# 1 GENERAL INFORMATION

# 1.1 Product description

The GemPC Key device is a cost-effective reader for Personal Computer logon application and GSM card management. Smart cards which can be used with the GemPC Key are ISO7816-1/2/3/4 compatible smart cards. It is introduced in the GemPC Key, and the Personal Computer manages applications;

Typical applications are:

- Home-banking
- Electronic coupons/loyalty
- Internet access
- Secure download of content
- Computer access control
- Network security
- People identification
- Access to Wlan network
- Others...

The GemPC Key is a plug & play device, requiring no additional cable or wiring, It's compliant with a USB 2.0 full speed. The power of the GemPC Key is supply by USB connector.

The GemPC Key is a product developed by the Gemplus company.

For more information, see product's data sheet at section 1.6.

# 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 (including inserted cards, which have grants) are :

Trade Mark – Model Number (Serial number)	FCC ID	Description	Cable description
GemPC Key PN:016-708010-00* (sn: R02C0600477)	MESKEY	Smart card reader	none
GemSAFE ™ Entreprise	None	Smart card	none
HEWLETT PACKARD Vectra VLi8 pn:D7963A (sn: FR9402053)	Doc. Of Conf.	Personal computer	All data cables are shielded Power cable unshielded
HEWLETT PACKARD pn: D2846 (sn: JP74001000)	Doc. Of Conf.	21" color monitor	Shielded video cable with ferrite at each end
HEWLETT PACKARD pn: C4736-60101 (sn: LZA693024031)	JNZ201213	Mouse	Shielded cable
HEWLETT PACKARD pn: C4734-60111 (sn: M971168931)	GYUR385K	Keyboard	Shielded cable
HEWLETT PACKARD 895CXI pn: C6410A (sn: MY9761915S)	Doc. Of Conf.	Parallel printer	HP C2950A shielded parallel cable
HEWLETT PACKARD deskjet500 pn: C2106A (sn: 3110S58792)	B94C2106X	Serial printer	HP 24542G shielded serial cable
TELEX (sn: 700.373.000A)	None	Microphone	Shielded cable
LABTEC LT100 pn: D8387A (sn: none)	None	Headset	Shielded cable
HEWLETT PACKARD 48GX (sn: 83802369)		Graphic Calculator	Unshielded cable with ferrite
*Equipment Under Test	•		•

<sup>\*</sup>Equipment Under Test

# 1.4 Test Methodology

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4-1992, CISPR22-1997/A1:2000 and EN55022:1998/A1:2000.

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 February 10<sup>th</sup>, 2003.

The test facility used to collect the radiated and conducted data is the SMEE Actions Mesures facility, located ZI des Blanchisseries, 38500 VOIRON, France. 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 C63.4-1992 in a letter dated August 04, 1999 (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 1-0844 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.

# 1.6 Data sheet of the product



# GemPC Key

# The portable USB smart card interface

GemPC Key Is a new, cost-effective reader for PC logon applications and GSM card management

Market pressure is driving down the cost of smart card readers, whilst expecting portable tokens with increased efficiency and a broad range of on-board security applications like digital signature, user authentication and secure on-line transactions. Gemplus' GemPC Key delivers the solution in the shape of a secure USB plug-in smart card interface for applications such as home-banking, loyalty, and network services. GemPC Key offers all the power of a multi-application dynamic smart card in a USB key, the ideal for users who require a combination of security and portability.

#### Secure, portable and customizable

GemPC Key is made of tough plastic and, since it is smaller than a conventional house key, can be easily carried on a key ring. GemPC Key is available in a variety of colors and can be customized with graphics, logos etc.

### Easy to deploy

The GemPC Key plug-in reader is distributed independently of the plugin smart card, fadilitating production, issuance, and marketing applications.

#### Easy to Install

GemPC Key is a plug & play device, requiring no additional cable or wiring. It is ISO7816 compliant, USB full speed and compatible with Microsoft PC/SC drivers on Windows®Me, 2000, XP, 98, 98SE. GemPC Key is also compliant with Microsoft's CCID driver. Installation and diagnostic tools are provided.

#### Easy to use

GemPC Key is a true plug and play device. The smart card can be easily removed from the plastic shell. Additional security features are optional.

#### Applications

- Home-banking
- · Electronic coupons/loyalty
- Internet access
- · Secure download of content
- Computer access control
- Network security
- People identification
- · Access to Wian network
- And more...



#### GemPC Key

#### Same Gemplus expertise

Gemplus designs, develops and delivers industry leading smart card interface technologies backed by a dedicated team to ensure successful and profitable implementation of our products.

Choosing Gemplus GemPC smart card readers also provides access to a full range of associated software, services and support which have made Gemplus the undisputed world leader in Smart Card enabled solutions. Working with our Integration and Consulting Services team means that you benefit from many years of experience in the deployment and integration of smart card solutions in telecommunications, financial services

and e-business security fields.

Our highly skilled experts provide quick to market, cost-effective, and best-in class services ranging from audit and application design to solution and system integration, change management, customer support, training & seminars.

#### **Technical Specifications**

#### Host Interface

- Plug and Play
- USB full speed (12Mbps)

#### Smart Card Interface

GemCore Pro hardware and firmware architecture:

- plug-in card size
- supports ISO7816 Class A, B and C (5V, 3V, 1.8V)
- supports all ISO7816 TA1 parameters (up to 344 kbds)
- reads from and writes to all ISO7816-1,2,3,4 microprocessor cards, T=0 and T=1
- short circuit detection

#### Smart Card Connector

- 8 frictions contacts ISO location
- 10,000 insertion cycles

#### **Human Interface**

- LED one Color (Green) Standards/ Certifications
- ISO/IEC 7816-1,2,3,4:
   IC Cards with Contacts
- Microsoft Windows® Hardware Quality Labs (WHQL)
- USB 2.0 Full speed
- CCID Chip Card Interface Device 1.0

# APIs

- Microsoft PC/SC environment with associated drivers
- Other environments (OCF, CT-API) upon request

#### Operating Systems Support

- Windows 98, 98SE, Me, 2000, XP
- Other OS supported upon request (Linux, MacOS X)

#### Cable/Power Supply

- USB type A connector
- Power supply thru USB port
- Op. voltage [4.4 -> 5.5V]

#### Environmental Performances

- CE, FCC part 15 Class B, VCCI, BSMI, C-Tick
- EN 60950/UL950/CSA950
- Operating temperature: +5°C to +55°C
- Storage temperature:
   -25°C to +60°C

#### Dimensions

LWH (LWH 64x16x8 mm)



