

PC-Link smart card readers

Securing network access

Smart card readers from the industry leader

As the rates of identity theft increases, more and more companies are turning to smart technology to secure their networks.

Enterprises, governments and financial institutions are rapidly deploying a smart card infrastructure for logical access and protecting the privacy of on-line bank customers and web shoppers.

Gemalto's user-friendly smart card readers are an integrated part of more global authentication solutions. Built on the latest technology they offer reliability and are certified by the major computing and banking organizations ensuring easy deployment.

Our diversified series includes readers for desktops, laptops, for SIM size card and readers for Pin entry.

FROST & SULLIVAN GRANTS PRIZE TO GEMALTO

Gemalto received the 2007 Market Leadership Award thanks to its significant performance in the smart card readers and chipsets' market.

"It has led the market, even in the first half of 2006, through its global presence and an innovative product strategy. No other market participant has been able to replicate the excellent performance in terms of leadership and sustainability in such a market."

Frost & Sullivan, 2006

Why choose Gemalto?

Gemalto, a leader in digital security, has over 15 years of experience in providing high quality smart card interfaces and that is why companies such as Microsoft, Boeing, Pfizer, US Department of Defence and Dell to name a few have relied on our expertise for their network security projects.

Gemalto has been recognized as a world's smart card reader market leader for the last five years and has delivered over fifteen million units to date to thousands of customers worldwide.

The high quality of our readers will contribute to the success of your smart card-based solution.

Working with us means you benefit from:

- Flexible production capabilities, from small quantities to large volumes
- Best in class supply chain
- Worldwide market access for smart card supply and distribution sales channels
- Competitive lead times for delivery

Our offer

PC Twin Reader



- USB or serial connection (simply by cable insertion)
- Innovative patented transparent design to highlight the card
- Modular concept through accessories: stand, floppy disk tray. It simplifies logistics and inventory

Accessories for PC Twin



- Desktop stand for vertical smart card insertion
- Floppy bay adaptor for 3.5" and 5.25"

PC USB Reader



- Slim line design
- Tamper evident casing
- Ideal for graphical customization, i.e. logo

PC Pinpad Reader



- Secure Pin entry for enhanced security
- Common criteria eal3+ and tamper evident case by void security sticker

PCMCIA Card Readers



- Compact and lightweight PCMCIA devices for laptop computers
- PC Card type II and ExpressCard 54 format
- Robust metal casing

USB Shell Token v2



- For Plug-In (SIM) card size
- Portable device, smaller than a house key

Technical Specifications

Host Interface

- PC Connection port

| | USB | Serial | PCMCIA |
|--------------------|-----|--------|--------|
| PC Twin | X | X | |
| PC USB-SL | X | | |
| PC Pinpad | X | | |
| PC Card | | | X |
| PC Express | | | X |
| USB Shell Token v2 | X | | |

- Plug and Play
- **USB 2.0 full speed** (12 Mbps)
- **Serial RS232** programmable transmission from 9,600 to 115,200 bps
- **PCMCIA**
PC Card type II, programmable transmission from 9,600 to 115,200 bps
ExpressCard/54, USB 2.0 full speed (12 Mbps)



Smart Card Interface

PC Core hardware and firmware architecture:

- Supports ISO 7816 Class A, B and C cards (5 V, 3 V, 1.8 V)
- Supports all ISO 7816 TA1 parameters (up to 500 Kbps, TA1=97 with a 4Mhz reader clock)
- Reads from and writes to all ISO 7816-1,2,3,4 microprocessor cards, T=0 and T=1 protocols
- Supports memory cards using "Synchronous Card API"
- Short circuit detection

Smart Card Connector

- 8 friction contacts - ISO location
- 100,000 insertion cycles
- EMV Level 1 mechanically compliant
- Embossed smart cards supported

Human interface

- LED one color (Green), dual state (blinking: waiting card insertion; ON: card reading / writing)
- PC Pinpad:
 - 2x16 alphanumeric display
 - orange LED ON at Secure PIN Entry mode
 - Tactile keypads with 16 (4x4) silicon rubber keys

Cable/Power Supply

- **USB reader**
 - Cable 1,5 m long
 - USB 2.0 type A connector
 - Power supply thru USB port
 - Operating voltage [4.4 – 5.5V]
- **Serial reader**
 - Cable 1,5 m long
 - Serial DB9 connector
 - Power supply thru PS/2 port
 - Operating voltage 5 V +/- 10%
- **PCMCIA PC Card reader**
 - Maximum operating current: 25mA
 - Power supply thru PC Card port
 - Operating voltage 5 V +/- 10%
- **PCMCIA ExpressCard reader**
 - Power Consumption Suspend mode: 1mA
 - Typical operating: 55mA
 - Maximum operating: 200mA
 - Power supply thru ExpressCard port
 - Rating 3.3V 1A primary supply voltage

Standards / Certifications

- ISO/IEC 7816-1,2,3,4: IC Cards with contacts

- EMV Terminal Level 1 version 4.0
for PC Core Twin Pro IFM



- Mondex ChipSafe Plus Purse 2 (PC Twin)



- Microsoft Windows Hardware Quality Labs (WHQL),
Windows Logo Program WLP 2.0



- USB 2.0 Full speed certified
(USB readers listed on usb.org website)

- CCID - Chip Card Interface Device 1.0
(USB & ExpressCard readers)



API

- Microsoft PC/SC environment with associated drivers
- CT-API (PC Twin, USB, Serial, Card)

Operating Systems

- Windows 95OSR2, NT4.00 (for PC Twin in serial mode)
- Windows 98, 98SE, Me, 2000, XP, Server 2003, x64 editions, Vista 32 & 64 bits
- Win CE 4.1, 4.2, 5.0 (USB readers)
- Linux RedHat WS4.0, Debian Sarge 3.1, Suze 10.0 on x86
- Solaris 10 (USB readers)
- Mac OS X 10.3 Panther, 10.4 Tiger, 32 editions on G3, G4, G5 and Intel platforms (USB readers)

Environmental

- CE, FCC part 15 Class B
- VCCI, c-Tick, BSMI
- EN 60950 / UL 950 / CSA 950
- Operating: +0 °C / +55 °C
- Storage: -20 °C / +65 °C
- ROHS compliant  , WEEE marking 

Warranty

- 24 months
- 100,000 smart card insertions

OEM

Reader and packaging personalization available
Customized stickers, logo and colors at request

Weight and size

| | Weight (grams) | Dimensions (LWH mm) |
|--------------------|----------------|---------------------|
| PC Twin (USB) | 61 | 75 x 63 x 13 |
| PC Twin (Serial) | 95 | 75 x 63 x 13 |
| PC USB-SL | 76 | 105 x 70 x 12 |
| PC Pinpad | 292 | 121 x 79 x 49 |
| PC Card | 29 | 85 x 54 x 5 |
| PC Express | 23 | 75 x 54 x 5 |
| USB Shell Token v2 | 9 | 64 x 16 x 8 |

