

pivCLASS® Readers for FIPS 201

For the following security areas per NIST SP 800-116:

- “Controlled” Areas
- “Limited” Areas
- “Exclusion” Areas



pivCLASS® READERS FOR “LIMITED” SECURITY AREAS ENABLE HIGH SECURITY, INTEROPERABILITY AND COMPLIANCE

- **Part of an integrated solution from a single, trusted provider** – Enables FIPS 201 compliance and follows NIST SP 800-116 guidelines and the TWIC Reader Specification.
- **Contact reader solution for “Limited” security areas** – Meets NIST’s “Limited” security area assurance level requirements with two-factor authentication mode: PIV + PIN.
- **Supports multiple card types** – PIV, PIV-I, CAC, CIV (a.k.a., PIV-C), TWIC and FRAC, as well as iCLASS® and HID Prox cards for easy, phased transitions from legacy technology to new PKI-enabled smart cards.

ADDITIONAL PRODUCT FEATURES:

- Architected for maximum security and affordability. pivCLASS utilizes the pivCLASS® Authentication Module to perform the cryptographic functionality and to pass Wiegand-formatted data to the PACS controller. Locating the critical security operations within the secure perimeter, rather than on the attack side of the door, increases security and reader affordability.
- Up to two pivCLASS readers can connect to a pivCLASS Authentication Module via four-wire RS-485 per reader, typically enabling facilities to re-use much of their existing wiring.
- Available single- and double-gang mountable and have the width of roughly a double-gang device.
- Available with either a pigtail or terminal strip wiring termination.
- User communication provided by LCD, 8-color LED and audio beeper.

HID Global pivCLASS® Government Solutions enable facilities to upgrade their existing physical access control system (PACS) to FIPS 201 compliance.

pivCLASS readers deliver the “Limited” assurance level as defined in NIST SP 800-116. These readers work with the pivCLASS Authentication Module to perform the following two-factor authentication mode:

PIV + PIN – After the cardholder enters his PIN into the pivCLASS reader’s keypad, the pivCLASS reader works with the pivCLASS Authentication Module to enable a “match-on-card” check of the PIN. A PIN match unlocks the card’s PIV Authentication Key certificate so it can be read from the card.

The pivCLASS Authentication Module then performs cryptographic tests to ensure the card’s validity. This includes a signature check of the PIV certificate and a private key

challenge to ensure the public key in the PIV Authentication Certificate is bound to the private key on the card.

This category of pivCLASS readers secures against cards that have been counterfeit, altered, copied, cloned, lost or stolen.

Optionally, the pivCLASS Authentication Module can utilize these readers for the lower-security “Controlled” assurance level that calls for a single-factor CHUID + VIS or CAK authentication mode using the contact or contactless interface. The authentication mode can be dynamically changed from a central location in response to threat level, time of day or day of week.

pivCLASS readers are guaranteed to meet stringent specifications for operation, reliability and interoperability with other Genuine HID™ products.

SPECIFICATIONS



Model Name	RKCL40-P	RPKCL40-P	RMKCL40-P	RMPKCL40-P
Base Part Number	923NPR	923PPR	924PPR	926NPR
Availability	Now		Not available at time of this datasheet's printing. Call for more info.	
Specifications	Final		Preliminary	
Typical Read Range¹	13.56 MHz + Contact FIPS 201 Credentials			
PIV, PIV-I, CIV (PIV-C), CAC, TWIC, FRAC	Uses Contact Interface			
	13.56 MHz Single Technology ID-1 Credentials (Cards) - SIO Data Model			
iCLASS SE	3.4" (8.6 cm)	3.3" (8.4 cm)	3.4" (8.6 cm)	3.3" (8.4 cm)
MIFARE DESFire EV1 SE	1.6" (4.1 cm)	1.4" (3.6 cm)	1.6" (4.1 cm)	1.4" (3.6 cm)
MIFARE Classic SE	2.9" (7.4 cm)	2.9" (7.4 cm)	2.9" (7.4 cm)	2.9" (7.4 cm)
	13.56 MHz Single Technology Tags/Fobs - SIO Data Model			
iCLASS SE	1.4" (3.6 cm)	1.4" (3.6 cm)	1.4" (3.6 cm)	1.4" (3.6 cm)
MIFARE Classic SE	0.5" (1.3 cm)	0.7" (1.8 cm)	0.5" (1.3 cm)	0.7" (1.8 cm)
	125 kHz Single Technology ID-1 Credentials (Cards) - Respective Prox Data Model			
HID Prox / AWID	N/A	1.4" (3.6 cm)	N/A	1.4" (3.6 cm)
Indala Prox	N/A	0.8" (2.0 cm)	N/A	0.8" (2.0 cm)
EM4102	N/A	0.8" (2.0 cm)	N/A	0.8" (2.0 cm)
Mounting	Double-gang size; designed to mount on double (preferable for stable wall mount) or single gang switch box			
Color	Black			
Keypad	Yes (illuminated, 4 x 3)			
Magstripe	No		Yes	
Dimensions	4.8" x 6.1" x 1.2" (12.2 x 15.6 x 3.0 cm)		4.8" x 7.4" x 1.2" (12.2 x 18.9 x 3.0 cm)	
Product Weight (Pigtail)	14.0 oz. (396 g)	14.0 oz. (398 g)	16.0 oz. (454 g)	16.0 oz. (454 g)
Product Weight (Terminal Strip)	12.9 oz. (366 g)	13.0 oz. (368 g)	14.9 oz. (422 g)	15.0 oz. (425 g)
Operating Voltage Range	+12VDC			
Current Draw - Normal Standby Current²	170 mA		200 mA	
Current Draw - Peak²	200 mA		230 mA	
Operating Temperature	-4° to 149° F (-20° to 65° C)			
Operating Humidity	5% to 95% relative humidity non-condensing			
Environmental	Indoor / Outdoor; IP55			
Transmit Frequency	13.56 MHz	13.56 MHz & 125 kHz	13.56 MHz	13.56 MHz & 125 kHz
Contact Card Compatibility	PKI-based FIPS-201 credentials including PIV, PIV-I, CIV (PIV-C), CAC, TWIC and FRAC – PIV + PIN			
13.56 MHz Card Compatibility	Secure Identity Object (SIO) on iCLASS SE, SE for MIFARE DESFire EV1, and SE for MIFARE Classic standard iCLASS Access Control Application ISO14443A (MIFARE) CSN			
125 kHz Card Compatibility	N/A	HID Prox, AWID, Indala, EM4102	N/A	HID Prox, AWID, Indala, EM4102
System Requirements	HID pivCLASS Authentication Module (M2000)			
Protocol	HID pivCLASS Protocol			
Cabling, Distance	Six conductor connection per reader: full duplex four-wire RS-485 for communication (500 ft. (150m), 22AWG); two-wires for power (500 ft. (150m), 22AWG)			
Wiring Connection	Pigtail or Terminal Strip			
Certifications³	GSA Approved Products List, UL294 (US & Canada), FCC Certification (US), IC (Canada), CE (EU), C-tick (Australia, New Zealand), SRRC (China), MIC (Korea), NCC (Taiwan), iDA (Singapore), RoHS			
Crypto Processor Hardware Common Criteria Rating	EAL5+			
Housing Material	UL94 Polycarbonate			
UL Ref Number	RKCL40A	RPKCL40A	N/A	N/A
Warranty	18 months			

¹ Typical read range achieved in air. Different types of metal will cause some degradation (typically up to 20%). Use spacers to space product off metal and improve read range if required.

² Measured in accordance with UL294 standards.

³ All preliminary specifications are communicating intended regulatory certifications upon product availability.

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