

H-Token™ H103 - MarcoPolo

The H-Token H103 MarcoPolo is a high-security storage device equipped with an internal Smart Card, an integrated keypad, an integrated high-resolution color display and an ID1 contact Smart Card reader, allowing secure PIN code entry directly and safely into the keypad without being transmitted to the host.

The H103 internal Smart Card, keypad, display and Smart Card reader are suitable for a wide range of applications, such as:

- Secure access to PCs and networks
- Authentication for web services such as home banking or electronic payments
- Digital signing of documents and transactions
- Data encryption



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Product Specifications

Flash Memory

- Capacity
 - 512MB SLC (default), 1GB SLC, 2GB SLC, 4GB (MLC)
- Multi-partition Support
 - CD-ROM
 - Read-Only
 - Public or Private (encrypted)
 - Hidden (raw access)
- Data Privacy
 - AES-256 CBC hardware encryption
- Read Performance
 - up to 10 MB/s in single flash mode
 - up to 20 MB/s in dual flash mode
- Write Performance
 - up to 6 MB/s in single flash mode
 - up to 10 MB/s in dual flash mode
- Data Retention
 - JEDEC compliant

Internal Smart Card

- Cryptographic Smart Card Chip
 - EAL 4+ (CNITSEC)
 - NIST CAVP/FIPS approved hardware implementation of
 - RSA1024
 - RSA2048
 - AES-256
 - 3DES
 - RNG
- Memory Protection
 - Bus/Memory encryption
 - Memory access control and protection
- Secured against DPA/SPA attacks
- Secure channel with H-Token Middleware

Integrated Smart Card Reader

- Supports ISO 7816 Class A, B and AB cards
- ISO/IEC 7810 ID-1 card slot
- Supports T=0 and T=1 protocol
- Secure PIN entry using the integrated keypad

Interfaces

- Secure Integrated Display
 - 2" TFT LCD
 - 176 x 220 (RGB)
 - 262K Colors
 - Controlled by internal Smart Card
- Secure Integrated Keypad
 - Secure PIN entry
 - Controlled by internal Smart Card
 - Two dedicated physical keys for CONFIRM and CANCEL
 - Ten physical keys for numbers, letters and positioning

External Smart Card API

- Virtual CCID API for sending APDUs directly
- PKCS#11 v2.20 (available upon request)
- User-level PC/SC driver (available upon request)

Operating System Support

Windows XP SP2	OSX 10.5
Windows Vista	OSX 10.6
Windows 7	OSX 10.7
Windows 8	OSX 10.8

Certifications

USB 2.0
CE
FCC
RoHS

Hardware Specifications

Size	111mm x 48mm x 11mm
Weight	70g
Display	2" TFT LCD
Display Resolution	176 x 220
Display Colors	262K
Operation Temperature	0°C - 40°C
Storage Temperature	-10°C - 70°C
Operation Humidity	30% - 80%
Storage Humidity	20% - 93% (40°C)
Sequential Read Rate	8 MiB/s
Sequential Write Rate	5 MiB/s
Memory Endurance	5000 Program/Erase Cycles
Data Retention	JEDEC compliant