

Gem PC Twin Technical Specifications

Smart-card interface

- support ISO 7816 Class A, B and C (5V, 3V, 1.8V)
- support all ISO 7816 TA1 parameters (up to 344 Kbps)
- Read from and writes to all ISO 7816-1, 2, 3, 4 microprocessor cards, T=0 and T=1 (memory cards support upon request)
- Short circuit detection
- smart card connector is 8 friction contacts - ISO location, guarantee for 100,000 insertion cycles - EMV level 1 mechanically compliant.
- embossed smart cards are supported.

Human Interface

- LED one color (green)

Host Interface PC Twin [in serial mode]

- Serial RS232
- programmable transmission from 9600 to 115,200 bps
- cable 1,5 meter long
- serial DB9 connector
- power supply thru PS/2 port
- operating voltage 5V +/- 10%

Host Interface PC Twin [in USB mode]

- USB full speed (12 Mbps)
- Hubless
- cable 1,5 meter long
- USB type A connector
- Power supply thru USB port
- operating voltage [4.4 --> 5.5V]

Operating/storage Temperature

- Operating : +5°C / +55°C
- Storage : -25°C / +60°C

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

Electro-magnetic standards

- Europe : 89/336/CEE guide line
- EN 55022: 1994 Class B
- EN 50082-1: 1994
- EN 50081-1: 1992
- EN 61000-4-2: 1995
- EN 61000-4-3: 1997
- EN 61000-4-4: 1995
- Comply with EMC directive 89/336/EEC
- USA: FCC part 15 Class B

Standards & certifications

- ISO/IEC 7816-1, 2, 3, 4: IC Cards with contacts
- EMV level 1, EMV96 version 3.1.1 (EMV2000 under completion at printing time)
- Microsoft Windows Hardware Quality Labs (WHQL), Windows Logo Program WLP 2.0
- USB 2.0 full speed (PC Twin in USB mode)
- CCID - Chip card Interface device 1.0 (PC Twin in USB mode)
- Mondex® level 1 Purse Approved (version: Purse 2, Chip Safe and Chip Safe+)
- ROHS compliant
- WEEE marking

Operating systems supported

- Windows 98, 98 SE, Me, 2000, Xp and Vista 32 bits
- Windows Server 2003
- Windows Xp, Server & Vista 64 bits
- Windows 950 SR2 and NT4 for PC Twin in serial mode
- Linux Redhat WS3.0, WS4.0, Suse Professional 9.2, DEBIAN "Sarge"
- Win CE 4.1, 4.2, 5.0 for PC Twin in USB mode
- Mac OS X (10.3 and higher) for PC Twin in USB mode
- [Drivers for PC Twin](#)

API's

- Microsoft PC/SC environment with associated drivers



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