VICON

VAX-LRT4-H, VAX-LRT4-S1 and VAX-LRR4

VAX
Transmitters and Receiver

Overview

Vicon's series of long range transmitters and receiver set the benchmark for high-frequency, long-range identification transmitters and receivers. Based on proven contactless digital ultra-high-frequency (UHD) technology, they interface with Vicon Access Control (VAX) system by complying with the Wiegand communication protocol. They offer value added features such as MAXSecure™, that provides increased security of data, and provide up to 200 feet of read range.

VAX transmitters are active devices, powered by the most reliable and common battery, and are equipped with a potted proximity or contactless smartcard module. The module supports a VAX proximity reader technology and allows the transmitter to be used as a close-range credential.

Refer to the table below for details on all models.

Product at a Glance

▶ Read ranges of up to 200 ft (61 m)
▶ Supports Wiegand communication protocol
▶ Receiver available with 4 outputs
▶ Transmitters available with 4 buttons that support Proximity or Smartcard credentials
▶ IP67
▶ Powered by 12 VDC

Ordering Information

Model Number	Description
Long-Range Transmitters	
VAX-LRT4-H	LONG-RANGE TRANSMITTER; 4 buttons; Proximity credential
VAX-LRT4-S1	LONG-RANGE TRANSMITTER; 4 buttons; Smartcard credential
Long-Range Receiver	
VAX-LRR4	LONG-RANGE RECEIVER; output transmitter data over four separate Wiegand outputs; 200 ft (61 m)
VAX-LRR4-OSDP	LONG-RANGE RECEIVER; output transmitter data over two separate OSDP outputs; 200 ft (61 m)

Specifications

LONG-RANGE TRANSMITTERS

Model	VAX-LRT4-H	VAX-LRT4-S1
Technology:	Long range	
Frequency:	Button press: 433 MHz; Presentation: 125 kHz or 13.56 MHz	
Read Range:	Button press: Up to 200 ft (61 m); Presentation: Up to 3.5 in. (88 mm)	
Interface:	Wiegand 26-bit industry standard	
Marking:	Date code and ID	
Button Press Transmission:	Rolling code + encryption	
LED:	Integrated red LED standard activated upon button press	
Compatibilty:	Button press: VAX-LRR4 receiver; Presentation: VAX Readers	
Presentation Insert Interoperability:	Supports 125 kHz VAX proximity protocols (VAX Readers)	Supports MIFARE 13.56 MHz Smartcard protocols (VAX Readers)
Battery:	Single replaceable CR2012, 3.3V, lithium	
Key Ring:	Optional 1-in. (25 mm) key ring	
Convenience:	Built-in eyelet to easily carry on key ring or lanyard	
Dimensions (W x H x D):	1.45 x 2.5 x 0.56 in. (37 x 63.5 x 14.2 mm)	
Weight:	0.7 oz (20 g)	
Enclosure Color:	Black polycarbonate with gray ABS keys	
Indoor/Outdoor Installation:	Electronics snap sealed in weather-resistant enclosure	
Operating Temperature:	-40° F to 122° F (-40° C to 50° C)	
Certifications:	FCC, ICC, CE, ETL listed; IP67	

LONG-RANGE RECEIVERS

Model	VAX-LRR4
Technology:	Long range
Frequency:	433 MHz
Read Range:	Up to 200 ft (61 m), installable adjustable
Interface:	Wiegand 26-bit industry standard
Marking:	Date code and ID
Transmission:	Rolling code + encryption
Audio Tone:	Beeper included standard, installer switchable
LED:	Four-state standard (red, green, amber and off), installer switchable; Power (blue); Channel (green)
Compatibilty:	Supports VAX-LRT4-H and VAX-LRT4-S1 Transmitters
Voltage:	12 VDC
Current Draw:	120 mA typical @ 12 VDC
Cabling:	24 AWG minimum, multi-conductor stranded with an overall foil shield (ex. Belden 9540 or similar)
Mounting:	USA/European wall box or any flat surface
Dimensions (W x H x D):	3.4 x 6.3 x 2.3 in. (86.4 x 160 x 58.4 mm)
Weight:	12 oz (340 g)
Enclosure Color:	Off-white plastic enclosure with black label
Indoor/Outdoor Installation:	Electronics sealed in weather-resistant UL listed enclosure
Operating Temperature:	-40° F to 122° F (-40° C to 50° C)
Certifications:	FCC, ICC, CE, ETL listed; IP67