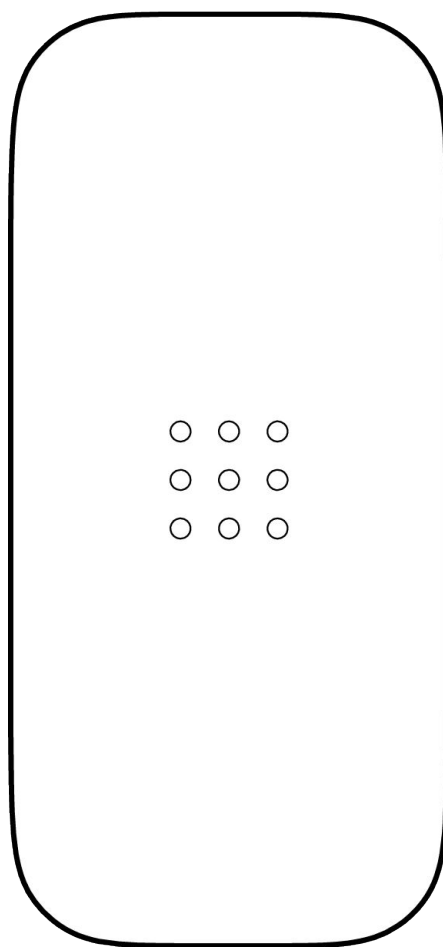


# AD33 Door Reader



Document

## Document Details

**V1.2** (20240209)

(V1.0 first published 20220315)

## Firmware

Firmware version can be verified on  
Verkada Command [command.verkada.com](https://command.verkada.com).

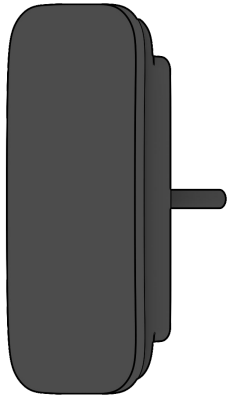


## AD33 Technical Specifications

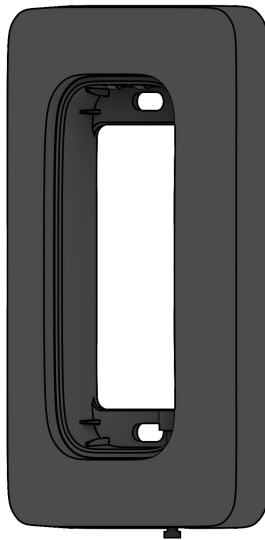
Mullion Dimensions	95 x 45 x 21mm (3.7 x 2.9 x .82in)	
Single Gang Dimensions	120 x 80 x 21mm (4.7 x 3.1 x .82in)	
Credential Compatibility	Bluetooth LE, RFID (LF and HF)	
Low Frequency (125 kHz)	HID Prox II 26-Bit (H10301), 37-Bit Wiegand HID H10304, 37-Bit Wiegand HID H10302, HID 35-Bit Corporate 1000	
High Frequency (13 MHz)	MiFare / DESFire (CSN), NFC	
Ratings	IP65, IK08	
Operating Temperature	-40° to 65°C (-40° to 149°F)	
Controller Compatibility	Requires Verkada access control unit (AC41, AC42, AC62) or Verkada TD52 video intercom	
Power Consumption	12V, 250mA max	
Compliance	FCC, CE, UL 294, UL 62368-1/CSA C22.2, CAN/ULC-60839-11-1:2016, NDAA, TELEC	
Included Accessories	Single gang mounting plate, Mullion mounting plate, T8 Security Torx hand tool, 2 Wall mount screws, 2 M3 Machine screws	
Mounting Options	Unit ships with both standard Single Gang mounting plate and Mullion mounting plate	



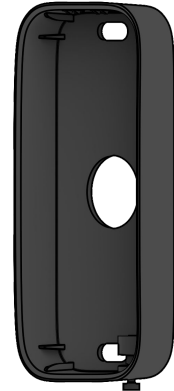
## What's in the box



AD33 Door Reader



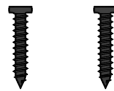
Single gang mount



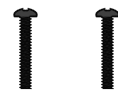
Mullion mount



T8 Security Torx hand tool



2 Wall mount screws



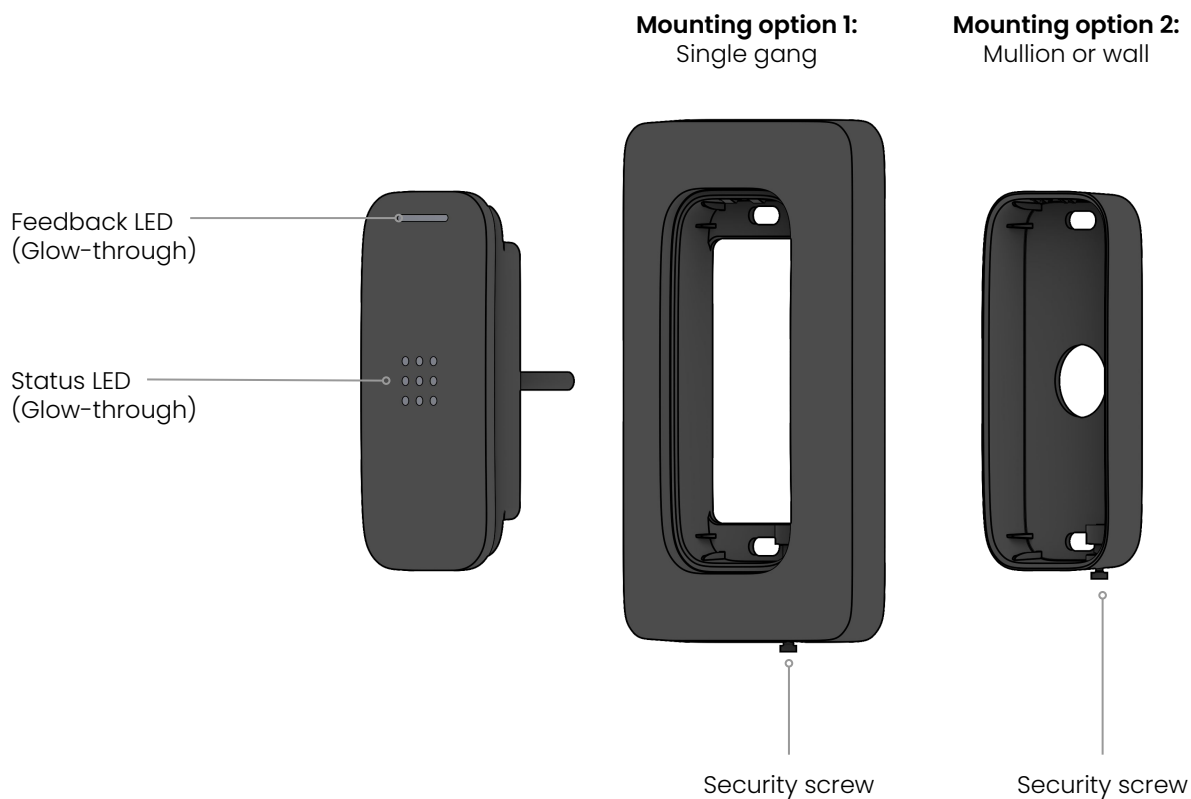
2 M3 Machine screws

## What you'll need

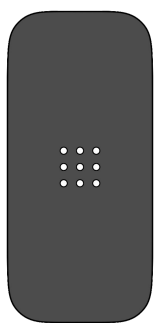
- A working internet connection
- A smartphone or laptop
- A #2 Phillips driver (screwdriver or power drill)
- 1/8 inch (3mm) drill bit for pilot holes
- 1/2 inch (12.7mm) drill bit, or larger, for routing cable through wall



## Door Reader overview



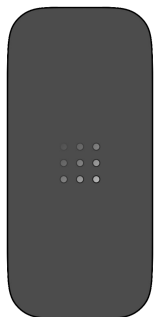
## LED Behavior



**Static status LED**  
Powered on and connected to the ACU.



**Green feedback LED**  
Has successfully processed a user scan and granted access.



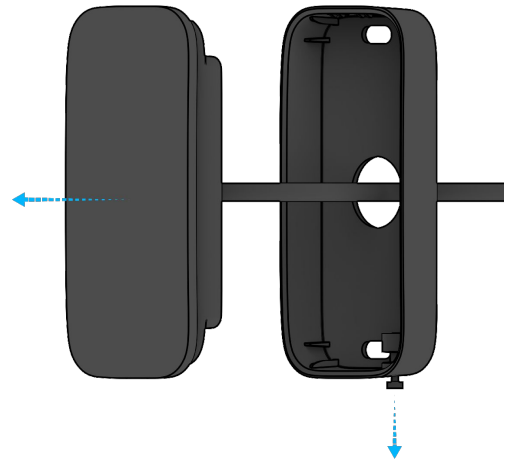
**Cascading status LED**  
Powered on but cannot connect to the ACU.



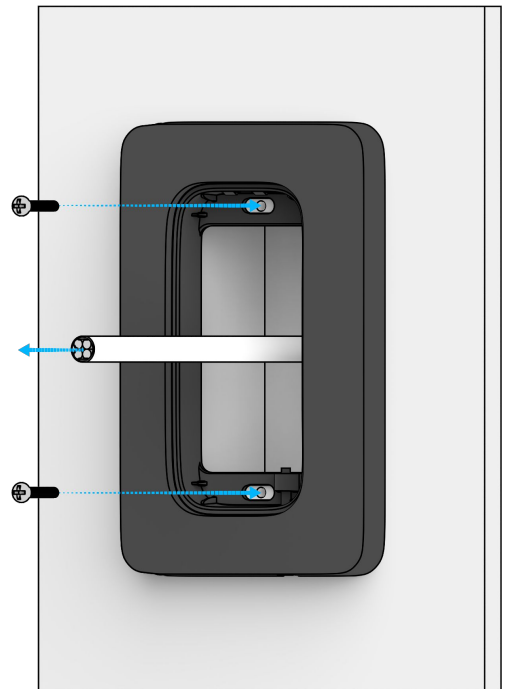
**Red feedback LED**  
Has successfully processed a user scan and denied access.

## Mounting option 1: Single gang

1. Loosen the security screw until the entire screwhead is exposed and remove the AD33 Door Reader from the mullion mount.

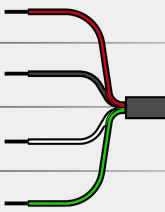


2. Route the building-side cable through the opening in the single gang mount. Secure the single gang mount to the junction box using the 2 M3 machine screws.

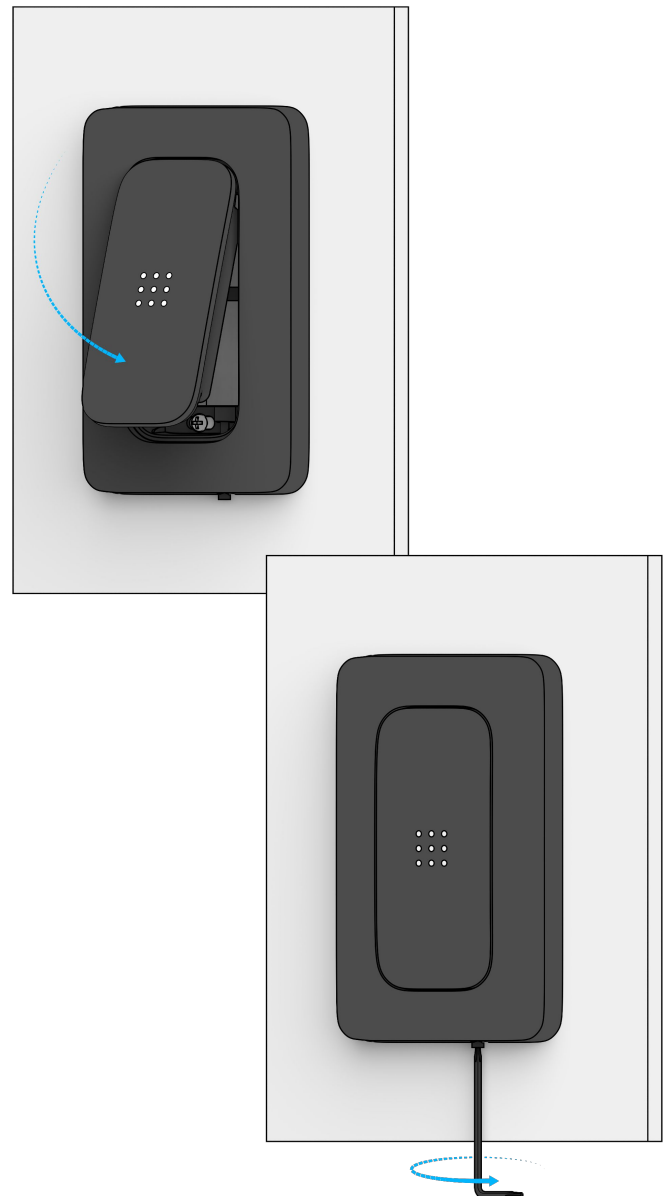


## Mounting option 1: Single gang cont.

3. Connect the wires using the diagram or the table on the back of the AD33 Door Reader as reference.

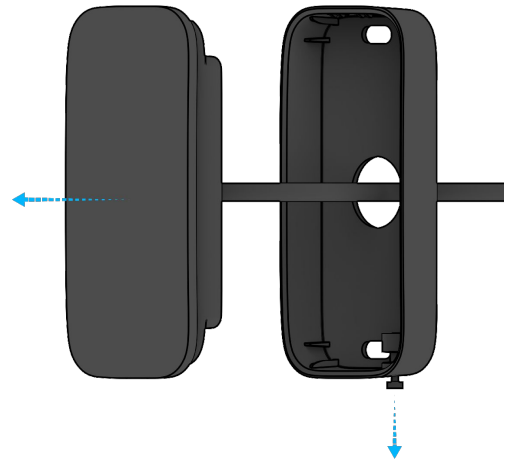
Wiring (RS-485)	
Red: +12V	
Black: GND	
White: A	
Green: B	

4. Insert the AD33 Door Reader into the single gang mount and secure using the T8 security screw and provided T8 Security Torx hand tool.

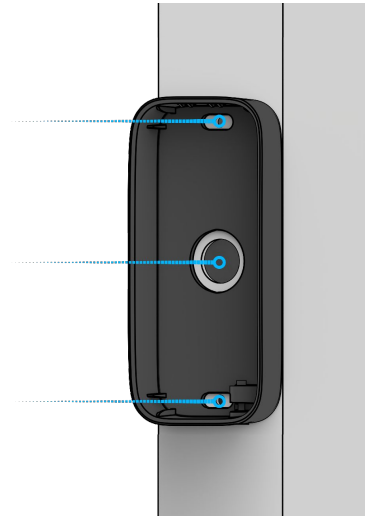


## Mounting option 2: Mullion or wall

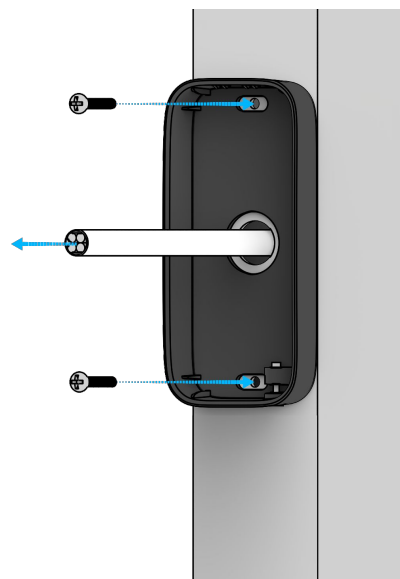
1. Loosen the security screw and remove the AD33 Door Reader from the mullion mount.



2. Using the mullion mount as your template, mark and drill two  $\frac{1}{8}$  inch (3mm) pilot holes at the top and bottom. Drill a  $\frac{1}{2}$  inch (12.7mm) center hole for cable routing.

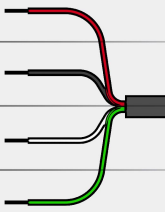


3. Route building-side cable through the center hole and the circular opening in the mullion mount. Secure the mullion mount to the mullion using the 2 M3 machine screws. If you are installing on a wall, use the 2 provided wall mount screws instead.

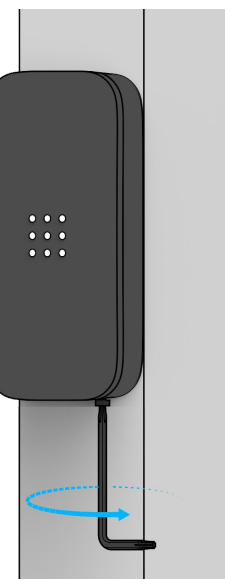
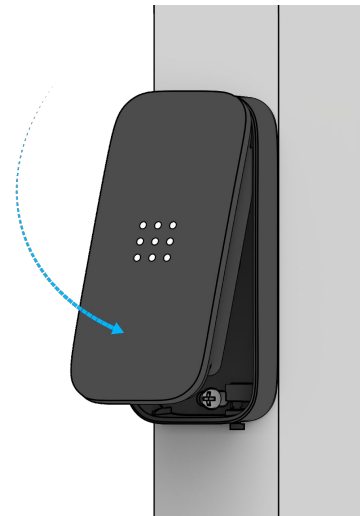


## Mounting option 2: Mullion or wall cont.

4. Connect the wires using the diagram above or the table on the back of the AD33 Door Reader as reference.

Wiring (RS-485)	
Red: +12V	
Black: GND	
White: A	
Green: B	

5. Insert the AD33 Door Reader into the mullion mount and secure using the T8 security screw and provided T8 Security Torx hand tool.



## AD33 Compliance

<b>FCC Statement</b>	<p>This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:</p> <p>(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.</p> <p>This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.</p> <p>These limits are designed to provide reasonable protection against harmful interference in a residential installation.</p> <p>This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.</p> <p>However, there is no guarantee that interference will not occur in a particular installation.</p> <p>If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:</p> <ul style="list-style-type: none"> <li>• Reorient or relocate the receiving antenna.</li> <li>• Increase the separation between the equipment and receiver.</li> <li>• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.</li> <li>• Consult the dealer or an experienced radio/TV technician for help.</li> </ul> <p><b>FCC Caution:</b> Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.</p> <p>This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.</p> <p><b>Radiation Exposure Statement:</b> The product comply with the FCC portable RF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual.</p> <p>The further RF exposure reduction can be achieved if the product can be kept as far as possible from the user body or set the device to lower output power if such function is available.</p>
<b>IC Statement</b>	<p>This device complies with ISED's licence-exempt RSSs. Operation is subject to the following two conditions:</p> <p>(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.</p> <p>Le présent appareil est conforme aux CNR d'ISED applicables aux appareils radio exempts de licence.</p> <p>L'exploitation est autorisée aux deux conditions suivantes :</p> <p>(1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.</p> <p><b>Radiation Exposure Statement:</b> The product comply with the Canada portable RF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual.</p> <p>The further RF exposure reduction can be achieved if the product can be kept as far as possible from the user body or set the device to lower output power if such function is available.</p> <p><b>Déclaration d'exposition aux radiations:</b> Le produit est conforme aux limites d'exposition pour les appareils portables RF pour les Etats-Unis et le Canada établies pour un environnement non contrôlé.</p> <p>Le produit est sûr pour un fonctionnement tel que décrit dans ce manuel.</p> <p>La réduction aux expositions RF peut être augmentée si l'appareil peut être conservé aussi loin que possible du corps de l'utilisateur ou que le dispositif est réglé sur la puissance de sortie la plus faible si une telle fonction est disponible.</p>



## Appendix

### Support

Thank you for purchasing this Verkada product. If for any reason things don't work right, or you need assistance, please contact us immediately.

[verkada.com/support](https://verkada.com/support)

Sincerely, The Verkada Team

