

ID-**one**™ Smart Cards

ID-One™ Smart Cards are based on Oberthur Card Systems' Operating Systems featuring on-board applications dedicated to identity and e-government services. ID One Smart Cards within Oberthur Card Systems are split into two offers: ID-One Prime and ID-One Cosmo.

ID-One Prime

ID-One Prime is the entry point product in Oberthur Card Systems' offer for identity markets.

Featuring flexible ISO 7816 file system management and a memory footprint from 4k up to 16k to securely store textual and biometrics data, ID-One Prime is the perfect product for the most demanding ID Projects.

Based on the same underlying technologies used in EMV 2000 banking cards, ID-One Prime has been submitted to strict evaluation procedures and is therefore compliant with the highest security requirements. For instance, all the security mechanisms required for Visa and MasterCard certifications are implemented, as well as all the Security Guidelines to combat the latest DFA attacks.

Flexible and secure, ID-One Prime offers the best possible performance at an affordable price and is currently available in two versions: a pure contactless interface and a dual interface (contact and contactless).

ID-One Prime has been designed to provide high performance through the implementation of a native ISO 7816 File System.

In addition to ISO 7816-4 specifications, ID-One Prime introduces two new specific commands (create file and delete file), which are extremely useful for card personalization.

ID-One Prime has already proven its flexibility, having been chosen to host an implementation of the Scosta standard, used for Driving Licence cards in India.

ID-One Cosmo

Implementing Java Card™ and GlobalPlatform industry standards, ID-One Cosmo cards offer from 32 to 64k of EEPROM, with the possibility of a contact, contactless and USB (optional) chip interface.



ID-One Cosmo cards support the standard API from the Biometric Consortium and are ready for biometric applications. They are available for e-passport use, supporting all the features requested by ICAO as well as LDS applications.

The applets available with ID-One Cosmo provide all the necessary cryptographic services to perform PKI (RSA) related operations and secured data storage functions for identity, password, credential or other sensitive data. RSA keys can be loaded or generated on-board for added security. DES or 3DES functions are also provided to perform encryption/decryption and can be used to perform challenge/response operations.

The Java Card architecture of ID-One Cosmo cards enables Oberthur Card Systems to easily implement applets based on national requirements: GSA, CNS/CNI, GAIA, LDS...

On-Card Applications

The following applications are available in the global ID-One Smart Cards offer, thus on ID-One Prime and/or ID-One Cosmo.

- + **Digital Signature:** applet for PKI integration, managing cryptographic keys, digital certificates and signatures. PKCS#15, ITU-T X.509 compliant.
- + **Secure Data Storage:** applet for enhanced authentication, supporting digital signature applet features, plus logical channels and multiple access conditions.
- + **Biometrics:** applet for authentication based on fingerprint biometrics.
- + **Secure File System:** command set to easily store and retrieve data, allowing the development of additional added value services for the citizen.

Highest Security Standards

- + Protection against non-authorized access to passport-holders' personal data.
- + Access to biometric identifiers restricted to authorized authorities only.
- + Prevention of 'skimming' without the approbation and voluntary action of the holder and his to give access to his personal data.
- + Support of Basic Access Control feature - electronic protection to ensure identity confidentiality.
- + Support of Extended Access Control for selective limited access to biometric data.
- + Oberthur Card Systems has a patent on an active anti-skimming solution; contactless access to personal data within the chip embedded in the passport is given by the voluntary action of the holder opening his passport.

Oberthur Card Systems: Your Best Partner

Oberthur Card Systems ranks amongst the worldwide leaders in the smart card industry and is the world's number 1 card provider for Visa and MasterCard. With the most extensive range of products and services in the industry, Oberthur Card Systems meets the specific requirements of a large number of markets: government, banking, mobile communication, payTV and transport.

Oberthur Card Systems is part of the François-Charles Oberthur Group, an international group of more than 5000 employees spread across five continents, which is one of the leaders in the worldwide security printing market.

Product Name	Memory Size	Features
ID-One Prime	4k, 8k, 16k	ISO 7816 File System, Scosta DES, 3DES Contact, Contactless
ID-One Cosmo	16k, 32k, 64k, 128k	Java Card™ 2.2 GlobalPlatform 2.1.1 DES, 3DES, RSA 2048 bits, SHA-1 & SHA-2, AES, Elliptic Curve On-board Key Generator Biometry Match On Card Major Systems Integrators Approved FIPS 140-2 Level 3 certified Common Criteria certified Contact, Contactless, USB