1 GENERAL INFORMATION

1.1 Product description

The GemPC433 device is a smart card reader connected to a Personal Computer. Smart cards which can be used with the GemPC433 reader are ISO7816-1/2/3/4 compatible smart cards. It is introduced in the GemPC433 reader, and the Personal Computer manages applications; Typical applications are:

- Computer access control
- Electronic commerce
- Home banking facilities
- E-purse facilities
- Electronic smart card personalization
- Development of smart card application software
- Others…

The GemPC433 reader is connected to the USB Type A slot for communication with the Personal Computer, and is also powered, by USB port..
The reader communicates with the card via conductive paths.

The GemPC433 is a product developed by the Gemplus company; Its part number is HWP105806 IA.

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**
GemPC433 PN: MWP105806 IA* (sn: F0120100012)	MES433GPC	Smart card reader	Shielded cable attached to product
GemClub EMV	None	Smart card	none
Laptop Dell PN: 0006692D-1280-03T-3722 (sn: VSRW6) with AC adaptor block 9364U	Doc. Of Conf	Personal computer	All data cables are shielded Power cable unshielded
HEWLETT PACKARD D2846 (sn: JP74001000)	Doc. Of Conf.	21" color monitor	Shielded video cable
HEWLETT PACKARD C4736-60101 (sn: LZA93024031)	JNZ201213	Mouse	Shielded cable
HEWLETT PACKARD C2106A (sn: 3110S58792)	B94C2106X	Serial printer	HP 24542G shielded serial cable
HEWLETT PACKARD C6410A (sn: MY9761915T)	Doc. Of Conf.	Parallel printer	HP C2950A shielded parallel cable
TELEX (sn: 700.373.000A)	None	Microphone	Shielded cable
LABTEC LT100 D8387A (sn: none)	None	Headset	Shielded cable

*Equipment Under Test

1.4 Test Methodology

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4-1992, CISPR22-1993/A1:1995/A2:1996 and EN55022:1994/A1:1995/A2:1997.
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 April 26th , 2001.
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), accreditation number 1-0844 as compliant with test site criteria and competence in 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

A highly accessible, highly convenient solution.

This compact card reader, designed to plug into a PC environment, is the ultimate smart card peripheral for a PC. It is also very simple to use and install. The user needs no technical knowledge. If you need electronic commerce, home banking or e-purse facilities, secure computer access or any of a multitude of other applications, the **GemPC433** is the smartest answer. For the first time, a solution is available that offers impressive possibilities at an exceptional price.

Small is beautiful

At a mere 70 x 98 x 15 mm, the **GemPC433** will handle the card interface, while your computer supports and manages the applications. Compatible with all major computers and operating systems, the **GemPC433** is powered from any USB type A slot available, free of the constraints associated with other power-source options.
It will open up many possibilities, including:

- computer-access control,
- electronic commerce,
- home banking facilities,
- e-purse facilities,
- electronic smart-card personalization,
- development of smart-card application software,
- lots of other interesting or entertaining things.

Years of Gemplus technological experience, now available to all

The **GemPC433** is based on Gemplus' GemCore ® hardware and firmware, which means it can handle all types of ISO7816- compatible smart cards without compatibility problems. It is user-friendly, and operating or using it requires no technical expertise. The **GemPC433** will happily blend with all main environments (Windows ® 98, Windows ® 2000, etc.), all types of card, and most makes of computer. It will readily adapt to new smart-card services, as they become available.
The **GemPC433** has successfully passed the **Microsoft Windows Hardware Quality Lab (WHQL)** test session and is eligible for the "Designed for Microsoft Windows" logo for both Windows98 and Windows 2000 professional.
The **GemPC433** has successfully passed the **Compliance program of the USB organisation** and is listed as a full compliant USB device in the USB web site.

GemPC433 Product range

Product	Part N°
GemPC433	HWPxxx

Please contact your local Gemplus office to order.

GemPC433 Features and Application Standards

Feature	Description
Smart-card interface	• reads from and writes to all ISO7816-1/2/3/4 memory and microprocessor smart cards (T=0, T=1) • supports 3V and 5V cards
Communication	• programmable from 9,600 bauds to 229,391 bauds with the smart card
Power consumption	• Bus Powered Suspend Mode: <500 µA typical • Bus Powered Unconfigured Mode: 25 mA typical • Bus Powered Configured Mode: 25 mA typical • Bus Powered Operating Mode: <70 mA typical
Interface modes	• High Speed communication with the PC through USB port connection • Hubless • Comply with USB CCID 1.00 Standard
Power supply	• 4.4 to 5.25V maximum drawn from the USB port
Electro-magnetic standards	• Europe: 89/336/EEC Directive • EN 55022: 1994 Ed. +A1 +A2 Class B • EN 55024 : 1994 • EN 61000-4-2: 1995 • EN 61000-4-3: 1996 • EN 61000-4-4: 1995 • USA: FCC part 15 Class B
Security levels	• Europe: EN60950 • IEC950: 1991, Am,3: 1995 • USA: UL1950 third edition, dated July 28, 1995 • Canada: CSA950 • Comply with low voltage directive 73/23/EEC