pivCLASS® RKCLB40, RPKCLB40 Readers for FIPS 201

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

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

pivCLASS® READERS FOR "EXCLUSION" SECURITY AREAS ENABLE HIGH SECURITY, INTEROPERABILITY AND COMPLIANCE

- **Part of an integrated solution from a single, trusted provider** – Enables FIPS 201 compliance per NIST SP 800-116 guidelines and the TWIC Reader Specification.
- **Contact biometric (BIO) reader solution for "Exclusion" security areas** – Meets NIST's "Exclusion" assurance level requirements with three-factor PIV + PIN + BIO authentication.
- **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 provide 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 communication to the reader, typically enabling facilities to re-use much of their existing wiring.
- Mountable on single- and double-gang boxes with a width of roughly a double-gang device.
- Available with a either a pigtail or terminal strip wiring termination.
- Supports CHUID, CAK, PKI+PIN and PKI+PIN+BIO authentication modes which can be dynamically changed from a central location.

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

pivCLASS readers deliver the "Exclusion" assurance level as defined in NIST SP 800-116. These readers work with the pivCLASS Authentication Module (PAM) to perform the following three-factor authentication checks:

PIV + PIN + BIO – The pivCLASS system first determines the validity of the PIV card and its certificates using public key cryptography-based authentication. For instance, pivCLASS verifies the digital signature and performs path validation on the PIV authentication certificate and the biometric template data object. As part of this process the cardholder must enter a PIN to unlock the card in order to retrieve the PIV certificate and biometric template.

After the card and its contents have been validated, the pivCLASS system then does a comparison of the reference biometric fingerprint template (stored on the card) with the sample biometric (the live finger). If successful, three factors of authentication have been achieved, and the pivCLASS system passes the appropriate cardholder ID data to the PACS controller for an access decision.

This pivCLASS three-factor authentication secures against cards that have been revoked, counterfeited, altered, copied, cloned, lost, stolen or shared.

Optionally, the pivCLASS Authentication Module can utilize these readers for lower-security assurance level areas. 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	RKCLB40-P	RPKCLB40-P
Base Part Number	924NPR	924PPR
Availability	Not available at this time	
Specifications	Final	
13.56 MHz Card Compatibility	PKI-Based FIPS-201 Credentials including PIV, PIV-I, CIV, CAC, TWIC and FRAQ 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, AWID, EM4102
System Requirements	These readers require HID pivCLASS Authentication Module (M2000) to support FICAM compliance	
Typical Contactless Read Range[1]	FIPS 201 type cards can be read using either the contact or contactless card interface	
	FIPS-201 Type Cards, Contactless Interface[1] PIV, PIV-I, CIV, CAC, TWIC and FRAQ	
	1" (2.5 cm)	
	13.56 MHz iCLASS, DesFIRE and MiFARE Cards	
iCLASS SE	4.5" (11 cm)	
DesFIRE EV1 SE	2" (x 5 cm)	
MiFARE Classic SE	4" (10 cm)	
	125 kHz Proximity Cards HID Prox / AMID / EM4102	
	N/A	2.5" (6.4 cm)
	N/A	3" (7.6 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)	17.0 oz (484 g)	17.1 oz (468 g)
Product Weight (Terminal Strip)	16.0 oz (454 g)	16.0 oz (456g)
Operating Voltage Range	+12VDC	
Current Draw - Normal Standby Current[3]	165 mA	
Current Draw - Maximum Average[4]	215 mA	
Current Draw - Peak[5]	275 mA	
Operating Temperature	14º to 122º F (-10º to 50º C)	
Operating Humidity	5% to 95% relative humidity non-condensing	
Storage Temperature	-67º to 185º F (-55º to 85º C)	
Environmental	Indoor; IP55	
Fingerprint Biometric Sensor Type	Optical	
Transmit Frequency	13.56 MHz	13.56 MHz & 125 kHz
Protocol	HID pivCLASS Protocol, CoreStreet Reader Protocol	
Cable Distance[6]	Six conductor connection per reader: full duplex four-wire 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[7], UL294 (US & Canada), FCC Certification (US), RoHS2	
Housing Material	UL94 Polycarbonate	
UL Ref Number	RKCL40E	RPKCL40E
Warranty	Warranted against defects in materials and workmanship for life. (See complete warranty policy for details.)	

1 Typical read range 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. Read ranges for FIPS 201 type cards will vary depending upon the card manufacturer.
2 Measured using the SIO Data Model
3 Standby Average - RMS current draw without a card in the RF field
4 Maximum Average - RMS current draw during continuous PIV card reads
5 Peak - highest instantaneous current draw during RF communication
6 For cable lengths when used in Wiegand mode see *"pivCLASS Reader Installation Guide"* PLT-01134
7 FICAM tested as part of complete physical access control systems

hidglobal.com

North America: +1 949 732 2000
Toll Free: 1 800 237 7769
Europe, Middle East, Africa: +49 6123 791 0
Asia Pacific: +852 3160 9800
Latin America: +52 55 5081 1650

2014-02-21-hid-pivclass-fips-readers-exclusion-ds-en PLT-00414

An ASSA ABLOY Group brand

ASSA ABLOY