



HID GLOBAL'S CRESCENDO SMART CARD SOLUTION FOR ACTIVID CREDENTIAL MANAGEMENT SYSTEM APPLIANCE (CMS APPLIANCE)

- **Solution for Enterprise/Governments** with requirements for Logical & Physical Access utilizing one card
- **Convenient and cost effective multi-application Smart Card** – Aligned with NIST FIPS201 specifications for increased interoperability (Compatible with NIST CIV: Commercial Identity Verification)
- **High Security Standard-based Solution for 2 Factor Authentication** – Platform accredited to Common Criteria
- **Readily Compliant** – Supports multi-technology with HID Proximity, iCLASS® and MIFARE® and MIFARE® EV1
- **Fast Deployment** – Designed to work with HID Global's ActivID® Credential Management System (CMS) Appliance for day one card issuance and usage

HID Global's Crescendo C800 Benefits

- Best Combination for Security and Convenience
- Delivered with unique (diversified) Card Keys for maximum security
- Large available memory to support credentials for most demanding applications credentials (PKI Digital Certificates-based operations, Single Sign On (SSO), Boot Disk and Disk Encryption, etc.)
- Optimized platform design with automatic memory defragmentation and secure memory management
- For Physical Access: support the HID Elite Program - extend security by providing unique keys for each application for iCLASS and MIFARE
- Compatible with HID Global's ActivID® Credential Management System Appliance, as well as HID Global's ActivClient

HID Global's Crescendo® Smart Card is a series of highly secure, off-the-shelf smart cards (credit card-based solutions) designed to provide versatile, high security solutions for converged access (logical and physical access control). The Crescendo card platform leverages the state-of-the-art smart card platforms technology to deliver a standard based solution for strong authentication and physical access. HID Global's Crescendo smart card addresses the evolving market needs by offering superior performance, interoperability, and security. The Crescendo smart card leverages industry-accepted standards for card provisioning and usage.

Single Device for Identity Assurance

With HID Global's Crescendo C800, users don't have to carry multiple credentials, nor do they need to remember multiple passwords or PINs. Instead, users have one smart card for access to the logical or physical resources they need to access.

HID Global's Crescendo C800 embeds a smart card chip, with high output crypto co-processor,

for logical access control. To meet the needs of physical access control customers, HID Global's Crescendo can be ordered with physical access support technology.

Digital Identity Assurance Applet

C800 cards leverage HID Global's existing Applet framework for Javacard-based smart cards. This framework is a portfolio of smart card module-based identity and security software applications. They deliver fortress-like protection for passwords, digital identity credentials, cryptographic functions, personal information, and network access. Those Applets are the most proven, complete, and widely used and FIPS140 certified platform of portable security functions available for organizations building multi-function smart card solutions.

HID Global's Applets are built on open standards and have broad third-party support, and operate in Windows®, Solaris™, Macintosh®, and Linux® environments.

TECHNOLOGY FEATURES

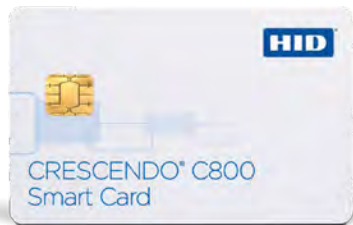
- Available as a contact-only or hybrid cards (contact and contactless)
- Supports ISO/IEC standards: 7810, 7816 for contact card and contactless cards (14443 A/B and 15693)
- Supports contactless smart cards with up to 848 Kbps in the fastest ISO 14443 transmission mode
- Smart Card chip integrating cryptographic co-processor for high performance
- Card Body Construction: Compatible with direct Image or thermal transfer printers
- Support customization (magnetic stripe, custom artwork text or graphics: Require minimum volume quantity)

SECURITY FEATURES

- Implement all the security mechanisms (protection against attacks) required for FIPS 140-2 L3 certification
- Protection against attacks: Built-in features against power SPA/DPA (Differential Power Analysis), timing and fault attacks DFA (Differential Fault Analysis)
- Common Criteria EAL 5+ for the Smart Card chip

CONTACTLESS SUPPORT

- HID: iCLASS® 32k (4 KB with 16k/16+16k/1) as well as iCLASS with HID Proximity
- NXP MIFARE® CLASSIC 4K or DESFire® EV1 8K with and without HID Proximity



SPECIFICATIONS

Product Compatibility	HID Global's ActivID Credential Management System Appliance HID Global's ActivClient 6.2 or higher
Environment	Support JavaCard 2.2.1 and Global 2.1.1 specifications
Cryptographic Capabilities	DES and Triple DES computations (with double or triple length)
Smart Card Readers	Compatible with PC/SC Compliant reader
Baud Rate	115,200 bauds 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 Endurance	500,000 cycles
EEPROM Retention	20 years
Operating Temperature Rang	-25° C to +85° C
Compliance and Standards	US Government: FIPS201 certified, NIST CIV
Warranty	5 year warranty