WG Converter into RS485
Introduction

The converter supports two-way conversion between Wiegand model and 485 signal. The conversion process is automatically identified through the signal transmission direction, without manual plugging or plugging of the interface or other settings.
The Wiegand signal format supports the standard WG26/WG34, 485 communication parameters 9600/N/8/1. If you need to support other private Wiegand or 485 protocols, you can provide data for customization.
The converter uses a high-anti-interference MCU processing chip, built-in watchdog circuit, automatically detects the working status of the equipment, and automatically resets when the work is abnormal to ensure that the converter never crashes.

Specifications

S4A Model No.	WG-RS485	Stop bit	1
Baud rate	9600	Voltage	9-15V
Test	N	Current	< 30mA
Data bit	8	Dimensions	70×41×23mm

1. Power connection

The converter uses a 9~15V/50mA power supply, and can directly use the 12V power supply of the Wiegand input port of the access controller, with a static working current of about 20mA, or an external 9~12v power adapter.
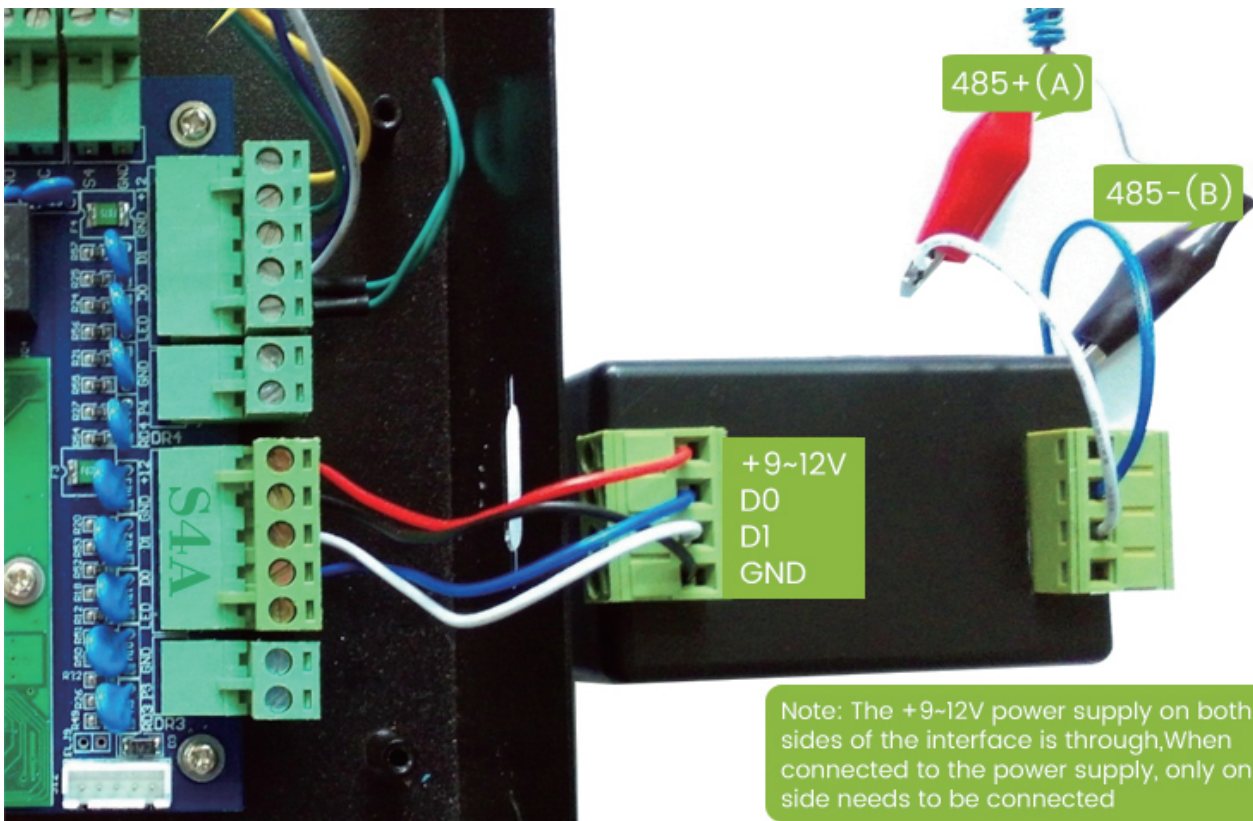
2. How to use 485 to Wiegand

2.1 Connect the signal wires of the converter A/B (485+/485-) and the 485 output device (such as 232/485 transcoder).
2.2 Connect the Wiegand interface D0/D1/GND of the converter and the corresponding Wiegand input device.
(Here the converter GND must be connected to the GND of the input device)
2.3 Send a 3-byte signal through the 485 device.
2.4 The Wiegand output port of the converter outputs Wiegand 26 signals.

Note: The +9~12V power supply on both sides of the interface is through,When connected to the power supply, only one side needs to be connected

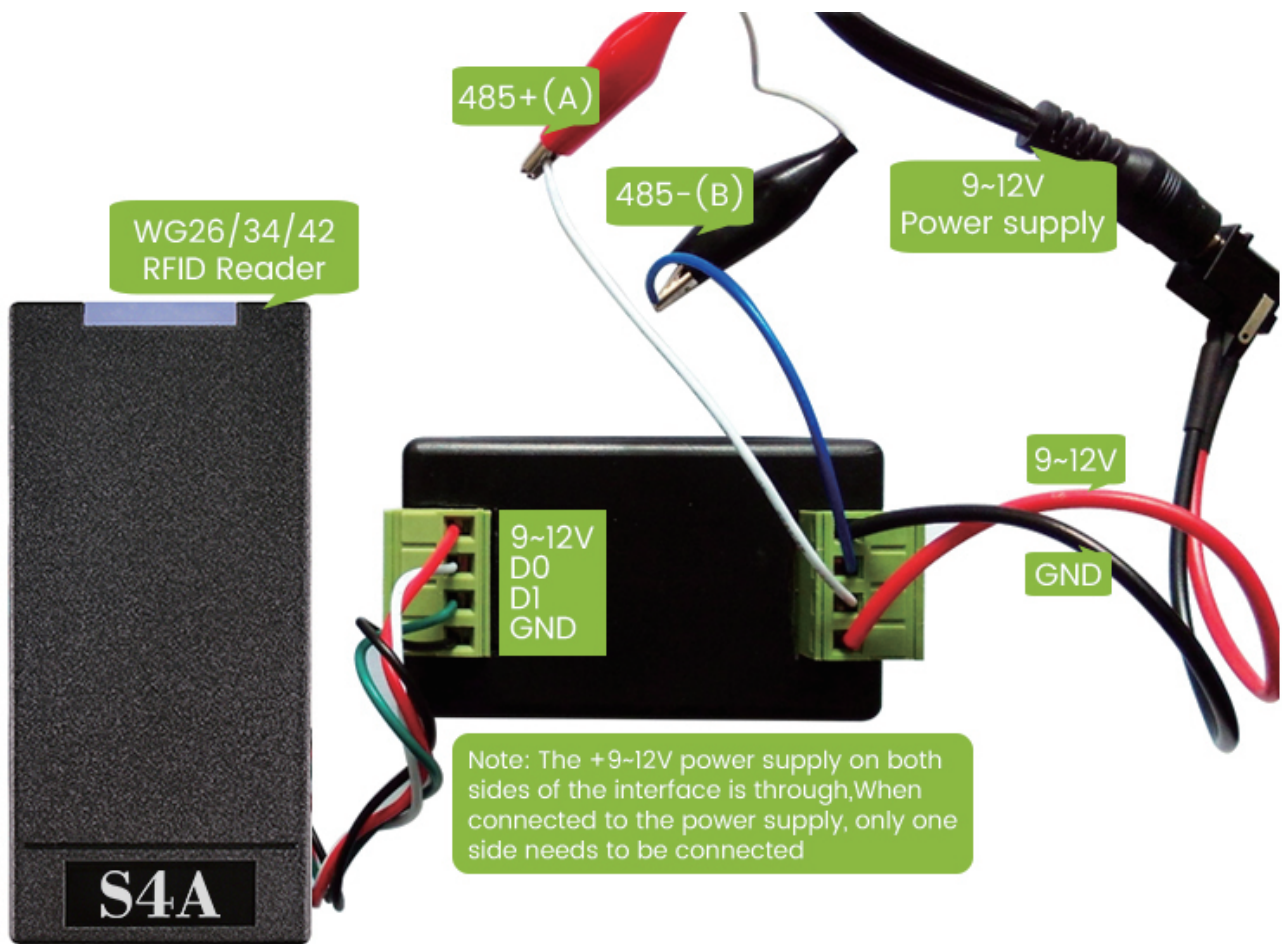| 485 bytes sent (per group)	Wiegand output protocol	Time interval for each group (minimum)
<3	WG keyboard	200ms
3	WG26	200ms
4	WG34	200ms

3. How to use Wiegand to 485

3.1 Connect the converter D0/D1/GND and the corresponding Wiegand signal output device (such as IC card reader) signal line.
(Here the converter GND must be connected to the GND of the output device)
3.2 Connect the converter A/B (485+/485-) signal line.
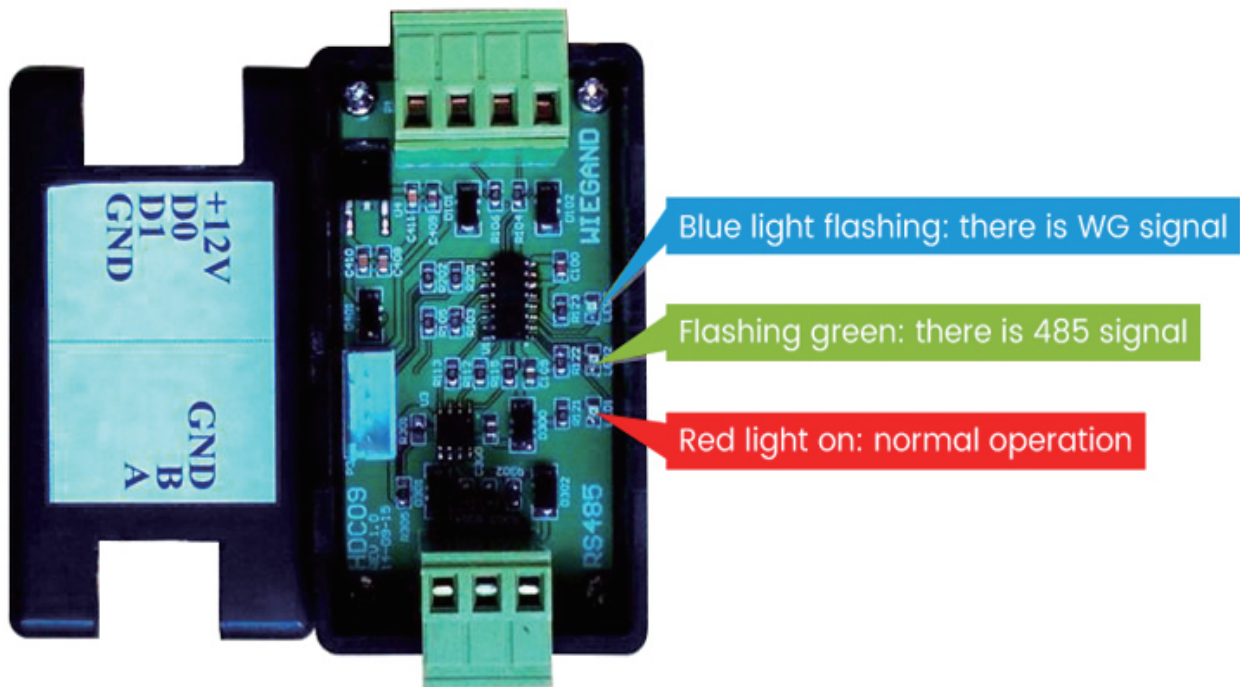3.3 Send Wiegand signal through Wiegand output device.
3.4 The converter outputs the corresponding 485 signal through the 485 port.

Wiegand output protocol	485 bytes sent (per group)		
WG keyboard	1	WG26	3
		WG34	4

4. Converter indicator description

There are 3 indicator lights in the converter: red, green and blue.
Red light on: normal operation, standby state.
Green light flashes: RS485 signal comes in.
Blue light flashes: WG signal comes in.

Blue light flashing: there is WG signal

Flashing green: there is 485 signal

Red light on: normal operation