





V-Series fingerprint readers are field-proven and widely deployed, authenticating over one billion ATM and teller transactions per year.

USE CASES:

- ATMs second factor or PIN replacement
- **Tellers** confirm customer and teller identities
- High-value transactions wire transfers, portfolio management,
 B2B payments, secure web portal access
- Government benefits pension payments, public healthcare access

TRUSTED AND SECURE FINGERPRINT AUTHENTICATION

- Establishes Trust in Transactions Device enables secure communications between
 the sensor and a centralized account management system, ensuring that only
 authorized users gain access.
- Encrypts Sensitive Data Cryptographic toolkit provides data security throughout sensitive transactions, preventing man-in-the-middle and replay attacks.
- Resists Tampering Cryptographic keys and other data stored on the device are
 protected by active hardware tamper detection and response.
- Provides Best Available Biometric Performance Patented Lumidigm multispectral imaging technology leads the industry in real world fingerprint authentication performance.
- **Prevents Fraudulent Verification Attempts** Award-winning liveness detection reliably distinguishes between fake and legitimate biometric characteristics.

HID Global's Lumidigm® V-Series V4xx
Fingerprint Sensors and Modules combine
world-renowned Lumidigm biometric
performance with data encryption, tamper
detection/response, and key management
for trusted user authentication. Designed
to simplify transactions for users while
eliminating fraud for financial institutions,
the V4xx provides convenient and reliable
biometric authentication in solutions requiring
end-to-end security in transactions.

New to the V-Series, the cryptographic toolkit provides a broad set of tools that allow an organization to secure data transmissions. The V4xx encrypts sensitive data for transactional security, preventing man-in-the-middle and replay attacks using mutual authentication between the host and the sensor. The tamper response capability on the V4xx detects and resists physical tampering of cryptographic keys and other data stored on the device. Encrypted and authenticated firmware updates prevent malicious code loading.

The V4xx offers exclusive multispectral imaging and best-in-class liveness detection that leverages the industry's best-performing fingerprint sensor platform. Known for its ability to provide a quick and easy user experience while reducing the opportunity for fraud, HID Global's Lumidigm technology gathers biometric data from the surface and subsurface of the finger to provide reliable, real world biometric authentication in any environment and with any user population. Strong, field-updatable liveness detection ensures that the person making the transaction is who they claim to be.

The V4xx supports multiple standard cryptography transaction models or can be customized for a proprietary, customerspecific solution. With flexible deployment options, the V4xx will reduce fraud and restore trust in transactions.

Lumidigm* V4xx FEATURES:

- Cryptographic toolkit with symmetric/ algorithms, hashing functions, random number generation, and digital signature generation/verification.
- Physical tamper resistance, detection and
- Per-device encryption keys that can be remotely updated.
- Mutual authentication between the host and the sensor.
- Encrypted and authenticated firmware updates.
- Lumidigm multispectral fingerprint imaging technology.
- State-of-the-art liveness detection.

DEPLOYMENT OPTIONS INCLUDE:

- Unlocked enables integration with existing V3xx installations, allowing crypto features to be activated later.
- cryptographic transaction models.
- Customized allows a proprietary or customer-specific cryptographic transaction model and requires



SPECIFICATIONS

Technology Patented Lumidigm optical multispectral imaging		Lumidigm® V4xx
Platen area O.7" x 1.1" (17.8mm x 27.9mm) ellipse, durable, chemical resistant glass (no coatings to wear out)		FINGERPRINT IMAGING SYSTEM
Platen area O.7" x 1." (17.8mm x 27.9mm) ellipse; durable, chemical resistant glass (no coatings to wear out) BIOMETRIC FUNCTIONS Image out ANSI 378 and ISO 19794-2 compliant (MINEX certified) Score or verification (1:1) ANSI 378 and ISO 19794-2 template inputs supported Liveness detection Liveness detection Latent protection Physical tamper protection Encapsulated electronics, tamper detection switches, tamper label, secure memory zeroization and other features. AES 128/192/256, TDES 64/128/192, RSA 1024/2048/4096, PKCS v1.5, v2.1 digital signature support, SHA-1/256/384/512, HMAC (variable key size), random number generator, unique device identifers, remote and factory key loading support. Finger placement to image Finger placement to template / score Finger placement to template / score Ingress protection at platen Ingress protection at platen Temperature (operating, with enclosure) Humidity (operating, with enclosure) ESD Immunity ESD Immunity ESD Immunity ESD Immunity Finger placement supported Windows 7 / 7 Embedded (32/64 bit) Windows 7 / 7 Embedded (32/64 bi	Technology	Patented Lumidigm optical multispectral imaging
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POWER SUPPLY REQUIREMENTS Supply current — operational +5 VDC 500 mA (peak)	Overall dimensions	
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		POWER SUPPLY REQUIREMENTS
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	Supply current — idle	+5 VDC 100 mA (typical)
STANDARDS COMPLIANCE		
Interoperability ANSI 378, ISO 19794-2:2005, ANSI 381, ISO 19794-4:2005, NFIQ compliant, MINEX-certified algorithm	Interoperability	ANSI 378, ISO 19794-2:2005, ANSI 381, ISO 19794-4:2005, NFIQ compliant, MINEX-certified algorithm
Device certifications CE, FCC Part 15 Class B, EN 60950, IEC 62471, RoHS, DEA EPCS, Certified support for thin clients, FBI WSQ, CTI (Brazil)	Device certifications	CE, FCC Part 15 Class B, EN 60950, IEC 62471, RoHS, DEA EPCS, Certified support for thin clients, FBI WSQ, CTI (Brazil)
MINIMUM SYSTEM REQUIREMENTS		MINIMUM SYSTEM REQUIREMENTS
Interface USB 2.0 High Speed	Interface	USB 2.0 High Speed

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