



VAX-P403R and VAX-P405R

VAX Vandal-Resistant Contactless Proximity Readers and Credentials/Cards



VAX-P405R
Mounts to Single Gang Wall Box

VAX-P403R
Mounts to Mullion



Overview

These vandal-resistant proximity readers are manufactured from thick polycarbonate material, with epoxy potted electronics and tamperproof screws, making them ideal for installations where more durability is required (e.g., schools, correctional facilities, or sites with heavy machinery). The functionality of these proximity readers is based on standard 125 kHz radio frequency identification (RFID) technology.

The readers interface with Vicon Access Control (VAX) system by complying with the Wiegand communication protocol or OSDP (Open Supervised Device Protocol), depending on the model ordered. They offer value added MAXSecure™, that provides increased security of data, and supports both sector and card serial number reads (CSN).

The VAX-P403R is designed to mount to metal doors, window frames (mullions) or flat surfaces; the VAX-P405R is designed to mount to a single gang box or flat surfaces.

Product at a Glance

- ▶ Vandal-resistant contactless proximity readers
- ▶ Reads standard proximity cards/fobs
- ▶ Read range up to 5 in. (126 mm)
- ▶ Wiegand or OSDP output interface
- ▶ Mounts to door or window frame (mullion) or single gang box
- ▶ Variety of proximity cards available
- ▶ IP67 rated
- ▶ Powered by 5-16 VDC

Specifications

Proximity Readers

Model	VAX-P403R	VAX-P405R
Technology:	Proximity	
Frequency:	125 kHz (proximity)	
Read Range:	Up to 5 in. (126 mm) using VAX-CRD with 12 VDC at the reader	
Interface:	Wiegand (26-bit and custom formats), ABA Track II magnetic stripe (clock and data) or OSDP (Open Supervised Device Protocol); model dependent	
Audio Tone:	Beeper included standard	
LED:	Four state standard (red, green, amber and off)	
Technologies Supported:	VAX-CRD-SD, VAX-CRD-MT, VAX-CRD-2P and VAX-PRX-TAG proximity card/fob credentials	
Voltage:	+5 - 16 VDC; linear power supply recommended	
Current:	30 mA typical; 75 mA peak @12 VDC	
Cabling ¹ :	24 AWG minimum, multi-conductor stranded with an overall foil shield (ex. Belden 9535 or similar)	
Mounting:	Metal door, window frames (mullions) and flat surfaces	Single gang box and flat surfaces
Dimensions (W x H x D):	2 x 5.25 x 1 in. (51 x 133 x 25 mm)	3 x 4.5 x 1 in. (76 x 114 x 25 mm)
Weight:	6 oz (170 g)	8 oz (227 g)
Environmental Installation:	Electronics sealed in weather-and tamper-resistant epoxy potting	
Operating Temperature:	-40° F to 149° F (-40° C to 65° C)	
Certifications:	FCC, ICC, CE, IP67	

Proximity Credentials

Model	VAX-CRD-SD	VAX-CRD-MT	VAX-CRD-2P	VAX-PRX-TAG
Technology:	Proximity			
Frequency:	125 kHz			
Read Range:	Up to 4 in. (102 mm)	Up to 4 in. (102 mm)	Up to 7 in. (176 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	ISO	Fob style (key tag)
Slot Punch:	Standard, vertical slot	Vertical and horizontal indicators	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	Supports dye sublimation imaging (PVC printable)	N/A
Color:	Off white	White	Glossy white	Gray
Dimensions:	2.2 x 3.4 x 0.06 in. (56 x 86 x 1.5 mm)	2.1 x 3.4 x 0.031 in. (53 x 86 x 0.79 mm)	2.1 x 3.4 x 0.031 in. (53 x 86 x 0.79 mm)	1.2 x 1.5 x 0.15 in. (30 x 38 x 3.8 mm)
Operating Temperature:	-35° F to 122° F (-37° C to 50° C)			

NOTES:

1. 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.

Ordering Information

Model	Description
VAX-P403R	CONTACTLESS PROXIMITY READER; designed to be mounted to metal door and window frame (mullion) or flat surfaces; up to 5-in. (126 mm) reading range; Wiegand protocol
VAX-P403R-OSDP	CONTACTLESS PROXIMITY READER; designed to be mounted to metal door and window frame (mullion) or flat surfaces; long-range up to 5-in. (126 mm) reading range; OSDP protocol
VAX-P405R	CONTACTLESS PROXIMITY READER; designed to be mounted to single gang box or flat surfaces; long-range up to 5-in. (126 mm) reading range; Wiegand protocol
VAX-P405R-OSDP	CONTACTLESS PROXIMITY READER; designed to be mounted to single gang box or flat surfaces; long-range up to 5-in. (126 mm) reading range; OSDP protocol
Credentials/Cards	
VAX-CRD-SD	CONTACTLESS PROXIMITY CREDENTIAL; clamshell type; non-graphic
VAX-CRD-MT	CONTACTLESS PROXIMITY CREDENTIAL; ISO style; dye sublimation imaging
VAX-PRX-TAG	CONTACTLESS PROXIMITY CREDENTIAL; small tag (fob) designed to be carried on a key ring
VAX-CRD-2P	CONTACTLESS PROXIMITY CREDENTIAL; ISO style; PVC printable

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Specifications subject to change without notice.

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