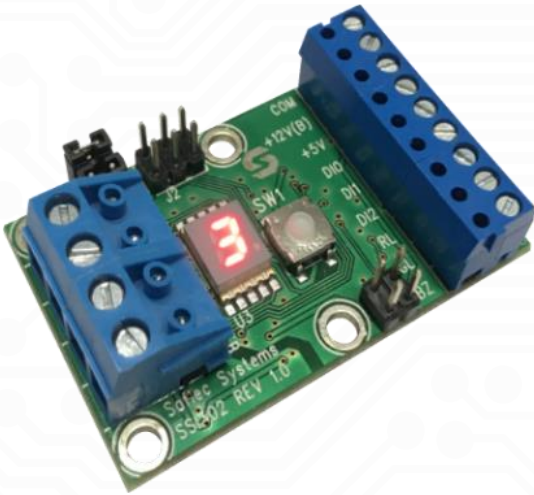


Isolated Wiegand Interface Board

ACCESS CONTROL

Product code: SSI-302-W

The **Optimal Conversion** approach



KEY FEATURES

- Essential for converting Wiegand data into the RS-485 used by the SDC based door controllers or the SEB-7xx Remote IO boards.
- Small, space saving board for unobtrusive installation behind a device, or within the controller cabinet.
- In-circuit programming for easy product updates.
- LED display for easy addressing.
- Requires 12Vdc power source

The **SSI-302-W board** connects Wiegand-compatible devices to the RS-485 reader network used by SDC controllers and the SEB-720 Remote IO board.

It supports power isolation, allowing the Wiegand device to have its own power supply without causing grounding issues on the network side of the device. To achieve this, the board should be powered from a 12Vdc source on both the RS-485 side and Wiegand device side separately.

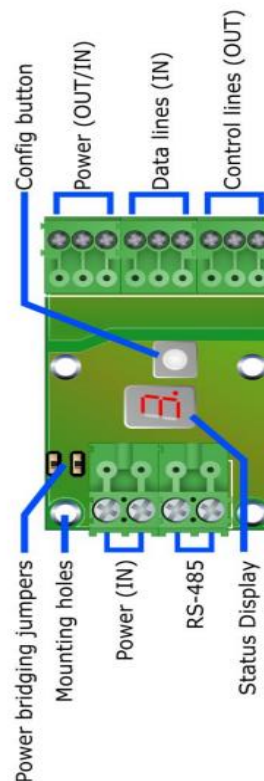
However, if necessary, the isolation override jumpers can be used to link the power on both sides, but caution should be taken to avoid damaging the board by using too much power on the Wiegand device. The SSI-302-W is designed for use with SDC controller boards, SEB-720 Remote IO board, and any 3rd party Wiegand-compatible device.

It mimics a proximity reader on the RS-485 side and has a Wiegand host connection on the other side, allowing it to translate data between the two standards.

It can also communicate using the **OSDP** protocol and function as a legacy Wiegand to **OSDP convertor**. The board is addressed on the RS-485 reader network using the 8-segment display and config button.

The display can also be used to check the status of the device and configure other settings.

Board Diagram



A rapidly flashing decimal point indicates that network communication with the controller has been established, while a slow flash indicates that the device is working but the network connection has not been established. A dash is shown when a Wiegand number has been received from the interface.

The SSI-302-W board supports multiple inputs, including Wiegand, RS-485 OSDP, and serial communications such as barcode scanners. It also supports multiple outputs, including RS-485 **OSDP**, RS-485 Saflec Systems proprietary protocol, and USB keyboard interface.

This converter board is a versatile solution that can replace the Wiegand to RS-485 convertor board (SSI-301-W) to convert legacy 3rd party Wiegand devices to the protocol used by Saflec Systems' SDC controllers.

Additionally, it can function as a barcode scanner to USB keyboard interface or convert legacy 3rd party Wiegand devices to the new secure **OSDP** for other purposes.

The board is isolated to protect the controller network from issues that can arise from 3rd party devices using their own power supplies. It can also be used in power pass-through mode.

PRODUCT SPECIFICATIONS

Power requirements

Operating Voltage (DC)	9 to 14 Vdc
Maximum Current	30 mA

Environmental characteristics

Operating Temperature	0°C to +70°C
Storage Temperature	-10°C to +80°C

Digital Outputs (Wiegand)

Specification:	Open collector transistor output with 4k7 Pull-up Resistor to 5Vdc.
Max Voltage on terminal	-2 to +20V referenced to ground
Max Load	100mA at 5Vdc

Inputs

Specification:	TLL input with 4k7 Pull-up Resistor to 5Vdc
Max Voltage on terminal	-10 to +20V referenced to ground
V Input Low	< 1V
V Input High	> 3V

Wiegand encodings

Wiegand length	34 bits (32 bits data)/26 bits (24 bits data)
Site code length	0 bits (No site code)
Start parity bit	Even parity over the first half of the databits
Stop parity bit	Odd parity over the last half of the databits