

Smart Credentials

Smart solutions for securing physical locations
and digital assets



SMART CREDENTIALS BY IDEMIA

IDEMIA offers a variety of solutions for securing both physical locations and digital assets. This may be in the form of a single smart card for both, like the ID-ONE PIV® card, or a USB key form factor for logical access only.

ID-ONE PIV® - CONVERGED ENTERPRISE ID ACCESS BADGE

One card, multiple uses

ID-One PIV® smart card combines physical and logical access credentials into one card, thereby eliminating the need for multiple credentials.

The card is manufactured according to FIPS 201 guidelines, which are the federal standard for ID cards, and FIDO2 for phishing-resistant multi-factor authentication.

WHY IDEMIA?

IDEMIA was a pioneer in meeting the FIPS 201 PIV standard, and for almost two decades has been the leading supplier of PIV and CAC cards to the U.S. federal market, serving over 120+ federal agencies, along with many corporate customers.

IDEMIA offers U.S.-based manufacturing and centralized print bureau services for personalization and fulfillment, and, as of April 2023, has produced and shipped 60 million smart cards to North America—a testimony to our leading position in a growing market, but also to the trust customers place in our team and expertise.

In addition, we offer FIPS 140-certified PKI credentials in a USB form factor for managing access to networks and workstations. These USB keys offer a budget-friendly means to upgrade your IT security infrastructure.

CAPABILITIES

- ✓ Secure Photo ID
- ✓ Building Access
- ✓ Workstation and Network Access
- ✓ Email and Document Signing
- ✓ Email and File Encryption
- ✓ FIDO2 Authenticator



BUILDING ACCESS

ID-One PIV® can be used with commercial off-the-shelf (COTS) door readers and back-end systems, making it easy to integrate into existing access control systems.

It supports both legacy and modern door-access reader technologies to facilitate easy migration from vulnerable older technologies to the latest security protocols. This eliminates the need to replace all access control infrastructure at time of adoption.

Supported technologies for physical access include 125 KHz proximity, MIFARE® and magnetic stripe, barcodes, and modern secure technologies such as DESFire®, LEAF, and PIV.



NETWORK ACCESS

The ID-One PIV® card supports PKI-based strong authentication methods and passwordless protocols built on standards such as FIDO2 and PIV for multi-factor authentication. Moreover, the cards support the FIDO2 protocol, offering FIDO-based passwordless authentication resistant to phishing attacks.

An on-card application based on the FIPS 201/PIV standard supports certificate-based authentication.

And lastly, ID-One PIV® is NFC-enabled to support mobile devices and contactless use, making the credential convenient to use.

BENEFITS

- ✔ **Helps avoid vendor lock** through the use of standards-based, interoperable technology that is widely trusted by both federal and commercial enterprises.
- ✔ **One credential for physical and logical access:** Employees don't have to carry multiple credentials.
- ✔ **Flexible form factor:** Issue FIPS-140 certified USB tokens or PIV-based smart cards, depending on your needs.
- ✔ **Ecosystem compatibility:** Because IDEMIA credentials are so widely used, you can be assured of compatibility with door readers and credential issuance systems.
- ✔ **A one-stop shop** for credential manufacturing, personalization/printing, and fulfillment services.
- ✔ **Value-added functionality** such as digital signatures, which reduce paper forms, and encryption, which protects data at rest and data in transmission.



ID-ONE PIV TECHNICAL DATA

CERTIFICATIONS

- FIPS 140-2 Certification: Level 2 (CIV), and Level 3 (SPE)
- Common Criteria: EAL 5+

CRYPTOGRAPHIC ALGORITHMS

- ECDSA: Curve P-224, P-256, P-384, P-521
- ECDH: Curve P-224, P-256, P-384, P-521
- RSA: 2048-bit, 3072
- AES: 128, 192, 256 bit Keys (CBC and ECB)
- 3TDES: 3 Key (CBC and ECB) (Legacy only)

RETIRED KEYS

- Supports up to 20 on-card retired key management keys (aka archived decryption keys) with associated X509 certificates.

ON-CARD FINGERPRINT VERIFICATION

- Takes less than 100 milliseconds for a positive match.

SECURE CHANNEL

- PIV secure messaging ECC P-256, P-384, P-521 with VCI (Virtual Contact Interface) for mobile device interfacing.
- Global Platform SCP-03 with secure channel modes "01," "03," and "33."

CUSTOM EXTENSIONS

- Supports additional data objects with custom access conditions as needed.

PROXIMITY SUPPORT (OPTIONAL)

- Optionally supports 125 KHz proximity technology on the PIV card, compatible with most widely-used proximity technologies and formats (HID®, CASI®, Indala®, Honeywell®)

MIFARE®, DESFire® SUPPORT (OPTIONAL)

- Options include MIFARE® Classic (1K, 4K), MIFARE® Plus (2K, 4K), DESFire® (2K, 4K, 8K, 16K, 24K, 32K)
- LEAF Standard or Custom on DESFire®.

CARD BODY

- Long-life composite PET-F/PVC plastic meeting physical and durability requirements specified in the FIPS 201 standard.
- Supports variety of security features up to Level 3 (forensic), and laser engraving options.

MINIDRIVER SUPPORT

- IDEMIA Minidriver available for download from Microsoft Update Catalog website.

COMMUNICATION PROTOCOLS

- T=1 (ISO/IEC 7816-3)
- T=CL (ISO/IEC 14 443 Type A)
- Supports extended length APDU for faster data exchange

COMMUNICATION SPEED

- Up to 625,000 bps over the contact interface with a 5MHz clock
- Up to 848,000 bps over the contactless interface

OPERATING VOLTAGE

- Class A (5V), Class B (3V), and Class C (1.8V)

CMS COMPATIBILITY

- Out-of-the-box support for most widely used commercial CMS products.

