

Crescendo™

Multi-technology Smart Card

- ▶ **Convenient and Cost Effective** – Combine logical and physical access control in a single card
- ▶ **Out-of-the-box, Standards-Compliant** – Supports hundreds of logical access applications provided by Microsoft® and others
- ▶ **Pre-initialized with the Required On-card Software** – Includes all required drivers and middleware
- ▶ **Simplified Deployment and Card Lifecycle Management** – naviGO™ software's self service functions reduce costs and simplify deployment and card lifecycle management



ACCESS secure.

Crescendo™ is a series of highly secure, off-the-shelf smart cards designed to provide out-of-the-box, standards-compliant support for hundreds of logical access applications. A multi-technology smart card, Crescendo is a credit card-sized card that enables logical and physical access control, also serving as an employee ID badge. By incorporating HID's industry standard proximity technology (i.e., HID, Indala®), iCLASS® and other 13.56 MHz technologies, Crescendo is a single card that can be easily deployed for both logical and physical access control applications.

Delivered in a highly durable composite card construction, Crescendo supports all standards-based card readers on the market and is designed to work with the wide range of OMNIKEY® reader form factors (for more information on OMNIKEY products, please visit www.hidglobal.com/OMNIKEY).

As part of the HID on the Desktop™ solution, Crescendo contact smart cards represent the highest level of network security, working with highly developed PKI (Public Key Infrastructure) infrastructures. Crescendo on the Desktop™ extends the features of the standard Crescendo product by using naviGO™ Server software to provide a simple management solution for card PIN and PUK as well as emergency access functionality.

A wide variety of security applications from other vendors are also supported including: Single sign-on, Pre-boot authentication, Disk encryption, Digital signatures. Choose the Crescendo smart card that is compatible with your existing physical access control system.

Crescendo is Windows® compatible. Crescendo series smart cards are compatible with the Microsoft® Windows® Smart Card Framework (WSF)* and support applications such as Windows Domain logon, VPN, Microsoft Office Outlook, secure Web access, and wireless LAN authentication. Crescendo supports the Microsoft® Identity Lifecycle Manager 2007 (ILM 2007), dramatically simplifying the deployment, management and auditing of smart cards used for logical access control applications.

An embedded contact smart chip is used for logical access control. To meet the needs of current physical access control customers, Crescendo can be customized with the "physical access control" technologies you choose including: Proximity (HID, Indala® and others), iCLASS®, MIFARE®, DESFire®, Multi-technology combinations, Magnetic stripe.

- ▶ Requires no per-seat middleware licenses, reducing overall costs.
- ▶ Uses a powerful contact smart chip with cryptographic co-processor coupled with HID's industry standard proximity or iCLASS® technology.
- ▶ Is available off-the-shelf, reducing lead times and cost.

* Only valid for C200

Features

	C200 ⁵	C700
OS Support		
Windows Vista™ / Windows 7	Yes (32 & 64 bit)	Yes (32 & 64 bit)
Windows® 2000 / Windows®XP	Yes	Yes
Windows® Server 2003 & 2008	Yes	Yes
Windows® CE / Mobile	No	Yes ¹
Mac® OS X, Linux®, Solaris, Unix	No	Yes ¹

	C200 ⁵	C700
Standards Support		
ISO 7816 1-4	Yes	Yes
PCSC / CCID	Yes	Yes
CryptoAPI / MSCAPI	Yes	Yes
PKCS11	No	Yes
Base CSP	Yes	No
X.509, PFX, DER, PKCS 8 / 12 / 15	Yes	Yes

	C200 ⁵	C700
Contact Smart Chip		
Java Card OS v2.2.2	Yes	Yes
Global Platform Specification 2.1.1	Yes	Yes
Crypto Co-Processor	Yes	Yes
AES (256 bit), ECC GF(p) (320 bit), SHA-1/2	Yes	Yes
Number of 1024 Bit Digital Certificates ²	16	21
Number of 2048 Bit Digital Certificates ²	12	15
EEPROM Storage	80K	80K
EEPROM Data Retention	20 Years	20 Years

	C200 ⁵	C700
Contactless Technologies		
HID iCLASS	Yes	Yes
MIFARE	Yes	Yes
DESFire	Yes	Yes
HID & Indala Prox and Magnetic ³ Stripe Optional	Yes	Yes
Other Contactless and Multi-Technology Card	Yes	Yes
Options Available on Request		

	C200 ⁵	C700
Microsoft® Applications		
Windows® Domain Log-On	Yes	Yes
Remote Desktop / RDP	Yes ⁴	Yes ⁴
Microsoft® Identity Lifecycle Manager 2007	Yes	Yes
Outlook	Yes	Yes
Encrypted File System	Yes	Yes
Internet Explorer	Yes	Yes
Windows® Certificate Authority	Yes	Yes

	C200 ⁵	C700
Other Applications⁶		
Single Sign-On	Yes	Yes
Pre-Boot Authentication	No	Yes
Firefox®, Netscape®	No	Yes
VPN (SSL / IPSEC)	Yes	Yes
Match-on-Card Fingerprint	No	Yes
Citrix™	Yes	Yes
Smart Card Management Utility	No	Yes

Microsoft® Identity Lifecycle Manager 2007

- ¹ May require an additional software license.
- ² Maximum number of certificates
- ³ The Magnetic stripe is ABA standard 3 track, high coercivity (4000 Oe), ISO 7811 I-6 compliant.
- ⁴ Requires Windows 7, Windows Vista, or Windows XP
- ⁵ The Crescendo C200 credential solution has completed the Microsoft certification program for smart card minidrivers
- ⁶ Please review the "Crescendo Third Party Product Compatibility" document for a complete listing of applications and uses



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ACCESS experience.

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