PHYSICAL ACCESS SOLUTIONS

pivCLASS® Keypad Readers

Meet NIST assurance-level requirements for these areas:

"Unrestricted" Areas | "Controlled" Areas | **"Limited" Areas** | "Exclusion" Areas

KEYPAD READERS FOR "LIMITED" 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.
- **Contact reader solutions for "Limited" security areas** – Meet NIST's "Limited" security area assurance-level requirements with two-factor PIV + PIN authentication.
- **Support multiple card types** – Work with 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, the readers utilize the pivCLASS Authentication Module (PAM) or OSDP-compliant strong authentication controller infrastructure to provide cryptographic functionality and pass Wiegand-formatted data to the PACS controller.
- Up to two pivCLASS readers can connect to a PAM via four-wire RS-485 communication to the reader, typically enabling facilities to reuse much of their existing wiring.
- Connect readers to strong authentication controller infrastructure via two-wire RS-485 OSDP
- Mountable on single- or double-gang boxes with a width of roughly a double-gang device.
- Available with either a pigtail or terminal strip wiring termination.
- Contact interface provides backup for cards with broken antennas.

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

The pivCLASS Keypad Readers (RKCL40 and RPKCL40) deliver the "Limited" assurance level as defined by the National Institute of Standards and Technology (NIST) SP 800-116. The readers work with the pivCLASS Authentication Module (PAM) or OSDP-compliant strong authentication controller infrastructure to perform two authentication checks: PIV + PIN.

PIN: As part of the PIV verification process, the cardholder must first enter a PIN to unlock the card so the PIV certificate can be retrieved. The cardholder entered PIN is matched on-card and then the PAM reads the PIV certificate.

PIV: The pivCLASS system then determines the validity of the PIV card and its certificates using public key cryptography-based authentication. 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 two-factor authentication protects against cards that have been revoked, counterfeited, altered, copied, cloned, lost or stolen.

Optionally, the authentication mode can be changed by the PAM to accommodate lower security requirements when only a single-factor CHUID + VIS or CAK authentication is needed, using either 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 Keypad Readers are guaranteed to meet the stringent specifications for operation, reliability and interoperability with other Genuine HID™ products.

SPECIFICATIONS

Model Name	RKCL40	RPKCL40
Full Duplex (PAM) Base Part Number	923NPR	923PPR
Half Duplex (OSDP) Base Part Number	923NPP	923PPP
13.56 MHz Card 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 Card Compatibility	N/A	HID Prox, AWID, EM4102 Prox
System Requirements	Readers require an HID Global pivCLASS Authentication Module (M2000) or OSDP-compliant FICAM listed controller infrastructure to support FICAM compliance	
Typical Contactless Read Range[1]	FIPS 201 type cards can be read using either the contact or contactless card interface (RKCL40)	
	Contactless Interface PIV, PIV-I, CIV, CAC, TWIC and FRAC	
FIPS-201 type cards	2.0″ (5 cm)	1.2″ (3 cm)
	13.56 MHz Single Technology ID-1 Cards – SIO Data Model	
iCLASS Seos	2.0″ (5 cm)	1.6″ (4 cm)
iCLASS	5.5″ (14 cm)	4.7″ (12 cm)
MIFARE DESFire EV1	2.0″ (5 cm)	1.6″ (4 cm)
MIFARE Classic	5.1″ (13 cm)	4.3″ (11 cm)
	125 kHz Single Technology ID-1 Cards	
HID Prox / AWID	N/A	2.8″ (7 cm)
EM4102 Prox	N/A	3.1″ (8 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)	
Dimensions	4.8″ x 6.1″ x 1.2″ (12.2 cm x 15.6 cm x 3.0 cm)	
Product Weight (Pigtail)	12.9 oz (366g)	13.0 oz (368 g)
Product Weight (Terminal Strip)	12.9 oz (366 g)	13.0 oz (368 g)
Operating Voltage Range	+12VDC	
Current Draw - Standby Average[2]	150 mA	
Current Draw - Maximum Average[3]	185 mA	
Current Draw - Peak[4]	250 mA	
Operating Temperature	-4° to 122° F (-20° to 50° C)	
Operating Humidity	5% to 95% relative humidity non-condensing	
Storage Temperature	-67˚ to 185˚ F (-55˚ to 85˚ C)	
Operating Environmental	Indoor / Outdoor; IP55	
Transmit Frequency	13.56 MHz	13.56 MHz & 125 kHz
Protocol	HID pivCLASS Protocol, OSDP	
Cable Distance[5]	RS485 for communication (500 ft [152m], 22AWG), (300 ft [91m], 24AWG); two wires for power (500 ft [152m], 22AWG)	
Wiring Connection	Pigtail or Terminal Strip	
Certifications	FICAM tested[6], UL294 Outdoor (U.S. & Canada), FCC Certification (U.S.), RoHS2	
Housing Material	UL94 Polycarbonate	
UL Ref Number	RKCL40E	RPKCL40E
Warranty	Warranted against defects in materials and workmanship (see complete warranty policy for details)	

1 Read range listed is statistical mean rounded to nearest whole centimeter. HID Global testing occurs in open air. Some environmental conditions, including metallic mounting surface, can significantly degrade read range and performance; plastic or ferrite spacers are recommended to improve performance on metallic mounting surfaces. Read ranges for FIPS 201 type cards will vary depending upon the card manufacturer.

2 Standby Average - RMS current draw without a card in the RF field.

3 Maximum Average - RMS current draw during continuous PIV card reads.

4 Peak - highest instantaneous current draw during RF communication.

5 For cable lengths when used in Wiegand mode see "pivCLASS Reader Installation Guide" PLT-01134/

6 FICAM tested as part of complete physical access control systems.

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