HID®

Crescendo® C1150
Smart Card

Crescendo® C1150

- **Higher security –** Encryption and data signing protects data-at-rest and enables trusted secure communications.

- **Supports Secure Identity Object™ (SIO) –** For multi-layered security of identity data beyond the device technology.

- **Scalable –** Pre-personalized cards streamline deployments with a range of logical access applications.

- **Cost effective –** Single card for logical and physical access control.

- **PKI-based two-factor authentication –** For secure desktop login and remote access.

- **Versatile –** Available with multiple physical access technologies a single card (HID Prox, Indala® Prox, Hitag, Legic, iCLASS® MIFARE® and DESFire® EV1).

HID Global's Crescendo offers a family of credit card-sized smart cards designed to provide versatile and secure logical and physical access control. Crescendo leverages the state-of-the-art smart card platform technology to deliver a standards-based solution for strong authentication and data protection. The smart cards also address evolving market needs by offering superior performance and security.

Crescendo C1150 smart cards provide end users with one smart card for accessing logical and physical resources, eliminating the need to carry multiple credentials or remember multiple passwords or PINs. For logical access, the cards can be used for secure login to workstations and laptops, as well as web-based applications.

The cards support strong authentication for VPN access as an alternative to one time password (OTP) tokens. They also support cloud-based applications when deployed with HID Global's ActivID® Appliance. C1150 smart cards provide document and email digital signature services and can be used to protect critical data during transmission between trusted parties or for data at-rest (e.g. encrypt files, emails or hard drives).

The C1150 is available as a hybrid card with a contact chip and one or several RFID chips for physical access. The smart cards leverage world-class contact chip technology that includes a high output co-processor to deliver maximum performance for cryptographic operations.

As a "ready-to-use" solution, the cards come preloaded to work with a variety of applications available on the market. HID Global's Crescendo C1150 portfolio is interoperable with the Microsoft-approved mini driver, delivering broad support for Microsoft's Enterprise products. The scalability of the cards allows them to be deployed in standalone mode (without a Credential Management system) or with any mini driver-compliant application.

The cards leverage HID Global's Applet Framework for JavaCard. This digital identity assurance applet offers secure storage and protection for passwords, digital identity credentials, cryptographic functions, personal information and network access. The applet framework is proven technology deployed in over two million active smart cards.

HID Global's Crescendo C1100 Benefits

- High capacity, high performance smart card to support credentials for the most demanding applications (PKI digital certificates-based authenti-cation, digital signature and encryption services, and one-time password authentication services).

- Secure physical access control: supports the HID's Elite Program that extends iCLASS® and MIFARE® security by providing unique keys for each application. Also support SE-Elite program for SIO.

- Versatile solution that is interoperable with HID Global's ActivClient®, HID Global's naviGO™ and HID Global's ActivID Appliance.

- Available in small quantities (pack of 25 cards with single or multi-technology combinations for physical access control).generation in RSA mode (JCOP/SMART-MX)

TECHNOLOGY FEATURES

- Available as contact-only and/or hybrid cards (contact and contactless). SIM punch out option also available.

- Supports ISO/IEC standards: 7810, 7816 for contact and contactless cards (14443 A/B and 15693).

- Common Criteria EAL 5+ certified smart card chip.

- Supports contactless with up to 848 Kbps in the fastest ISO 14443 transmission mode.

- Smart card chip integrating co-processor with high performance for cryptographic calculations with symmetric and asymmetric keys.

- Optimized platform design with automatic memory defragmentation and secure memory management.

- Support customization (magnetic stripe, custom artwork text or graphics: requires minimum volume quantity).

- Available with anti-counterfeiting features such as holograms, holographic foil, OVI (Optical Variable Ink).

CONTACT MODULE PRE-PERSONALIZATION

- Loaded with an electrical profile (card application and objects) that supports 9 PKI keys with configurable key size as well as X.509 certificates.

- Global PIN management as well as card unlock feature.

- One Time Password with HID's ActivID patented algorithm.

- Microsoft certified mini driver available at no charge; interoperable with Windows Forefront Identity Manager 2010 and other Windows' mini driver based applications.

SINGLE OR MULTI-TECHNOLOGY CONTACTLESS SUPPORT

- iCLASS® 32k (4 KB with 16k/16+16k/1) and proximity 125 KHz.

- NXP MIFARE® CLASSIC 4K or DESFire® EV1 8K with HID Prox.

- Technologies such as Legic and other combinations are possible.

- Programmable with Secure Identity Object (SIO) for increased security.
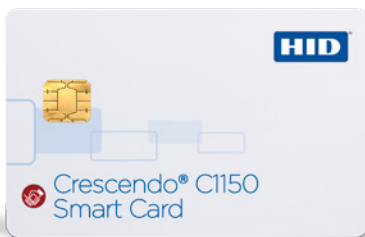
SPECIFICATIONS

Product Compatibility	ActivClient 6.2, naviGO 3.0 and HID Global's ActivID AAA Server 6.7
Environment	Support JavaCard 2.2.2 and Global 2.1.1 specifications
Cryptographic Capabilities	AES, RSA, ECC, DES and Triple DES
Smart Card Readers	Compatible with PC/SC Compliant reader
Baud Rate	230.4 kbps at 3.57 MHz for contact mode 106-848 kbps (depending the contactless technology)
Card Construction	Thin, flexible Composite PVC/PET
Dimensions	2.127" x 3.375" x 0.033" max (5.40 x 8.57 x 0.084 cm)
EEPROM Memory	80K Bytes
EEPROM Endurance	500,000 cycles
EEPROM Retention	20 years
Operating Temperature Range	-25°C to +85°C
Security Countermeasures	Clock frequency, temperature, supply voltage and light sensors. Also includes Single Fault Injection (SFI) attack detection as well as protection against SPA/DPA, timing and fault attacks (DFA)
Supported Printers Technology	Works with direct image or thermal transfer printers
Warranty	5 year warranty