OPERATIONAL DESCRIPTION

1.1. Equipment description

PC-Link readers

IIIII The leading link to secure access



ENTERPRISE > PRODUCT

yber attack and identity theft continue to increase and becomemore sophisticated as businesses hamess the power of online services for business applications. To counteract this threat, many enterprises, financial institutions and government agencies have deployed strong authentication using smart card technology to provide safe logical access, protect digital identities and secure online transactions of their employees, customers and citizens at large.

Smart card readers are an essential component of any smart card deployment. Connected to a PC, laptop or thin client, they ensure communication between the smart card and network services, and must do so in a convenient yet secure manner. Gemalto's full range of PC-Link smart card readers provide the perfect balance of ease of use combined with the highest level of security. Purpose designed to be compatible with any corporate PC and any level of user.

Based on Gemalto's own PC-Core smart card reader hardware and firmware technology, Gemalto's PC-link readers employ over 30 years of security and cryptography research and development to deliver a range of products that are reliable, versatile and compliant with relevant standards and certifications for each industry.

> Applications:

- · identity protection
- · logical security
- data security
- secure online transactions
 online banking and gaming

> Vertical Markets:

- eGovernment
- Enterprise
- · Health care
- Banking
- Gaming

> Key Benefits:

- > Easy to Install plug and play
- > Easy to Use compatible with leading operating systems
- > Standards Based:
- Supports all ISO 7816, EMV and memory cards (5V/3V/1.8V) up to 500Kbds
- Compliant with PC/SC V2, USB 2.0, CCiD1.0 and EMV L1
- > Custom packaging brand reader with custom color and logo.
- > Global Manufacturing RoHS, WEEE and REACH compliant, recyclable packaging
- > Warranty 24 months

The PC-Link portfolio of products includes readers for desktops, laptops, and PIN pads for secure PIN entry. This ensures the maximum flexibility for any use case or business environment. Customization is available for both readers and packaging to align with corporate branding (i.e., logo, company colors, etc.).

Gemalto's global manufacturing footprint supports any volume of product or global distribution. For standard products, the Gemalto web store provides convenient access to small batch orders and quick delivery.

"Gemalto world-wide leader in smart card reader and chipset in Y2009".*



*Frost & Sulliven report 2009



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Our offer:

> PC USB-TR

The innovative transparent design of the PC USB-TR highlights the card with your graphics. A flexible deployment solution with maximum user-friendliness, the PC USB-TR is compact and lightweight to optimize shipping expenses and offers a cost effective solution to all your smart card reader needs.



The PC USB-TR is modular in concept, and several easy-to-use and easy-to-install accessories are available, including a stand for desktop use (vertical insertion) and floppy disk tray to convert the reader to an internal device to be installed in a PC Floppy Disk or CD-ROM bay.

Designed for ease of use for any level of computer user. Works with all smart card market standards.

The PC-Link portfolio of readers is fully customizable to meet your specific visual brand needs.

> PC USB-SL



The PC USB-SL offers all of Gemalto's technical know-how in a slim-line and tamper-evident casing. Its housing is ideal for customization to your corporate identity and it offers a simple and secure solution with a modern and sleek design.

> PC Pinpad

The PC Pinpad is an ergonomically designed Class 2 reader (Secure Pin Entry) featuring one hand card insertion.



Perfect for corporate, administrative, eCommerce and eBanking services that require an extra layer of security, the PC Pinpad integrates a tactile 16 key keypad, a 2x16 line display and a USB interface.

> USB SHELL TOKEN VS

Gemalto's USB Shell Token V2 is a USB-connected plug-in format reader that offers all the power of a smart card reader with maximum portability. Small enough to carry on a key ring but smart enough to be secure, the USB Shell Token V2 is the ideal solution for users requiring security and portability.



> PC EXPRESS

PC Express is a lightweight device for laptop computers or PDAs that is ideal for security applications on the move.



With a robust metal casing in a full ExpressCard 54 format, the PC Express is a handy and compact solution.

www.gemalto.com



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:

Inputs/outputs:

- USB cable

Cables:

- USB cable, shielded, length: 1.5m

• Auxiliaries equipment used during test:

- 1 x Laptop TOSHIBA SATELITE S1410-704 (PS141E-04YCM-3V), sn: 13594938G

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 on June 8th, 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.