

GV-WTR Wiegand Converter

Introduction

GV-WTR is a converter designed for enabling the integration of a 3rd-party Wiegand or GV-RS-485 interface reader to a GV-RS-485 or Wiegand controller, respectively. Through the GV-WTR, both Wiegand / GV-RS-485-interface readers can be easily combined to a wide range of access control systems for improved versatility.

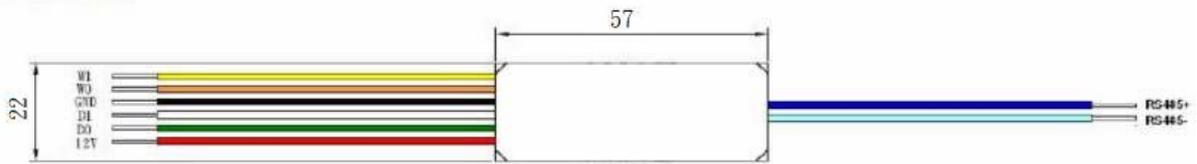
Key Features

- Support one Wiegand (3rd party) reader to be integrated to a RS-485 GV-Controller
- Compliant with GV-AS210 / 410 / 810 / 1010 / 1520 / 1620 / 2110 / 2120 / 4110 / 4111 / 8110 / 8111, GV-CS1320 and GV-EV48
- Support one GV-CR1320 (RS-485) reader to be integrated to a Wiegand controller

Packing List

1. GV-WTR
2. Warranty Card

1. Wire Definition



Wire Color	Function
Yellow	Wiegand Data 1 (Output)
Orange	Wiegand Data 0 (Output)
Black	GND
White	Wiegand Data 1
Green	Wiegand Data 0
Red	DC 12V
Blue	RS-485+
Light Blue	RS-485-

2. Connection

You can connect Wiegand (3rd party) readers to RS-485 GV-Controllers through GV-WTR.

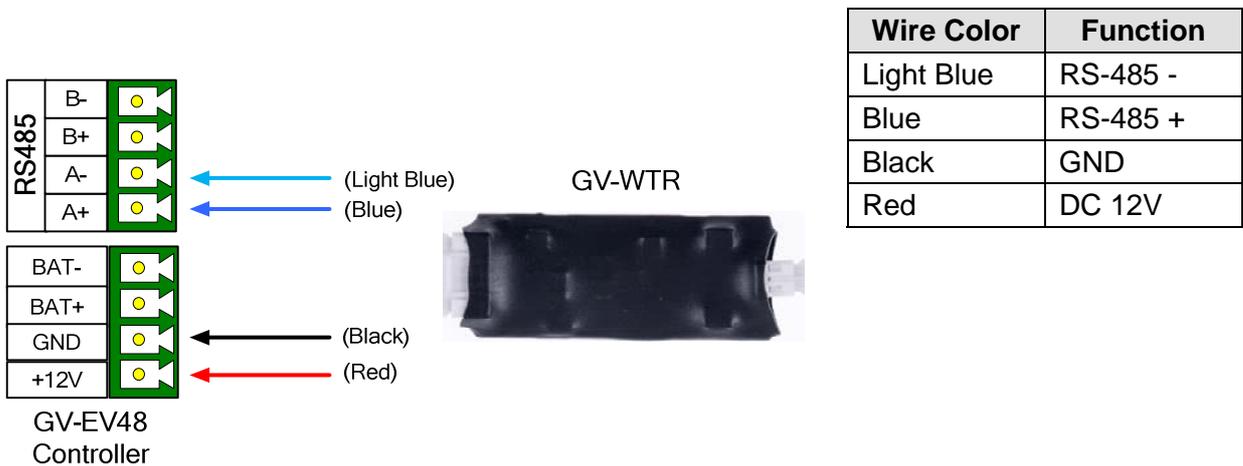
2.1 Connecting with Wiegand Interface Reader

The following diagram uses a **3rd-party Wiegand Reader** as an example. Only one Wiegand reader can be connected to a GV-WTR at a time.



2.2 Connecting to RS-485 GV-Controller

The following diagram uses GV-EV48 controller as an example. Up to two GV-WTR converters can be connected to the RS-485 interface of a GV-Controller.

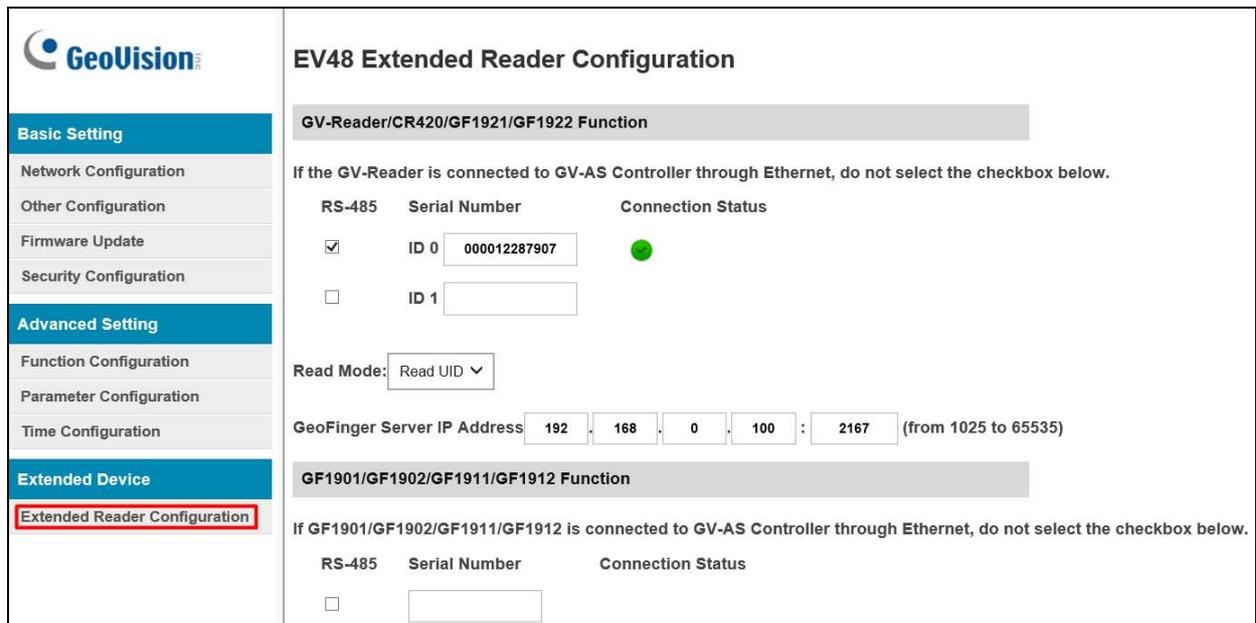


For details on connecting GV-CR1320 to a Wiegand controller, please refer to 1.7 *Connecting GV-CR1320*, *GV-CR1320 User's Manual* from [GeoVision's website](#).

2.3 Defining GV-WTR on GV-Controller Web Interface

This section explains how to define GV-WTR and readers on the Web interface of GeoVision controllers. The following uses GV-EV48 for illustration.

1. On the GV-Controller Web interface, click **Extended Reader Configuration**. This dialog box appears.



EV48 Extended Reader Configuration

GV-Reader/CR420/GF1921/GF1922 Function

If the GV-Reader is connected to GV-AS Controller through Ethernet, do not select the checkbox below.

RS-485	Serial Number	Connection Status
<input checked="" type="checkbox"/>	ID 0 000012287907	●
<input type="checkbox"/>	ID 1	

Read Mode: Read UID

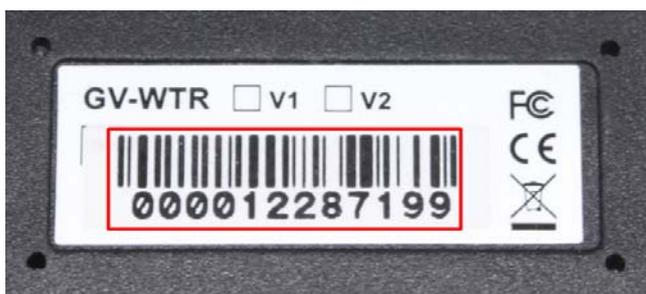
GeoFinger Server IP Address: 192 . 168 . 0 . 100 : 2167 (from 1025 to 65535)

GF1901/GF1902/GF1911/GF1912 Function

If GF1901/GF1902/GF1911/GF1912 is connected to GV-AS Controller through Ethernet, do not select the checkbox below.

RS-485	Serial Number	Connection Status
<input type="checkbox"/>		

2. In the GV-Reader/CR420/GF1921/GF1922 section, select the **RS485** checkbox in front of the ID number and type the **Serial Number** on the rear panel of the GV-WTR. The ID number will be assigned to the GV-WTR.



3. Next to **Read Mode**, select **Read UID** to set the Wiegand reader connected to the GV-WTR to read UID (unique identifier) on GeoVision or 3rd-party ID Cards / Key Fobs.
4. Click **Submit**.

Note: When you click **Submit** on the Extended Reader Configuration page of the GV-Controller, all readers connected through RS-485 interface will reboot.

Specifications

System Requirements		
GV controllers supported	GV-AS210 / 410 / 810 / 1010 / 1520 / 1620 / 2110 / 2120 / 4110 / 4111 / 8110 / 8111, GV-CS1320 and GV-EV48	
GV readers supported	GV-CR1320	
Hardware		
CPU	8-bit Microprocessor	
Power	DC 12 V , 20 mA	
Wiegand Interface	1 Wiegand interface, 26 ~ 64 bit format, distance 100 m (328.1 ft), 24 AWG	
Serial Interface	RS-485	1 RS-485+/- interface
	Serial line protection	8 KV ESD for all signals
Communication Parameters	Parity	N/A
	Data bit	8
	Stop bit	1
	Speed	9600 bps
Operating Temperature	0 ~ 55°C / 32 ~ 104°F	
Operating Humidity	0% ~ 95% RH (non-condensing)	
Dimensions (W x H x D)	57 x 22 x 7 mm (2.2 x 0.87 x 0.28 in)	
Weight	22 g (0.0486 lb)	
Certification	CE, FCC, RoHS	

Note: Specifications are subject to change without notice.