

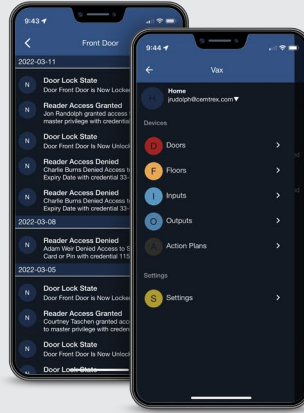


VICON ACCESS CONTROL

Mobile-Ready Proximity Readers, Cards and Credentials



VAX-CRD-MT/VAX-CRD-SD/VAX-PRX-TAG



VAX Mobile Credentials



VAX-PCR-640L
Mounts to Single Gang
Wall Switch Box

VAX-PCR-35L
Mounts to Single Gang
Wall Switch Box

VAX-PCR-35L
Mounts to Mullion

Overview

The VAX-PCR proximity readers function both as a Bluetooth reader, using virtual card credentials on the mobile app, as well as standard proximity readers that work with proximity cards and fobs. The mobile access support offers VAX customers the convenience of using their smartphone (iPhone or Android) instead of cards or fobs. Upon installing the CONEKT® smartphone app, users can scan their own, unique VAX credentials (VAX-BTC) into their phone, allowing them to communicate via Bluetooth Low Energy (BLE) with these readers.

Based on proven contactless digital radio frequency identification (RFID) technology, the readers interface with VAX system by complying with the Wiegand communication protocol or OSDP (Open Supervised Device Protocol), depending on the model ordered. They offer value added features such as MAXSecure™ and ValidID™, that provide increased security of data, and support both sector and card serial number reads (CSN).

Two model types are available. The VAX-PCR-35L is designed to mount to metal doors, window frames (mullions), single gang wall box with switch plate or flat surfaces; the VAX-PCR-640L includes an integrated keypad and is designed to mount to a single gang box or flat surfaces. A variety of proximity card credentials are also available. Refer to Ordering Information table for details on all models.

Product at a Glance

- ▶ Mobile-ready contactless proximity reader
- ▶ Reads standard proximity cards/fobs
- ▶ Long read range (up to 15 ft)
- ▶ Models that support Wiegand or OSDP output interface
- ▶ Mounts to window frames (mullions) or single gang box
- ▶ Mobile credentials stored on smartphone (iPhone or Android) for Bluetooth communication with reader
- ▶ Variety of proximity cards available
- ▶ 125 kHz (proximity); 2.4 GHz (BLE)
- ▶ IP67 rated
- ▶ Powered by 8-14 VDC

Specifications

Proximity Readers

Model	VAX-PCR-35L	VAX-PCR-640L
Technology ¹ :	Proximity and Bluetooth Low Energy (BLE)	
Frequency:	125 kHz (proximity); 2.4 GHz (BLE)	
Read Range ⁵ :	Mobile credentials: Up to 15 ft (4.6 m). Physical credentials: Up to 4 in. (102 mm).	
Interface:	Wiegand (26-bit and custom formats), ABA Track II magnetic stripe (clock and data) or OSDP (Open Supervised Device Protocol), model dependent	
Keypad Output:	Wiegand ⁸ or OSDP ⁷ (model dependent)	
Audio Tone:	Beeper included standard	
LED:	Five state standard (blue, red, green, amber and off)	Four state standard red, green, amber and off)
Technologies Supported:	VAX-BTC Mobile Access Credentials ¹⁰ as well as VAX-CRD-SD, VAX-CRD-MT and VAX-PRX-TAG proximity card/fob credentials ⁹	
Voltage ⁴ :	+8 - 14 VDC; linear power supply recommended	
Current:	60 mA typical; 90 mA peak @12 VDC	
Cabling ⁶ :	24 AWG minimum, multi-conductor stranded with an overall foil shield (ex. Belden 9535 or similar)	
Mounting:	Metal door, window frames (mullions), single gang wall box with switch plate and flat surfaces	Single gang box and flat surfaces
Dimensions:	Mullion: 1.7 (W) x 4.7 (H) x 1.2 (D) in. (43 x 119 x 30 mm) Gang Box: 3.0 (W) x 4.6 (H) x 0.75 (D) in. (76 x 117 x 19 mm)	3.0 (W) x 4.6 (H) x 0.75 (D) in. (76 x 117 x 19 mm)
Color:	NA	Black snap-on cover included
Environmental Installation:	Electronics sealed in weather- and tamper-resistant epoxy potting	
Operating Temperature:	-31° F to 150° F (-35° C to 66° C)	
Certifications:	FCC; ICC; CE; UL Standard 294/ULC 60839-11-1 ² (Wiegand models tested); IP67 ³	

NOTES:

- Optimized for use with devices supporting BLE version 4.2 or higher.
- Carrying the ETL Label and tested by Intertek, conforms to UL Standard 294 and ULC Standard 60839-11-1. Only Wiegand models have been evaluated.
- Independently tested and verified by Intertek.
- Linear power supplies are recommended for best operation.
- Using VAX-CRD-SD with 12 VDC at the reader. Other credentials may be less. Read ranges are further subject to the type of proximity credential or smartphone, as well as the manner in which it is used and the installation and its environment.
- For example, Belden 9535 or similar, supporting the five conductors comprising the physical layer of the Wiegand interface (power, ground, data 0, data 1, and/or beeper and LED). Alternatively, Belden 9539 or similar, for all reader functions. Shielded, twisted pair (Belden 8723 or similar) for OSDP. Contact your access control system manufacturer for their specific requirements.
- OSDP readers are independent models and need to be appended with the suffix "-OSDP" when ordering (Example: VAX-PCR-35L-OSDP).
- 8-Bit Burst or 26-bit Wiegand standard. For 4-Bit Burst and other options, please contact Vicon.
- Examples include, but are not limited to, VAX-CRD-SD, VAX-CRD-MT and VAX-PRX-TAG.
- Conekt Mobile Access Credentials are intended to be supported by the current and preceding versions of Apple® iOS and standard compliant Google Android™ mobile operating software (OS). Custom OS variants may result in a loss of functionality.

Specifications

Proximity Cards

Model	VAX-CRD-SD	VAX-CRD-MT	VAX-PRX-TAG
Technology:	Proximity		
Frequency:	Excitation (125 kHz)		
Read Range:	Up to 4 in. (102 mm)	Up to 4 in. (102 mm)	Up to 3.5 in. (88 mm)
Formats:	Wiegand (26-bit and custom formats), ABA Track II magnetic stripe (clock and data)		
Operation:	Passive (no battery)		
Marking:	Date code and ID		
Type:	Clamshell style	Dye sublimation	Fob style (key tag)
Slot Punch:	Standard vertical slot	Vertical and horizontal indicators	Built-in eyelet
Imaging:	Use a glossy adhesive overlay for color dye sublimation printing or print directly on card	Supports dye sublimation imaging	N/A
Color:	Off white	White	Gray
Dimensions:	2.2x3.4x0.06 in. (56x86x1.5 mm)	2.1x3.4x0.031 in. (53x86x0.79 mm)	1.2x1.5x0.15 in. (30x38x3.8 mm)
Operating Temperature:	-35° F to 122° F (-37° C to 50° C)		

Mobile Credentials

Model	VAX-BTC
Technology:	Bluetooth Low Energy (BLE)
Frequency:	2.4 GHz
Read Range:	Up to 15 ft (4.6 m)
Formats:	Wiegand (26-bit and custom formats)
Operation:	iPhone or Android-based smartphones

Ordering Information

Model Number	Description
VAX-PCR-35L	MOBILE-READY CONTACTLESS PROXIMITY READER; designed to be mounted to metal door and window frames (mullions), single gang box with switch plate or flat surfaces; long-range up to 15-ft reading range; Wiegand protocol
VAX-PCR-35L-OSDP	MOBILE-READY CONTACTLESS PROXIMITY READER; designed to be mounted to metal door and window frames (mullions), single gang box with switch plate or flat surfaces; long-range up to 15-ft reading range; OSDP protocol
VAX-PCR-640L	MOBILE-READY CONTACTLESS PROXIMITY READER; includes integrated keypad; designed to be mounted to single gang box or flat surfaces; long-range up to 15-ft reading range; Wiegand protocol
VAX-PCR-640L-OSDP	MOBILE-READY CONTACTLESS PROXIMITY READER; includes integrated keypad; designed to be mounted to single gang box or flat surfaces; long-range up to 15-ft reading range; OSDP protocol
Credentials and Cards	
VAX-BTC	MOBILE ACCESS CREDENTIAL; stored on iPhone or Android smartphone for communication with mobile-ready readers
VAX-CRD-SD	PROXIMITY CARD; clamshell style; non-graphic
VAX-CRD-MT	PROXIMITY CARD; ISO style; dye sublimation imaging
VAX-PRX-TAG	PROXIMITY FOB; small tag designed to be carried on a key ring

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