

1 GENERAL INFORMATION

1.1 Product description

The IBM410p device is a smart card reader connected to a Personal Computer. Smart cards which can be used with the IBM 410p reader are: reads from or writes to ISO7816-1/2/3/4 memory and micro processor smart cards. The smart card is introduced in the IBM410p 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 IBM 410p reader is connected to the RS232 serial port for communication with the Personal Computer and is powered from keyboard's port,.

The IBM 410p is a product developed by the Gemplus company; Its name in Gemplus company, is: GemPC410. (ex GCR410p). That's why in data's results could appear the GCR410p reference.

For more informations, 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
IBM 410p* (sn: 99240103)	MES410IGCR	Smart card reader	Shielded cable attach to product
HEWLETT PACKARD Vectra 515 series D4136A (sn: FR62365527)	B94VECTRA500T	Personal computer	All data cables are shielded Power cable unshielded
HP D2846A (sn JP74001000)	Doc. Of Conf.	21" color monitor	Shielded video cable
IBM KB7953 (sn: 0010491)	Doc. Of Conf.	Keyboard	Cable shielded
HP C3751B (sn: LZA62831217)	DZL211029	Mouse	Cable shielded
HP 7440A (sn: 2807L77281)	BSD4TE7475A	Serial plotter	HP 24542G shielded serial cable
HP C6410A (sn: MY9761915T)	Doc. Of Conf.	Parallel printer	HP 24542D shielded parallel 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 and EN55022:1994/A1:1995.

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 November 8th, 1999.

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 Universal Smart Card Reader

The GemPC410 (ex GCR410p) was certified by Microsoft's WHQL in January 99

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 GemPC410 (ex GCR410p) 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 86 x 85 x 26 mm, the GemPC410 (ex GCR410p) will handle the card interface, while your computer supports and manages the applications. Compatible with all major computers and operating systems, the GemPC410 (ex GCR410p) is powered from your computer's keyboard port, 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.
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Years of Gemplus technological experience, now available to all

The GemPC410 (ex GCR410p) is based on Gemplus's 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 GemPC410 (ex GCR410p) will happily blend with all main environments (DOS, Windows ®* 3.x, Windows ® 95, Windows ® NT, OS/2 ® , etc.), all types of card, and most makes of computer. It will readily adapt to new smart-card services, as they become available

GCR410p

Features and Application Standards

Feature	Description
Smart-card interface	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> programmable from 9,600 baud to 115,200 baud with the smart card up to 38,400 baud for communication with PC
Power consumption	average of 20 mA in operational mode
Interface modes	<ul style="list-style-type: none"> Serial communication with the PC through RS232 connection TLP224 and GBP (Gemplus Block Protocol)
Power supply	5V maximum
Electro-magnetic standards	<ul style="list-style-type: none"> Europe: 89/336/CEE guideline USA: FCC part 15
Security levels	<ul style="list-style-type: none"> Europe: EN60950 USA: UL1950 Canada: CSA950

The cable supplied with the GemPC410 (ex GCR410p) allows the user to connect both the keyboard and the reader to the same port.