Contactless Readers for PIV Solutions

MEETS NIST ASSURANCE-LEVEL REQUIREMENTS FOR THESE AREAS:

"Unrestricted" Areas	"Controlled" Areas	"Limited" Areas	"Exclusion" Areas

CONTACTLESS READERS FOR "CONTROLLED" AREAS ENABLE HIGH SECURITY, INTEROPERABILITY AND COMPLIANCE

- **Part of an integrated solution from a single, trusted provider** – Enable FIPS 201 compliance per NIST SP 800-116 guidelines and the TWIC Reader Specification.

- **Contactless reader solutions for "Controlled" security areas** – Meets NIST's "Controlled" security area assurance-level requirements with a single-factor authentication.

- **Support multiple card types** – Works with PIV, PIV-I, CAC, CIV (a.k.a., PIV-C), TWIC, FRAC, iCLASS® and HID Prox® cards for easy, phased transitions from legacy technology to new PKI-enabled smart cards. .

HID Global's pivCLASS Government Solutions portfolio enables facilities to upgrade their existing physical access control system (PACS) to achieve FIPS 201 compliance.

The PIV-enabled contactless readers and their proximity – enabled versions deliver the "Controlled" assurance level defined in the National Institute of Standards and Technology (NIST) SP 800-116 guidelines when used with the pivCLASS Authentication Module (PAM) to perform a single-factor authentication check.

CHUID + VIS Authentication – The system tests the signature on the PIV Card Holder Unique IDentifier (CHUID) data object. The CHUID signature check helps verify that the card is authentic (came from a valid issuer) and has integrity (has not been altered).

Because the CHUID is a "free read" and will be transmitted unencrypted to any reader, it could be possible for perpetrators to capture a PIV card's CHUID and create a counterfeit card. However, the required visual check (VIS) of the card secures against this threat by making it possible to identify cards that have been counterfeited or altered.*

CAK Authentication – The full duplex version of these contactless PIV-enabled readers work with the PAM to perform a PKI challenge-response test in addition to a signature check to validate the card authentication key (CAK). The challenge-response test helps verify that the public key in the card authentication certificate is bound to the private key on the card. This CAK authentication secures against cards that have been counterfeited, altered, copied or cloned. The half duplex version of these readers supports the OSDP protocol to half duplex authentication modules.

HID Readers for PIV Solutions are guaranteed to meet the stringent specifications for operation, reliability and interoperability with other Genuine HID™ products.

ADDITIONAL PRODUCT FEATURES:

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* Per SP 800-116, to achieve "Controlled" assurance, the CHUID read must be combined with a visual check (VIS) of the identification card.

HID

Model Number	Reader Series	HID Signo™	HID pivCLASS®
General Information			
	Base Model & Form Factors	20 / 20K- mullion 40 / 40K - wallswitch	R10 / RP10 - mullion R40 / RP40 / RK40 / RPK40 - wallswitch
Credential Technology	13.56 MHz Credential Compatibility	PKI-Based FIPS-201 Credentials including PIV, PIV-I, CIV, CAC, TWIC and FRAC Secure Identity Object (SIO) on iCLASS Seos, iCLASS SE, MIFARE DESFire EV1 and MIFARE Classic standard iCLASS Access Control Application ISO14443A (MIFARE) CSN	
	125 kHz Credential Compatibility	HID Proximity, EM4102 Proximity, AWID	
Device Characteristics	Mounting	Mullion, single or double-gang switch box	
	Connector Type	Pigtail Cable – 18 inch (0.5 m) Terminal Block – flush mount	Pigtail Cable – 18 inch (0.5 m) Terminal Block - protruding mount
	Color	Black Bezel / Silver Trim (Black Trim available as an accessory)	Black Bezel Only
	Material Housing	Polycarbonate – UL94 V0 rated	
	Operating Voltage Range	12 VDC	5 - 16 VDC
	Current Draw (max)	250 mA	200 mA
	Device Input & Output	Input: Tri-color LED, Buzzer, Hold Output: Tamper Relay	Input: Tri-color LED, Buzzer, Hold Output: Open Collector – TTL
	Operating Temperature Range	-35° C to +66° C (-31° F to +150° F) 0% to 95% non-condensing	
	Storage Temperature Range	-40° C to +85° C (-40° F to +185° F)	-55° C to +85° C (-67° F to +185° F)
	Environmental Rating	UL294 Outdoor and Indoor rated	
	Ingress Protection	IP65	IP55; IP65 if installed with optional gasket (IP65GSKT)
	Controller Communication	Half duplex supports OSDP protocol and HID pivCLASS protocol. Wiegand, Clock & Data integrated into base hardware.	Full duplex supports HID pivCLASS protocol, Half duplex supports OSDP and HID pivCLASS protocol . Wiegand, Clock & Data integrated into base hardware.
	Cable Distance 1	RS485 for communication (500 ft [152m], 22AWG), (300 ft [91m], 24AWG); two wires for power (500 ft [152m], 22AWG)	
Device Features	Device Management	HID Reader Manager, OSDP configuration	HID reader configuration cards
	Intelligent Power Mode	Yes	
	Velocity Attack Detection	Yes	
	Metal Environment Optimization	Yes – surface detection feature automatically calibrates read range	No
	FIPS-201 Outputs	Wiegand and OSDP: CHUID & UUID outputs per reader configuration. CAK, SM Auth, High Assurance Authentication and PKI supported when connected to a pivCLASS Authentication Module (PAM) or controller using HID pivCLASS Embedded Authentication.	
Certifications and Terms	Certifications	FIPS-201 & FICAM Certified 2 , UL294, FCC, CB, CE, - see www.hidglobal.com/certifications	
	Warranty	Limited Lifetime	