

Reader Specifications

Assurance Level¹

	Level 1	Level 2	Level 3	Level 4
AUTHENTICATION FACTORS	SOME	SOME PLUS	HIGH	VERY HIGH
1-FACTOR (Credential Only)				
CONTACT (EntryPoint™)	74-01-1001			
CONTACTLESS (EntryPoint™)	74-01-3001			
CONTACTLESS w/ PKI CHALLENGE (CAK) (TrustPoint™)		74-01-4000		
DUAL INTERFACE (EntryPoint™)	74-01-2002			
DUAL INTERFACE w/ PKI CHALLENGE (CAK) (TrustPoint™)		74-01-4012		
2-FACTOR (Credential + Pin or PIN)				
CONTACTLESS + Pin to System (EntryPoint™) (2)	74-01-3002			
CONTACTLESS + Pin to SYSTEM w/ PKI CHALLENGE (TrustPoint™) (2)		74-01-4002		
CONTACT + PIN (EntryPoint™)	74-01-1002			
CONTACT + PIN w/ PKI CHALLENGE (PAK) (TrustPoint™)			74-01-4001	
DUAL INTERFACE: Contactless Mode w/ Pin to SYSTEM (EntryPoint™) (2)	74-01-2003			
DUAL INTERFACE: Contact Mode w/ PIN to CARD (EntryPoint™)	74-01-2003			
DUAL INTERFACE: Contactless Mode w/ CAK CHALLENGE (TrustPoint™)		74-01-4003		
DUAL INTERFACE: Contact Mode w/ PIN to CARD w/ PKI CHALLENGE (TrustPoint™)			74-01-4003	
3-FACTOR (Credential + PIN + BIO)				
DUAL INTERFACE + PIN + BIO (SURFACE MOUNT) (3)		71-02-2222		
DUAL INTERFACE + PIN + BIO w/ PKI CHALLENGE (SURFACE MOUNT) (3)				71-02-3222
STANDARDS SUPPORTED				
	<ul style="list-style-type: none"> • ISO 7816 Card-to-Reader Interface • ISO 14443 Contactless Card-to-Reader Interface • FIPS-201 • NIST 800-76 Biometric Data for PIV • NIST 800-96 Cryptographic Algorithms • NIST 800-116 (Guidance for Use of PIV in PACS) 			
SMART CARD CREDENTIAL SUPPORT				
	<ul style="list-style-type: none"> • CAC End Point • PIV, TWIC, FRAC, PIV-I (Open Standard) • IDFACTORS Crypto ID 			
LOGICAL & CARD READ PERFORMANCE				
	<ul style="list-style-type: none"> • T=0, T=1 Contact Interface • Type A and Type B Contactless Interface • Contactless Read Range: 95+% at 1.5 inches (3.8 cm) • Maximum Read Range: less than 4 inches (10 cm) • Supports Accelerated Transmission Bit Rates 106, 212 and 424 Kbits per second • Default Wiegand format for FASC-N as defined in NIST 800-116 (Agency Code, System Code, Credential Number, Issue Code and Series Issue) 			
CRYPTOGRAPHIC ALGORITHM SUPPORT				
	<ul style="list-style-type: none"> •RSA-1024 •RSA-2048 •ECC-256 •AES 128 & 256 •3DES •SHA-1 •SHA-2 			

WIEGAND & OSDP OUTPUT SUPPORT

- Wiegand 48 Bit • 56 Bit • 64 Bit • 75 Bit • 128 Bit • 200 Bit
- Contact factory for additional Wiegand format support
- OSDP

PHYSICAL

- High impact weather resistant polycarbonate
- 1 & 2-Factor Dimensions: 9.50" high x 5.00" wide x 2.75" deep
- 3-Factor Dimensions:
- Smart Card Connector rated to 500,000 insertions. Includes protective Shutter to resist rain & insertion of foreign objects.
- BIO Scanner: Secugen (FIPS-201 Approved)
- Die Cast Metal Keypad
- Lighted Keypad

USER I/O

- 2-Factor: Red, Yellow & Green LED's
- Audible Speaker for Keypad (Configurable)
- 3-Factor: High Intensity Red LED Display (2 line 16 Character)

ENVIRONMENTAL

- Indoor or Outdoor
- -25 F to +130 F (-32 C to + 66 C)
- UL rain tested design
- 95% relative humidity (non-condensing)
- Weatherized shield recommended for outdoor installations

ACCESS SYSTEM INTEGRATION

- Cisco •Quintron ••Honeywell Vindicator
- AMAG •Genetec •Lenel •Software House
- Andover •Galaxy •Sielox
- Call Factory for Other System Integrations

READER I/O PORTS

- Access System: RJ-45 & Standard Terminal Block
- Programming: USB Connector (Printer Type Cable)

MODE CONTROL

- 2-Factor Readers: 1-Factor to 2-Factor Mode controlled by LED2 Line switched from Panel
- 3-Factor Readers: 1-Factor to 2-Factor & 3-Factor Mode is controlled by LED2 Line and 1 AUX relay from panel

ELECTRICAL

- Input: 12 - 18 Volt DC; 350 mA @ 12 VDC

CONFIGURABLE PERFORMANCE FEATURES

- Audible Keypad ON/OFF Control • LED Flashing Mode • Duress Alarm
- PIN to Card or Pin to System • Multiple Output Formats based on Card Type

INSTALLATION

- 1 & 2-Factor Readers: Mounting Plate Included (select 4 screws appropriate for wall material) or Single-Gang Wall Box
- 3-Factor Readers: Stainless Steel Mounting Plate Included (select 4 screws appropriate for wall material) or Double-Gang Wall Box. Integrated 1/2" Conduit receiving port eliminates need for Condit Box.

NOTES

- (1) ASSUARANCE LEVEL from OMB 04-04 & NIST 800-116 (1)
 - Level 1 = Little or Some confidence in the asserted identity
 - Level 2 = Some Plus confidence in the asserted identity
 - Level 3 = High Confidence in the asserted identity
 - Level 4 = Very High Confidence in the asserted identity
- (2) Pin to System is not a recognized Use Case by OMB, FISMA, NIST or FICAM
- (3) BIO match requires Contact Interface to enter PIN for 3-Factor Authentication

DEFINITIONS

PIN: Indicates PIN is Sent to the Credential in Contact Mode per FIPS-201 and NIST 800-116 Guidance

Pin: Indicates Pin is sent to System Controller in Contactless Mode (Not Recognized by Federal Guidance). It should be noted that the User's PIN to credential is personal information and must not be stored in any database including a PACS. This means that a Pin must be different than the User's PIN for the credential which introduces multiple pins for the User to remember.

CAK: Card Authentication Key Challenge - Does not Require Pin Entry and can be Contactless or Contact

PAK: Personal Authentication Key Challenge - Requires PIN Entry in Contact Mode to Activate Private Key