

RFID Readers



By providing a choice of credential technologies that includes Proximity (125 kHz), Smart (13.56 MHz) and Bluetooth®, customers have the ability to set their own migration path to secure credentials. With both Wiegand and Serial versions, these RFID readers are capable of working with a wide variety of legacy access control panels.

✓ Virtual Credential Authentication

Inbuilt support for SafeAccess, providing secure authentication at the door over BLE.

✓ Environment Flexibility

Accommodates indoor, outdoor, and various other installation environments.

✓ Multiple Supported Credentials

Mifare® Classic, Ultralight, Mifare Plus, DESFire EV1, DESFire EV2, Proximity, LEAF, and Virtual Credentials.

✓ OSDP Auto-detect

Communicates OSDP and Wiegand over the same two wires, requiring no re-wiring or re-configuration of the reader when upgrading to OSDP.

✓ “Foolproof” Accelerometer-Based Tamper Detection

✓ Onboard LED

Tristate LED Light Bar (red, green, amber) and Buzzer

Tech Specs

Reader

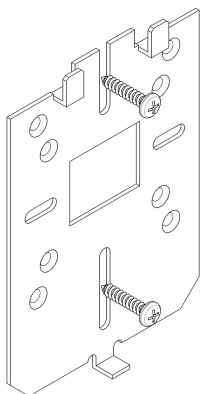
Mullion Reader	3009	3010
Single Gang Reader	3012	3013
Keypad Reader	3015	3016
125 kHz		x
13.56 MHz	x	x
Bluetooth	x	x
Current (mA)	3009, 3010: 106 mA average, 144 mA peak 3012, 3013: 118 mA average, 169 mA peak 3015, 3016: 143 mA average, 193 mA peak	
Voltage	5-16 V DC	
Dimensions	3009, 3010: 5.1" x 1.7" x 0.71" 3012, 3013: 5.1" x 3.25" x 0.71" 3015, 3016: 5.1" x 3.25" x 0.71"	
Read Range	Configurable BLE Read Range Up to 100ft, Pros Up to 4", Mifare up to 3.5"	

*Technical data subject to change without notice. To order, contact sales@safetrust.com or visit www.safetrust.com/shop.

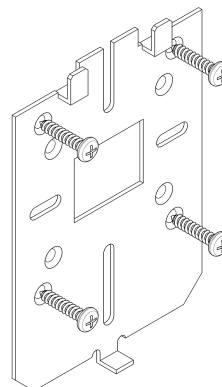
Installation

1) Install Metal Wall Plate to Single Gang Box

Connect the wall plate to the single gang box using the provided #6 screws. Alternatively, you can use the provided #4 screws in the four outer holes for other installation requirements. Drywall installations will require molly bolts.











Standard Single Gang Box Installation



Alternative for situations outside of a single gang box installation

2) Wire the Cable to the Control Panel

Common Cable Connections

Red		Power In
Black		Ground
Shield		Shield Ground
Brown*		Tamper Out
Green		Wiegand Data0/RS 485B
Yellow*		Beeper Control
Blue*		Green LED Control
Orange*		Red LED Control

Max Length to Panel

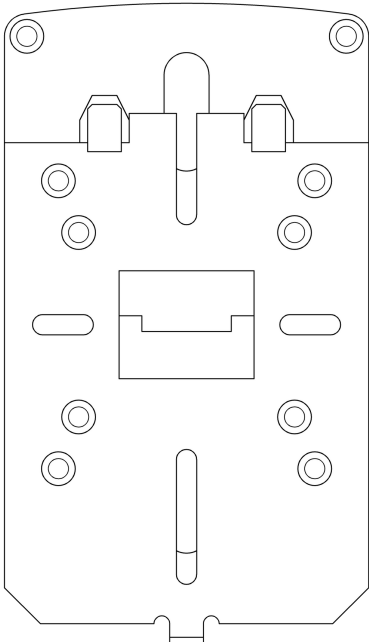
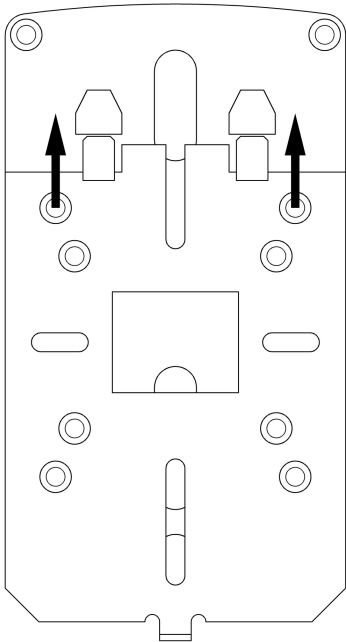
Length	AWG
200" (60m)	22
300"	20
500"	18

Current @ 12 V and 25 C

Avg. mA	Max. mA
140	190

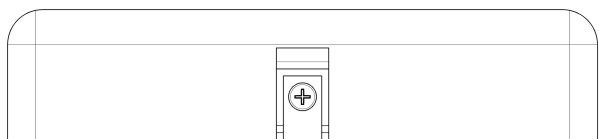
3) Attach the Reader to the Wall Plate

Align the reader so that the tabs of the base plate slide into the slots on the wall plate and slide the reader into place.



4) Install the Reader Screw

Install the #4-40 screw or pin-in-torx at the bottom of the reader.



5) Test the Reader

Power the reader and wait for the power up LED beep sequence to complete. Present a valid credential to the reader and the light-bar will turn green.

Installation Tips

When connecting the reader to a Wiegand panel, simply connect the Green wire to Data 0 and the White wire to Data 1. When connecting the reader to an OSDP panel, connect the Green wire to RS485A and the White wire to RS485B.

The number of beeps during the power-up reset sequence indicates what mode the reader is in:

- 4 beeps (with green LED flash) indicate that the reader is in Wiegand communication mode (with OSDP auto-detect).
- 2 beeps (with green LED flash) indicate that the reader is in OSDP-only communication mode.

By default, the reader will transmit credential and keypad data in Wiegand communication mode. Upon each power up, and before the reader reads a credential or a key is pressed, the reader will be listening for an incoming OSDP message. If a message is received during this period, the reader will automatically switch to OSDP-only communication mode. To return to OSDP auto-detect mode, tilt the reader 45 degrees to simulate tamper and cycle power in this state. The power up sequence should indicate OSDP auto-detect with 4 beeps.

Upon a power reset, the RFID readers provide a reset sequence using the LED indicator and the beeper, to provide information about the reader type its and communication mode. The first sequence describes the credential technologies built in the reader:

- A single red LED flash indicates Bluetooth credential support
- A single green LED flash indicates 13.56 MHz credential support
- A single amber LED flash indicates 125 kHz credential support

Sequence A is followed by Sequence B. Sequence B indicated that the reader communication protocol:

- Two beeps (with green LED flash) indicate that the reader is in OSP-only communication mode.
- Four beeps (with green LED flash) indicate that the reader is in Wiegand communication mode (with OSDP-auto-detect).

