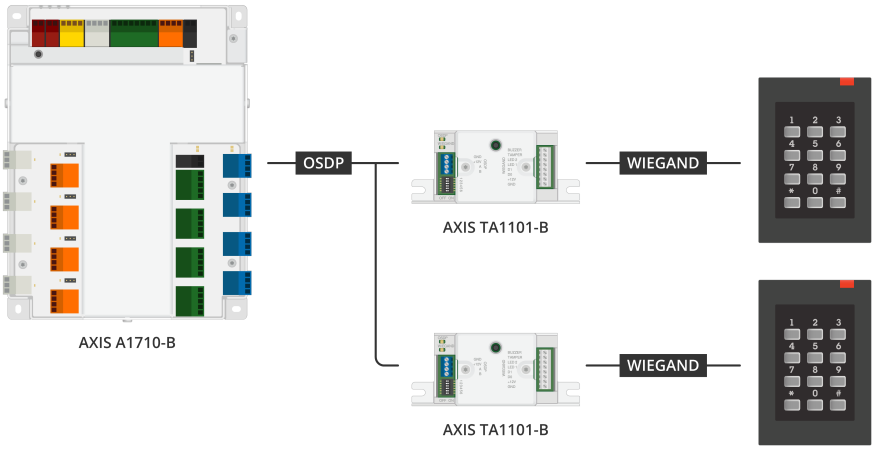
AXIS TA1101-B Wiegand to OSDP Converter

User manual

Table of Contents

Solution overview 3
Specifications 4
Product overview 4
LED indicators 4
Buttons 5
Control button 5
Connectors 5
OSDP connector 5
Wiegand connector 5
Supervised inputs 6
DIP switch connector 6
Troubleshooting 8
Reset to factory default settings 8
..... 8
Configuration mode 8
Upgrade the device software 8
Technical issues, clues, and solutions 8
Contact support 9

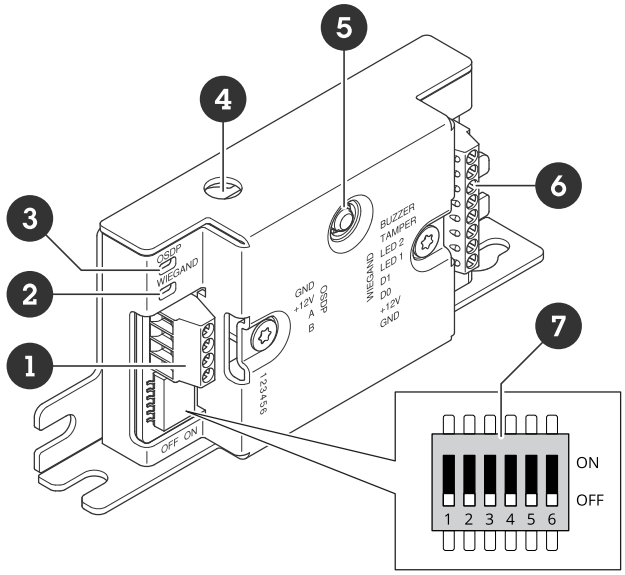
Solution overview



The Wiegand to OSDP converter is used between the Wiegand reader and door controller to convert Wiegand data to OSDP. Each Wiegand reader must be connected to one converter.

Specifications

Product overview



1 *OSDP connector*
2 *Wiegand LED*
3 *OSDP LED*
4 *Case open tamper*
5 *Control button*
6 *Wiegand connector*
7 *DIP switch*

LED indicators

OSDP LED	Indication
Blinks green every 1 s	Idle. No OSDP communication
Blinks green every 50 ms on every OSDP response transmission	Normal OSDP communication
Red	Casing tamper or Wiegand reader tamper is active
Green	Idle when the control button is pressed for less than 15 s
Blinks red/ green every 250 ms	Download and install device software
Blinks green every 100 ms	Restore to factory default when the control button is pressed for more than 15 s (*)
Blinks red every 100 ms	Erase the device software when the control button is pressed for more than 60 s (*)

Wiegand LED	Indication
Green	Wiegand data received

(On for 50 ms)	
Green (On for 1s)	Enter or exit the configuration mode (*)
Blinks green every 250 ms	In the configuration mode (*)
Red	Wiegand output over current error

(*) See *Control button, on page 5*.

Buttons

Control button

The control button is used for:

- Resetting the device to factory default settings. See *Reset to factory default settings, on page 8*.
- Configuration mode. See *Configuration mode, on page 8*.

Connectors

OSDP connector

One 4-pin terminal block to connect to the OSDP reader.

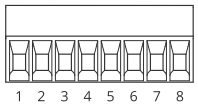


Function	Pin	Note	Specifications
DC ground (GND)	1		0 V DC
DC input (+12 V)	2	Supplies power to unit	12 V DC, max 440 mA
A	3	Half duplex	RS485
B	4	Half duplex	RS485

For more information, see *electrical wiring drawings*.

Wiegand connector

One 8-pin terminal block to connect to the Wiegand reader.



Function	Pin	Note	Specifications
DC ground (GND)	1		0 V DC
DC output (+12 V)	2	Supplies power to reader. (Pass through from OSDP DC input)	12 V DC, max 440 mA

D0	3	Wiegand data	0 to max 30 V DC
D1	4	Wiegand data	0 to max 30 V DC
LED 1	5	Digital output	0 to max 30 V DC, open drain, 100 mA
LED 2	6	Digital output	0 to max 30 V DC, open drain, 100 mA
TAMPER	7	Digital input or supervised input — Connect to pin 1 to activate, or leave floating (unconnected) to deactivate. To use supervised input, install end-of-line resistors. See connection diagram for information about how to connect the resistors. See *Supervised inputs, on page 6*.	0 to max 30 V DC
BUZZER	8	Digital output	0 to max 30 V DC, open drain, 100 mA

For more information, see *electrical wiring drawings*.

Note

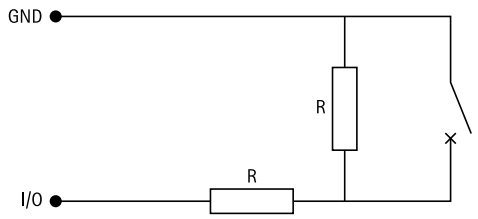
Wiegand data isn't encrypted. To reduce security risk, install the Wiegand reader as close as possible to AXIS TA1101-B when using OSDP Secure Channel.

Supervised inputs

To use supervised inputs, install end of line resistors according to the diagram below.

Serial first connection

The resistor values must be 1 kΩ.

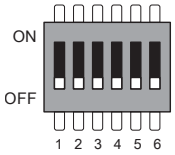


Note

It is recommended to use twisted and shielded cables. Connect shielding to 0 V DC.

DIP switch connector

6-pin terminal block. The default position of the DIP switches is OFF.



1	2	3	4	5	6	Description
OFF	OFF					Address 0 (OSDP COMSET supported)
ON	OFF					Address 1
OFF	ON					Address 2
ON	ON					Address 3
		OFF				120 Ohm RS485 termination disabled
		ON				120 Ohm RS485 termination enabled
			OFF			Single Wiegand LED mode (LED1)
			ON			Dual Wiegand LED mode (LED1 + LED2)
				OFF		Casing tamper disabled
				ON		Casing tamper enabled
					OFF	OSDP Secure Channel mode disabled
					ON	OSDP Secure Channel mode enabled

Troubleshooting

Reset to factory default settings

1. Disconnect power from the product.
2. Press and hold the control button while reconnecting power. See *Product overview, on page 4*.
3. Keep the control button pressed for 15 seconds. See *LED indicators, on page 4*.
4. Release the control button. The process is complete when the status LED indicator turns green. The product has been reset to the factory default settings.

Configuration mode

To enter the configuration mode, press the control button for more than 10 seconds until the Wiegand LED turns green for one second. See *LED indicators, on page 4*. For how to configure supervised inputs, see *Supervised inputs, on page 6*.

During the configuration mode:

- Click the control button once to exit the configuration mode.
- Click the control button twice to configure IO5 as digital.
- Click the control button three times to configure IO5 as analog for supervised tamper.
- Click the control button four times to configure the supervised open collector circuit.
- Click the control button five times to configure the supervised switch circuit.

Upgrade the device software

Important

- Preconfigured and customized settings are saved when you upgrade the device software (provided that the features are available in the new version) although this is not guaranteed by Axis Communications AB.
- Make sure the device remains connected to the power source throughout the upgrade process.
- Make sure you have an OSDP reader configured in your access control management system.

Note

When you upgrade the device with the latest version, the product receives the latest functionality available. Always read the upgrade instructions and release notes available with each new release before you upgrade the version. To find the latest device software and the release notes, go to *axis.com/support/device-software*.

1. Download the device software file to your computer, available free of charge at *axis.com/support/device-software*.
2. Log in to your door controller web interface as an administrator.
3. Go to **Peripherals > Upgrade > Upgrade converters**.
4. Click **Upgrade converters**.

When the upgrade has finished, the product restarts automatically.

Technical issues, clues, and solutions

If you can't find what you're looking for here, try the troubleshooting section at *axis.com/support*.

Problems with the device software	
Upgrade failure	If the upgrade fails, try upgrading the device software again.
No device software	If you press the control button during power on for more than 60 seconds, it is possible to remove the device software. To solve this, try upgrading the device software.

Contact support

If you need more help, go to *axis.com/support*.

T10221892

2025-04 (M1.13)

© 2025 Axis Communications AB