

# GEMPLUS<sup>\*</sup>

### The USB Smart Card Token

Gem e-Seal is the new USB token from Gemplus, based on the latest Java Smart Card chip, which enlarges Gemplus smart card offer for PC logical access control applications.



#### Portable USB design

Gem e-Seal combines the simplicity of a USB device with the capabilities of a smart card and an integrated reader. The resulting token is not much bigger than a key and is made in tough plastic for use in the offers harshest conditions. It increased efficiency and a broad range of on-board security applications like digital signature, user identification and secure on-line transactions.

Gemplus' Gem e- Seal is ideal for applications such as:

- Home banking
- e-Commerce
- Internet access
- Secure content
   download
- Computer access control
- Network security
- Personal identification

It is can be personalized with a company logo and Gemplus also offers other possibilities for customisation as to promote a unique brand.

#### Tamper-proof security

Gem e-Seal is a token with an embedded smart card for extra convenience especially in situations where smart card readers are not readily available. Furthermore, this avoids any potential tampering with the card. The result is that only authorised users will be allowed to access your network or other confidential information.

It is designed for digital signature, storage of keys and certificates and encryption of e-mail and Internet connections, providing the highest possible level of security and nonrepudiation, a crucial feature for proving financial transactions.



## Double authentication

Gem e-Seal guarantees a two-part authentication; the token itself as well as the associated PIN, providing extra security for the most sensitive applications. It offers all the power of a multiapplication dynamic smart card in a USB key form factor, an ideal option for those users that require combination of security, а portability, robustness and convenience.



Features	Description
Operating systems supported	• Windows 98, 98SE, Me, 2000, XP, XP Pro x64, Server 2003 & 64 bit
	• Linux, WinCE 4.1, 4.2, 5.0
API's	Microsoft PC/SC environment with GemPC Key     associated drivers
Key form factor	<ul> <li>Dimensions: 64 mm x 16 mm x 8 mm with a keyring</li> <li>Sealed tamper evident case</li> <li>Weight: 10 g</li> </ul>
Host Interface	<ul> <li>Hubless, USB full speed (12 Mbps)</li> <li>USB type A connector guarantee for 1500 insertions</li> <li>Power supply thru USB port</li> <li>Operating voltage [4.4 à 5.5V]</li> </ul>
Human Interface	LED one color (green)
Smart Card general features	<ul> <li>Based on JavaCard Virtual Machine, compliant with JC2.1.1</li> <li>Card Management &amp; API compliant with OP2.0.1'</li> <li>Baud rates up to 115Kbps</li> </ul>
Cryptographic features	<ul> <li>Cryptographic algorithms: 3DES (ECB, CBC), RSA up to 2048bit &amp; SHA-1</li> <li>32 Kbytes chip with 30,300 bytes available for keys, certificates and PKCS#11 object</li> <li>10 x RSA key containers for GemSafeXpresso 32K</li> <li>RSA key length up to 2048 bits</li> <li>On board Key Generation</li> <li>RSA Key injection</li> <li>Digital Signature</li> <li>Secure messaging</li> <li>Entrust (v6 and above) compliant.</li> <li>User PIN and Admin PIN support</li> </ul>
Environmental performances	<ul> <li>CE, FCC part 15 Class B</li> <li>EN60950/UL950/CSA950</li> <li>Operating: 0°C / +55°C</li> <li>Storage: -20°C / +60°C</li> </ul>
Standards/ Certifications	<ul> <li>ISO/IEC 7816-4</li> <li>Microsoft Windows Hardware Quality Labs (WHQL), Windows Logo Program WLP 2.0</li> <li>USB 2.0 full speed</li> <li>CCID - Chip card Interface device 1.0</li> </ul>



