Keyboard	Number of keys	16
	Number navigation keys	4
	Backlit	●
Buzzer		●
Connections	RS 232	optional
	USB Slave	●
	Ethernet	optional
Power	Power USB 5V	●
	External Power Supply	optional
Size	Size (without PIN shield)	L 165 x W 95 x H 45
Weight (in gr)		240
Customization	Lens	optional
	Casing	optional
PIN Shield		optional
Environment	Operating temperature	+5°C to +40°C
	Operating humidity NC	+85% at +40°C
PCI PED	Online/offline	●

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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. Justification

Test was performed on ML30-322A-0101 Serial number: 09310PP10000102 with "USB cable option" and "RS232 option cable + power supply adapter FRIWO Ref: 153051). Reference 322A and 312A indicates only whether apparatus is sold with USB or RS232 configurations.

1.4. Tested System Details

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

Trade Mark – Model Number (Serial number)	FCC ID	Description	Cable description
ML30-322A-0101 (USB option cable)	**XKB-ML30**	Bank payment terminal	USB cable unshielded (2m)
ML30-312A-0101 (RS232 option cable)	**XKB-ML30**	Bank payment terminal	RS232 cable unshielded (3m) DC power supply cable (2m)
Power adapter: 153051 FRIWO 120Vac / 60Hz		RS232 configuration	
Laptop DELL VOSTRO 1710 sn: T932DA00	None	Laptop	Power cable unshielded
Power supply DELL unit (CN-ODF266-71615-76L-C8FC)	None	Adaptor AC/DC	Power cable unshielded
Smartcard (Bank card) Sn: none	-	-	-
SAM cards (x2) Sn: none	-	-	-

* : Equipment under test

1.5. 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.

1.6. Test facility

Tests have been performed on November 12th, 2009.

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.