

AVIGILON Single Door Controller

Installation Guide

OP-CR-SDC



© 2024, Avigilon Corporation. All rights reserved. AVIGILON, the AVIGILON logos, and AVIGILON ALTA are trademarks or registered trademarks of Avigilon Corporation. Allegion, ENGAGE technology and Schlage are trademarks of Allegion plc, its subsidiaries and/or affiliates in the United States and other countries. Safari is a trademark of Apple Inc., registered in the U.S. and other countries and regions. All other trademarks are the property of their respective owners.

This document has been compiled and published using product descriptions and specifications available at the time of publication. The contents of this document and the specifications of the products discussed herein are subject to change without notice. Avigilon Corporation reserves the right to make any such changes without notice. Neither Avigilon Corporation nor any of its affiliated companies: (1) guarantees the completeness or accuracy the information contained in this document; or (2) is responsible for your use of, or reliance on, the information. Avigilon Corporation shall not be responsible for any losses or damages (including consequential damages) caused by reliance on the information presented herein.

Avigilon Corporation avigilon.com

20241024-en

Revisions

Guide	Description	
September 2024	Control Center portal renamed to Alta Access	
August 2024	Tip about using Avigilon Alta Access mobile app: Add SDCs using Alta Access on page 17	
July 2024	Power rating updates: Standard SDC wiring configuration on page 11, Specifications on page 9	
	Software updates (blinking yellow, blinking red): Status LED indicator on page 20	
	Overview diagram, package contents, mounting, and provisioning updates: Overview on page 6, What's included on page 7, Mounting on page 9, Provision SDCs using Avigilon Alta Access mobile app (recommended) on page 16	
April 2024	App name updates: Avigilon Alta Open mobile app (formerly, Openpath Mobile Access app), Avigilon Alta Access mobile app (formerly, Open Admin app)	

Revisions 3

Contents

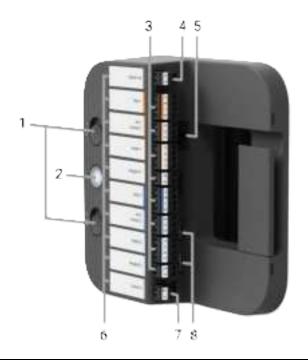
Revisions	3
Before you start	6
Overview	6
What's included	7
Conducting site surveys	7
Network requirements	8
Power requirements	8
Installation	g
Specifications	g
Mounting	g
Standard SDC wiring configuration	11
Avigilon reader wiring requirements	12
ACU and Wiegand reader wiring requirements	12
Wiring fail-safe and fail-secure lock hardware	13
Tamper alert setup	13
Advanced configuration	13
Legacy wiring	13
Voltage switches	14
Provisioning	15
Prerequisites	15
Provision SDCs using Avigilon Alta Access mobile app (recommended)	16
Add SDCs using Alta Access	17
Add multiple SDCs using Quick start option	17
Add one SDC	17
Disable the Static Cloud IP connection	18
Test internet connection using Alta Access mobile app	19
Configure network settings using Alta Access mobile app	19
Change network settings	19
Set up Wi-Fi on the SDC	19
LED indicators	20

Status LED indicator	20
Port LED indicators	21
Maintenance and troubleshooting	22
Resetting SDCs	22
Soft reset	22
Hard reset	22
Selecting a backup battery	23
Appendix: Best practices - Wiring a REX to your Alta access control system	24
Wiring REX in series with mag lock or other fail-safe hardware	24
Wiring REX with Video Reader Pro and Video Intercom Reader Pro	24
For more information	26
Technical support	26
Product documentation	26
Avigilon warranty	26
Regulatory notice	26
UL 294	26
FCC	26
RF Radiation Hazard Warning	27
Industry Canada Notice and Marking	27

Before you start

The Avigilon Single Door Controller is a compact access control unit (ACU) that controls up to two entries and two Avigilon readers. This installation guide explains how to install and configure the Single Door Controller as part of the Alta access control system.

Overview



1	2 x Wet/Dry relay selections
2	Admin button, Status LED indicator
3	2 x ports for Avigilon readers 2 x ports for Wiegand readers 2 x ports for REX sensors 2 x ports for relays 2 x ports for contact sensors
4	Power output
5	Ethernet port
6	Port LED indicators
7	Power input
8	USB ports (future use)

Before you start 6

What's included

Single Door Controller



Cover



Mounting backplate



Drywall anchors



Electrical box screws



Set screw for securing SDC to backplate



Self-tapping screws



Hex key for set screw



Conducting site surveys

Before installing Avigilon hardware, conduct a customer site survey to determine the following:

- The number of entries that need to be configured (for example, doors, gates, and elevator floors)
- The legacy wiring or new wiring to be installed
- The electronic entry mechanisms, Request to Exit (REX) mechanisms, and door contact sensors to be used and their power requirements
- Any backup batteries for the Single Door Controller (see Selecting a backup battery on page 23)
- The support of a legacy access control panel for mobile gateway

Before you start 7

Network requirements

An Ethernet connection with DHCP can be used to connect the Single Door Controller to the Local Area Network (LAN). You may also need to configure firewall settings to communicate with Alta Access, which uses the following outbound ports:

- TCP port 443
- UDP port 123
- Note: If using an external DNS server, the outbound UDP port 53 must also be open.

To support Wi-Fi unlocking from the Alta Open mobile app, the inbound TCP port 443 of the Single Door Controller must be available from within the LAN. Inbound port forwarding on the router, firewall, or NAT device is not required.

The Single Door Controller also supports Wi-Fi connections. See Configure network settings using Alta Access mobile app on page 19.

Power requirements

The Single Door Controller can be powered using Power-over-Ethernet (PoE or PoE+), and/or an external 12-24V supply. The Single Door Controller will automatically switch to the higher voltage source if both PoE and an external source are available. We recommend using a backup battery in case of power failures on the external 12-24V supply or the PoE supply.

Electrical		
Supply Requirement	PoE, PoE+, or external 12-24VDC	
	Note: When using an external supply, if 24V wet relay output is required a 24V external supply must be used.	
	Δ Certified external power source (complies with LPS) must be used.	
External Supply Rating 12V @ 2.2A min. or 24V @ 1.1A min.		
Output Ratings	Power Out can supply up to 100mA @ 12V or 50mA @ 24V	
	2 reader ports, max power output: 250mA @ 12V each	
	2 relays, max power output: PoE: Max 3W combined output (250mA @ 12V, 125mA @ 24V) PoE+: Max 9W combined output (750mA @ 12V, 375mA @ 24V)	

Before you start 8

Installation

Specifications

For the Single Door Controller specifications, see the OP-CR-SDC datasheet.

Note: All national and local electrical codes apply when installing this device.

Mounting

1. Attach the backplate to a US single-gang or double gang box using the included electrical box screws (two or four screws, respectively), or EU-standard gang box.



- Tip: Use the included drywall anchors and self-tapping screws on drywall for added stability.
- 2. Snap the Single Door Controller onto the backplate. Ensure the side clips on the backplate (a) fit into their notches on the back of the controller (b).





3. Use the included hex key to tighten the pre-installed set screw on the Single Door Controller to secure it to the backplate.



4. Wire the Single Door Controller (see 2 - Wiring). Use the cable slot to hold cables while wiring.



- Warning: Do not apply power during wiring. Ensure the power supply is unplugged until all wiring is complete.
- 5. Snap on the cover.

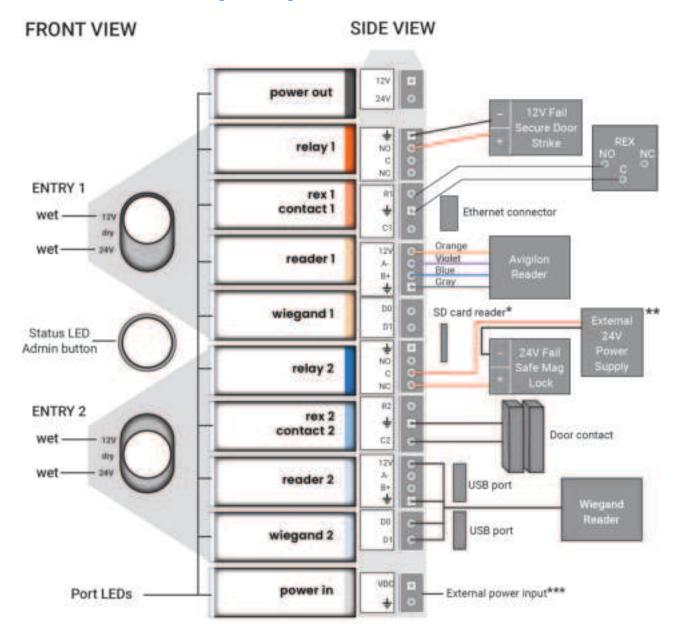


- **Note:** Removal of the front cover will trigger tamper detection during normal operation.
- 6. Apply power using either DC or PoE.



Example: North American power cord and outlet

Standard SDC wiring configuration



^{*} SD card must not be removed unless instructed by Avigilon Alta Support.

▲ Caution: Certified external power source (complies with LPS) must be used.

^{** 24}V locking hardware requires PoE or a 24V power supply.

^{***} For backup or if PoE not available. 12V @ 2.2A (min) or 24V @ 1.1A (min). 24V required if locking hardware requires 24V.

Avigilon reader wiring requirements

Avigilon readers and the Single Door Controller communicate via RS-485. The compatible wire types are listed in order of preference which impacts distance.

- Shielded CAT6A (recommended; additional two pairs can be used for sensors)
- · Shielded Cat 6
- Shielded RS-485 with 18-24 AWG (lower gauge, thicker wire is better)
- Shielded Cat 5
- · Unshielded Cat 6
- Unshielded Cat 5
- Shielded 22/6
- Unshielded 22/6

Note: Use one twisted pair for GND and VIN (power) and one twisted pair for +B and -A (data).

ACU and Wiegand reader wiring requirements

Table 1 Connections from Avigilon Single Door Controller to Avigilon reader

Pigtail color	Short name	Full name	
Gray Blue	GND	Ground (RTN)	
Blue	+B	RS485-B	
Violet	-A	RS485-A	
Orange	VIN	+12V IN	

Table 2 Connections to third-party Wiegand reader (optional)

Pigtail color	Short name	Full name
Red	VO	Wiegand Voltage
Black	GND	Wiegand RTN
Green	WD0	Wiegand Data 0
White	WD1	Wiegand Data 1

Temperature must not exceed -22°F to 140°F (-30°C to 60°C).

Recommended maximum cable length: 300 ft (91 m) with CAT6 or 500 ft (152 m) if two wire pairs are used for GND and VIN (power).

For shielded wiring: Connect one side of the drain wire (the shield around the wires) to the GND terminal on the Single Door Controller. Both the shield and the GND wire can share the same GND terminal. Do not connect the other side of the shield to anything.

Note: For elevators, all relays and readers must be connected to the same Single Door Controller. If you need more than two access controlled floors or readers, add the 16 I/O Elevator Board.

Warning: Always remove power from the Single Door Controller and locking hardware when wiring Avigilon readers and other devices. Failure to do so can damage the Single Door Controller.

Wiring fail-safe and fail-secure lock hardware

Fail safe and fail secure are ways of configuring lock hardware:

- Fail-safe hardware *unlocks* when power is interrupted or lost.
- Fail-secure hardware *locks* when power is interrupted or lost.

For information about wiring third-party lock hardware, refer to vendor documentation.

See also Appendix: Best practices - Wiring a REX to your Alta access control system on page 24.

Tamper alert setup

The front cover of the Single Door Controller has a built-in tamper sensor and will report tamper events when the cover is removed. You can monitor tamper events using the Tamper Detector State Changed alert, which is configured in Alta Access. See this Alta Access article

Advanced configuration

Legacy wiring

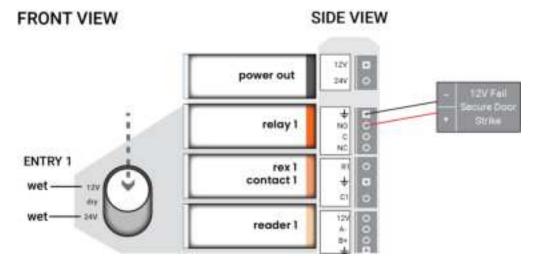
Sometimes legacy wiring (unshielded and straight through, rather than shielded twisted pair, often 22-6) results in slower connections and dropped packets between the Avigilon reader and Single Door Controller. To remedy this, you can switch GND and VIN with +B and -A connections on the SDC and readers to ensure the data pair (+B and -A) are using the alternate pair of legacy wires.

Voltage switches

Warning: Remove the DC input power and PoE before changing the voltage of the relays.

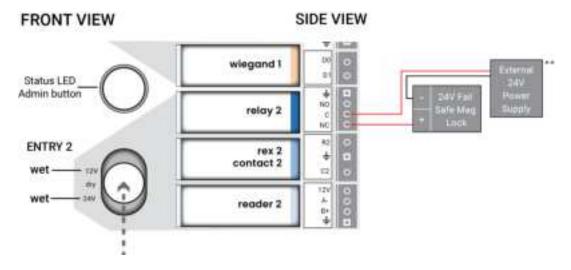
Wet relay example

To power locking hardware without an external supply (Wet Relay), select 12V or 24V, and connect locking hardware to NO and GND for fail-secure locks, or NC and GND for fail-safe locks.



Dry relay example

To use external power, select DRY and use NO or NC and C, and wire to external supply.



** 24V locking hardware requires PoE or a 24V power supply.

Provisioning

Provisioning the Single Door Controller means registering it in Alta Access and running the latest firmware. You will need to re-provision in the case of a hard reset, see Resetting SDCs on page 22.

Note: If you are provisioning Single Door Controllers for a customer account, the customer organization needs to be created first.

Prerequisites

- Connect the ACU to a power supply using the included power cable.
 - Meet all Network requirements on page 8.
- Connect the Single Door Controller to the internet using the Ethernet cable.
 - Note: The expansion boards must be on the same subnet and LAN as the Single Door Controller it connects to.
- Install the Alta Access mobile app.





- If you are using a laptop instead of the app, the laptop must be on the same network as the Single Door Controller. If you have a VLAN, make sure the laptop is on the same VLAN as the Single Door Controller.
- If you are using a laptop running Microsoft™ Windows or Linux®, you must download the iTunes app. The provisioning process uses Bonjour software that comes with iTunes. Optionally, you can download iTunes and use an archive utility to extract and install only the Bonjour MSI.

App Store® and the Apple logo® are trademarks of Apple Inc. Google Play and the Google Play logo are trademarks of Google LLC. Linux® is the registered trademark of Linux Torvalds in the U.S. and other countries.

Provision SDCs using Avigilon Alta Access mobile app (recommended)

1. If powering using PoE, plug in the Ethernet cable (a). If powering using an external power supply, plug in the Ethernet cable and connect power to the **power in** port (b).



The Status LED indicator is solid cyan .

- 2. In the Alta Access mobile app, locate the org to which you're provisioning hardware, either on the list or using search, and then tap on the org name.
- 3. Wait until the Status LED indicator is solid blue and then press the Admin button on the Single Door Controller.



- Note: The Single Door Controller will disconnect from the Alta Access mobile app after 5 minutes of inactivity. Press the Admin button again to reset the timer.
- 4. When the Status LED indicator is blinking purple 🔅, tap on the ACU ending in the last five digits of the serial number in the Alta Access mobile app.
- 5. When the Status LED indicator changes to solid purple , tap **Test Internet Connection** and wait for a green **YES** to appear before proceeding to the next step.
 - Note: This checks if the Single Door Controller can ping api.openpath.com.

If this step fails, see Maintenance and troubleshooting on page 22.

6. If the internet connection test is successful, tap **Provision Device** in the app.

- 7. Tap the ACU name that you want to provision to (this is the name of the SDC you created in Alta Access), and then tap **Yes** to proceed.
- 8. Optional. Tap Provision with Static Cloud IP, if the Static Cloud IP toggle is enabled in Alta Access.
- 9. When setup is complete, the Status LED indicator will change to solid white \bigcirc .

Add SDCs using Alta Access

Tip: You can choose to add Single Door Controllers using the Alta Access mobile app.





For more information, see this Alta Access article.

Add multiple SDCs using Quick start option

- 1. Go to control.openpath.com/login and sign in. For access in the EU, go to control.eu.openpath.com/login.
- 2. Go to --- Administration > Quick start.
- 3. Enter a **Site name** and any other relevant site information.
 - a. In Site language, select the preferred language for the site-wide emails sent by the system.
 - b. Click Next.
- 4. Enter the number of controllers located at your site and:
 - a. Enter names for the controllers.
 - b. In Controller type, select Single Door Controller (SDC).
 - **Note:** Expansion board connections are not applicable to SDCs.
- 5. Enter the number of readers connected to the controllers. Enter their names and click **Next**.
- 6. Review your site details and click Confirm & submit. It may take a few minutes for setup to complete.

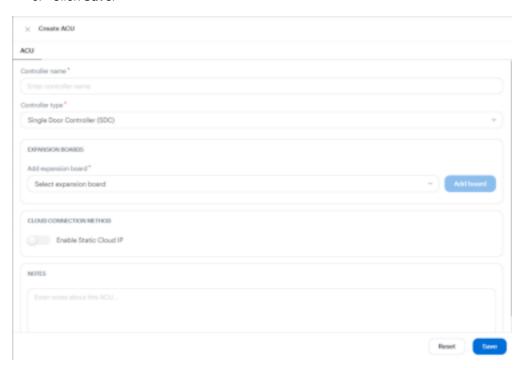
Add one SDC

- 1. Go to Devices > ACUs.
- 2. To add a new SDC, click the + button in the upper-right corner.
- 3. Enter a unique name for the SDC.
- 4. In Controller type, select Single Door Controller (SDC).

- Note: Expansion board connections are not applicable to SDCs.
- 5. Optional. To connect your network to the Cloud using a static IP address and port on an allowlist, select the **Enable Static Cloud IP** toggle. Default port is 443.
 - Note: An Enterprise plan is required to use Static Cloud IP.
 - a. Go to \bigcirc App marketplace and ensure the Static Cloud IP app is installed.



- b. After the toggle is enabled in Alta Access, open the Alta Access mobile app and select **Provision with Static Cloud IP** to provision the devices.
- 6. Click Save.



Disable the Static Cloud IP connection

If it is necessary to disable the Static Cloud IP connection:

Go to the Edit ACU page, and deselect the Enable Static Cloud IP toggle.
 Normal cloud operation resumes after the Static Cloud IP connection is disabled.

Test internet connection using Alta Access mobile app

In the Alta Access mobile app, you can tap **Test Internet Connection** to check if the Single Door Controller can ping api.openpath.com/health.

Configure network settings using Alta Access mobile app

In the Alta Access mobile app, you can configure network settings for the Single Door Controller. While wired internet connections are preferred, you can configure the Single Door Controller to use Wi-Fi instead. The default interface for the Single Door Controller is Ethernet/wired connection. Ethernet and Wi-Fi connections can be DHCP (default) or can have a static IP address.

The SDC supports 2.4 GHz and 5 GHz Wi-Fi connections.

Change network settings

- 1. Connect to the Single Door Controller by pressing the Admin button again, if needed.
- 2. Tap on Network Settings.
- 3. Select Configure network manually.
- 4. Configure the network settings as needed. Set a static IP address or set a preferred DNS server.
- 5. Tap **Save** in the top-right corner.

Set up Wi-Fi on the SDC

- 1. Connect to the Single Door Controller by pressing the Admin button again, if needed.
- 2. Tap on **Network Settings**.
- 3. Tap on Wi-Fi IP Settings.
- 4. Enable Default Interface.
- 5. Tap on Pick Wi-Fi Network.
- 6. Choose your network, enter your password, and then tap Connect.

LED indicators

Status LED indicator

The Status LED on the Single Door Controller indicates the following.

Status LED		Description	
	Solid white	The SDC is provisioned and functioning normally.	
•	Solid cyan	The SDC is booting.	
•	Solid yellow	The SDC is restoring software. Displays when you turn on the SDC for the first time or perform software updates.	
÷	Blinking yellow	The SDC is updating software. Displays when the SDC has been online for less than 24 hours.	
		If the device is stuck in this state after 3.5 hours, an unexpected issue may have occurred. Contact Avigilon Alta Support before power cycling the device.	
•	Solid blue	Unprovisioned state. The SDC has finished booting and is ready for provisioning.	
•	Solid purple	The SDC is connected to the Alta Access mobile app.	
	Blinking purple	The SDC is ready to connect to the Alta Access mobile app.	
*	Blinking red	No internet. There is a problem with the internet connection.	
		If attempting to set up a device using Wi-Fi, try switching to an Ethernet connection. See Network requirements on page 8.	
		The SDC configuration is being updated and saved in Alta Access. The device continues to operate as expected.	
		The blinking red indicator is expected to be temporary and change back to the solid green indicator. If the device is stuck in this state after 5 seconds, contact Avigilon Alta Support.	
•	Solid red	The SDC is in an error state.	
		Go to Dashboards > Device, and choose Restart device communicator from the REMOTE DIAGNOSTICS column.	
		If this doesn't resolve the error, power cycle the SDC, remove power, wait 10 seconds, and reapply power.	
		If the error persists, contact Avigilon Alta Support.	

LED indicators 20

Port LED indicators

The Single Door Controller has eight port LEDs and two power LEDs. The port LEDs indicate the following.

Port LED		Description
Avigilon readers or Wiegand Readers	Solid	Normal operation
	Blinking	Error state
Sensors, including REX and Contact Sensors	Solid	Active
	Blinking	EOL shorted or cut
Lock hardware including relays	Solid	Relay is energized
	Blinking	Fault detection

LED indicators 21

Maintenance and troubleshooting

Warning:

- Disconnect power before servicing.
- Do not plug into an outlet controlled by an on/off switch.

Resetting SDCs

Soft reset

To soft reset the Single Door Controller, disconnect power from the Single Door Controller, wait 10 seconds, and then reconnect the power.

Hard reset

- Warning: Only hard reset the Single Door Controller if absolutely necessary and if instructed by Avigilon Alta Support. This will clear all of the data off of the Single Door Controller and will require reprovisioning.
 - 1. Disconnect power from the Single Door Controller.
 - 2. Press the Admin button.



- 3. While still pressing the Admin button, reconnect the power. Continue to hold the button for another 15 seconds until the status LED turns yellow , and then release.
- 4. Wait 15 minutes or until the status LED turns blue before provisioning. See Provisioning on page 15.

Selecting a backup battery

While not required, a backup battery is recommended in case of power outages. For PoE power backup, refer to the manufacturer's instructions for your PoE injector or switch. When using an external supply, 12V supplies require one 12V backup battery. 24V supplies require two 12V batteries in series. The size of battery depends on your setup and how long you want to power the system.

Table 3 Example power requirements (24V)

Single Door Controller	.3A
Smart Reader (2)	0.25A
Locking hardware (while engaged)	0.125A - 0.25A

Assuming an external 24V power supply, an SDC configured with two Avigilon readers and locking hardware uses about 1.1 Amps. To keep the system running for 3 hours with all entries engaged, you need 1.1A x 3 hours = 3.3 AH, so two 12V 4AH sealed lead acid (SLA) or gel cell batteries in series.

Appendix: Best practices - Wiring a REX to your Alta access control system

For fire and safety reasons, and in accordance with building code in many jurisdictions, a Request to Exit (REX) device is used to ensure free egress.

Important: Always defer to the Authority Having Jurisdiction (AHJ) for all building code requirements, including code requirements for REX devices and how they should connect to an access control system, such as Alta Access.

Wiring REX in series with mag lock or other fail-safe hardware

Although you can wire a REX directly to the Alta access control unit (ACU) like other access control systems, the best practice would be to wire the REX device in series with electromagnetic (mag lock) or other fail-safe hardware. This prevents any points of failure in the egress path. If the REX device is wired directly to the REX input on an ACU, then the Alta access control system can simply shunt forced-open alarms only, or shunt forced-open alarms and trigger the relay to unlock. In the event of complete power loss, the lock hardware specified by the AHJ would be fail-safe or fail-secure.

- Fail-safe hardware unlocks when power is interrupted or lost.
- Fail-secure hardware locks when power is interrupted or lost.

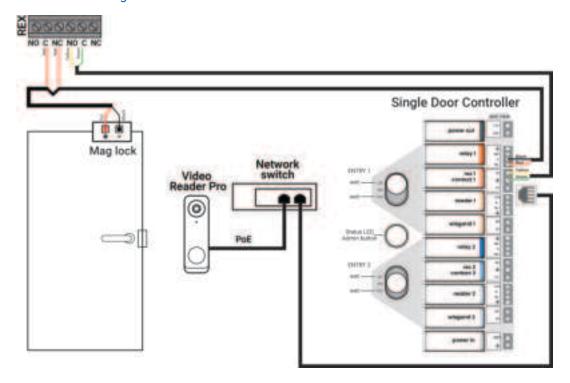
Wiring REX with Video Reader Pro and Video Intercom Reader Pro

Because these devices do not include a REX input or door relay, you must use a remote ACU to manage door peripherals, such as a door lock relay, door contact, and a REX device. A LAN connection to the remote ACU is required to control all door peripherals that are assigned to the Video Reader Pro or Video Intercom Reader Pro entry. If the Video Reader Pro and the Video Intercom Reader Pro go offline, and if the REX is not wired in a series with the lock hardware, the REX on the entry does not engage the remote relay. It is important to follow the best practices outlined here and the diagrams below to ensure a reliable experience when the Video Reader Pro or Video Intercom Reader Pro is inaccessible due to a network interruption, maintenance, or firmware update.



👽 **Tip:** The following wiring diagram is an example. Make sure you follow the installation instructions of thirdparty hardware for cable type, power requirements, and manufacturer-specific configurations (for example, DIP switch configuration).

Example: Remote REX on Single Door Controller with Video Reader Pro or Video Intercom Reader Pro



To further improve reliability, Alta Access will be implementing changes that will engage the remote relay for the entry when the REX is triggered even if the associated video device is unavailable. The controller for this relay should have a battery backup or be wired in a fail-safe configuration for maximum reliability.

Tip: In Alta Access reporting, a REX event on Video Reader Pro and Video Intercom Reader Pro entries will appear twice due to these changes. This duplicate can be safely ignored.

For more information

Technical support

For additional support documentation, see support.avigilon.com.

Product documentation

For additional product documentation, see the Alta Access (Cloud Solutions) product suite on avigilon.com.

Avigilon warranty

Warranty terms for Avigilon products are provided at avigilon.com/support/warranty.

Regulatory notice

All national and local electrical codes apply.

UL 294

The following performance levels are defined for the Single Door Controller, as per UL 294:

Attack:	Level I
Endurance:	Level I
Line Security:	Level I
Standby:	Level I

FCC

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. To comply with FCC RF exposure compliance requirements, a separation distance of at least 20 cm should be maintained between the antenna of Openpath Smart Reader(s) and persons during operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the User will be required to correct the interference at his own expense.

For more information 26

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

OP-CR-SDC: Contains FCC ID:2ABCB-RPICM4

RF Radiation Hazard Warning

To ensure compliance with FCC and Industry Canada RF exposure requirements, Smart Hubs device must be installed in a location where the antennas of the device will have a minimum distance of at least 20 cm from all persons. Using higher gain antennas and types of antennas not certified for use with this product is not allowed. The device shall not be co-located with another transmitter.

Installez l'appareil en veillant à conserver une distance d'au moins 20 cm entre les éléments rayonnants et les personnes. Cet avertissement de sécurité est conforme aux limites d'exposition définies par la norme CNR-102 at relative aux fréquences radio.

Industry Canada Notice and Marking

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other Users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

OP-CR-SDC: Contains IC ID: 20953-RPICM4

For more information 27