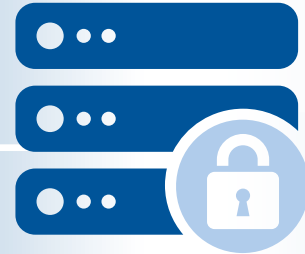**HID**®

Lumidigm® Secure Line
Secure Integration Kit

Markets
- Banking
- Education
- Finance
- Gaming
- Government
- Healthcare
- Hospitality
- Retail
- Transportation

HID SECURE ENDPOINTS – STOPPING CYBER THREATS AND BREACHES

- **Protect Your Data Assets –** Prevent cyber criminals from gaining unauthorized access to your networks and intellectual property
- **Protect Your Brand –** Prevent brand damage and lost customers from public and humiliating data breaches
- **Protect Your Profits –** Prevent financial loss from theft, ransom and reparations to third parties
- **Protect Your Business -** Prevent downed networks resulting in expensive recovery costs, lost productivity and lost revenues

You need a means to protect the transmission of sensitive and confidential information. Cryptography is the key to secure transactions by ensuring data confidentiality, data integrity, user authentication and non-repudiation. Without a secure endpoint, cyber criminals could steal data, alter data and gain access to your networks.

By supporting key management and today's most popular cipher algorithms the HID Secure Integration Kit makes safe electronic transmissions possible. The HID Secure Integration Kit turns your biometric reader into a secure endpoint. All the data transmitted between the biometric reader and your network is encrypted ensuring the security of your transactions. The HID Secure Integration Kit allows you to have confidence in your electronic transactions.

Fingerprint Readers	V420-NC-01	V421-NC-01	M420-NC-01	M421-NC-01
Integration Kit	V42X-SW-HYB02		M42X-SW-HYB02	
BIOMETRIC FUNCTIONS				
Technology	HID Patented Lumidigm® Multispectral Imaging (MSI)			
Template Extractor and Matcher	MINEX III certified			
Output Image Resolution / Bit Depth	500 dpi / 8-bit, 256 grayscale			
Image Output Format	Uncompressed or WSQ compressed images (FBI Certified)			
Template Output Format	ANSI 378 / ISO 19794-2 / ISO-19784 (MINEX III certified)			
Match-on-Device	ANSI 378 / ISO 19794-2 Template Inputs			
Image Acquisition	Structured Image Acquisition (SIA) for Enhanced Speed, Ambient Light Rejection, and Finger Position Qualification			
SECURITY FEATURES				
Presentation Attack Detection (PAD) / Live Finger Detection (LFD)	ISO/IEC 30107-3, Level 1 Presentation Attack Detection (PAD) certified Multispectral Imaging (MSI), Live Finger Detection (LFD)			
Physical Tamper Protection	Encrypted firmware updates Secure element with active key erase			
Cryptography	AES 128/256, TDES 2/3 Key, SHA-256, RSA-2048			
Number of user symmetric keys	10			
Unique Static ID	64 Bit			
Deterministic Random Bit Generator (DRBG)	NIST CAVP Certified			
TRANSACTION MODEL SUPPORT				
Factory Key Injection	Supported			
Master/Slave Session				
Remote Key Load (RKL)				
INTERFACE				
USB	USB 2.0 high speed (480 Mbps)			
Operating Systems	Windows 7/10; Linux x86/x64			
CERTIFICATIONS				
FIPS 140-2 CAVP Certifications; FBI Certified WSQ Compression; ISO/IEC 30107-3 Presentation Attack Detection Level 1; MINEX III				

The following cryptographic algorithms are compliant and registered with the NIST CAVP (Cryptographic Algorithm Validation Program).
https://csrc.nist.gov/projects/cryptographic-algorithm-validation-program

Cipher Algorithm	Description	Document	CAVP Validation Number
AES	**Advanced Encryption Standard** Modes: ECB, CBC, CTR, GCM, CMAC / Key Sizes 128, 192, 256 bits	FIPS 197 SP800-38A	#3970
TDES	**Triple-DES (TDES/DES)** Modes: ECB, CBC / 2 and 3 Key TDES	SP800-67 SP800-38A	#2177
SHS	**Secure Hash Standard** SHA (1, 224, 256, 384, 512)	FIPS 180-4	#3273
DRBG	**Deterministic Random Bit Generator** AES Block Cipher Counter Mode (CTR DRBG) Prediction Resistance Enabled Independent Dual Hardware RBG Entropy Sources	SP800-90A	#2587
RSA	**Rivest Shamir Adleman** Key Sizes 1024b, 2048b, 3072b PKCS #1 V1.5 KEY (Gen), RSA Sig (Ver)(1024), RSA (Gen, Ver) (2048 3072), SHA (1,224,256,384,512)	FIPS 186-3	#2029

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