PHYSICAL ACCESS SOLUTIONS

pivCLASS® Biometric Reader

Meets NIST assurance-level requirements for these areas:

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

BIOMETRIC READER FOR "EXCLUSION" AREAS FOR HIGH SECURITY, INTEROPERABILITY AND COMPLIANCE

- **Part of an integrated solution from a single, trusted provider** – Enables 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** – Works with PIV, PIV-I, CAC, CIV (a.k.a., PIV-C), TWIC, FRAC and iCLASS® cards for easy, phased transitions from legacy technology to new PKI-enabled smart cards.

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

The pivCLASS Biometric Reader (RKCLB40) delivers the "Exclusion" assurance level defined in the National Institute of Standards and Technology (NIST) SP 800-116 guidelines. This reader works with the pivCLASS Authentication Module (PAM) or pivCLASS Embedded Authentication to perform three authentication checks: **PIV + PIN + BIO**.

PIV: The pivCLASS system first determines the validity of the PIV card and its certificates using public key cryptography-based authentication. For instance, the system verifies the digital signature and performs path validation on the PIV authentication certificate and the biometric template data object.

PIN: As part of the PIV verification process, the cardholder must enter a PIN to unlock the card in order to retrieve the PIV certificate and biometric template.

BIO: After the card and its contents have been validated, the pivCLASS system compares the reference biometric template stored on the card with the biometric sample from the live finger.

If successful, three factors of authentication have been achieved. Only then will the pivCLASS system pass the appropriate cardholder ID data to the PACS controller for an access decision.

This three-factor authentication protects against cards that have been revoked, counterfeited, altered, copied, cloned, lost, stolen or shared.

Optionally, the reader's authentication mode can be lowered by the PAM or pivCLASS Embedded Authentication to accommodate areas with reduced security requirements. This authentication mode can be dynamically changed from a central location in response to threat level, time of day or day of week.

The pivCLASS Biometric Reader is guaranteed to meet the stringent specifications for operation, reliability and interoperability with other Genuine HID® products.

ADDITIONAL PRODUCT FEATURES:

- Architected for maximum security and affordability, the reader utilizes the pivCLASS Authentication Module (PAM) or pivCLASS Embedded Authentication to provide cryptographic functionality and to pass 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 PAM via four-wire RS-485 communication to the reader, or pivCLASS HDX readers can be connected to Mercury LP4502 controllers and supported modules for pivCLASS Embedded Authentication via two-wire RS-485.
- Mountable on single- and double-gang boxes with a width of roughly a double-gang device.
- Available with either a pigtail or terminal strip wiring termination.
- Supports CHUID, CAK, PKI + PIN and PIV + PIN + BIO authentication modes, which can be dynamically changed from a central location.

SPECIFICATIONS

Model Name	**RKCLB40**
Base Part Number	924NPR / 924NPP
Specifications	Final
13.56 MHz Card Compatibility	PKI-Based FIPS-201 Credentials including PIV, PIV-I, CIV, CAC, TWIC and FRAC
System Requirements	These readers require HID Global's pivCLASS Authentication Module (M2000) or pivCLASS Embedded Authentication in the connected controller to support FICAM compliance
Typical Contactless Read Range[1]	FIPS 201 type cards can be read using either the contact or contactless card interface Biometric authentication only available on the contact interface per FIPS 201
	FIPS 201 Type Cards, Contactless Interface PIV, PIV-I, CIV, CAC, TWIC and FRAC
FIPS-201	2.0" (5 cm)
	13.56 MHz Single Technology ID-1 Cards – SIO Data Model
iCLASS® Seos®	2.0" (5 cm)
iCLASS®	5.5" (14 cm)
MIFARE DESFire EV1	2.0" (5 cm)
MIFARE® Classic	5.1" (13 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)
Product Weight (Terminal Strip)	16.0 oz (454 g)
Operating Voltage Range	+12VDC
Current Draw - Normal Standby Current[2]	165 mA
Current Draw - Maximum Average[3]	215 mA
Current Draw - Peak[4]	300 mA
Operating Temperature	14° to 122° F (-10° to 50° C)
Operating Humidity	5% to 95% relative humidity non-condensing
Storage Temperature	-67° to 185° F (-55° to 85° C)
Environmental Rating	UL 294 and IP55 outdoor ratings
Fingerprint Biometric Sensor Type	Optical
Transmit Frequency	13.56 MHz
Protocol	HID Global pivCLASS Protocol, OSDP (OSDP Transparent Mode required for all data beyond CHUID FASC-n or UUID on OSDP system)
Cable Distance	100 ft (30.5 m) 22 AWG , 500 ft (152 m) 22 AWG. Supported by both HDX and FDX readers. RS-485 HDX = Half Dulpex using 2 communication wires + Power & Ground. Support OSDP and pivCLASS Protocol. RS-485 FDX = Full Duplex using 4 communication wires + Power & Ground. Supports pivCLASS protocol on PAM only.
Wiring Connection	Pigtail or Terminal Strip
Certifications	FICAM tested, UL294 (U.S. & Canada), FCC Certification (U.S.), RoHS2
Housing Material	UL94 Polycarbonate
UL Ref Number	RKCLB40E
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 on 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] FICAM-tested as part of complete physical access control system.

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