

GV-AS1520 Controller with Built-in UHF RFID Reader



GV-AS1520 is a controller with a built-in Radio Frequency Identification (RFID) reader of ISO18000-6C (EPC GEN2) standard. Designed for parking lot management, GV-AS1520 can read RFID tags up to 10 m (33 ft) under optimal conditions.

Key Features

- Built-in UHF Reader
- Built-in 1 digital input and 4 relay outputs
- 1 RS-485 interface supporting up to 2 readers
- 1 network interface for connection with GV-ASManager and TCP/IP reader
- DC 12V / PoE+ (IEEE 802.3at, provides up to 25.5 W)
- 12V DC power supply to external devices when in the PoE power mode
- Effective range of up to 10 m (33 ft) under optimal conditions
- 100,000 cards supported
- Electronic tag compliant with EPC Gen II (ISO18000-6C) standard



Specifications

System Requirement	nts		
GV-ASManager Version		V5.0.1.0 or later	
Hardware			
Number of User Cards		100,000 cards	
Event Buffer		65,535 events and log data	
Antenna gain		7.71 dBi (circular polarization)	
Antenna receiving		50 ohm U.FL.	
Operating frequency		AS1520 TW 922-928 MHz AS1520 US 902-928 MHz AS1520 EU 865-868 MHz	
Protocol		EPC Gen2 (ISO 18000-6C)	
Receiving sensitivity		-85 dBm	
Sensing range		10 m (33 ft) max.	
Power		12V DC, 1.25A / PoE+ (IEEE 802.3at, provides up to 25.5 W)	
RS-485 Interface		1 RS-485 interface for 2 GeoVision readers (GV-CR420 / GV-SR1521 / GV-R1352 / GV-RK1352 / GV-DFR1352)	
TCP/IP Interface		1 TCP/IP interface for 2 GeoVision readers (GV-CR420 / CR1320 / GV-GF1921 / GV-GF1922)	
Communication Protocol		TCP/IP	
Digital I/O	Input	1 input, dry contact, NO / NC	
	Output	4 relay output (30V DC, 1A; 110V AC~250V AC, 0.3A)	
General			
Operating Temperature		-20°C ~ 55 °C / -4°F ~ 131°F	
Humidity		10 ~ 90% RH (non-condensing)	
Dimensions (W x H x D)		228 x 228 x 52.3 mm / 8.97 x 8.97 x 2.04 in	
Weight		590 g / 1.30 lb	
Ingress Protection		IP56	
Regulatory		CE, FCC, RoHS compliant	

Note:

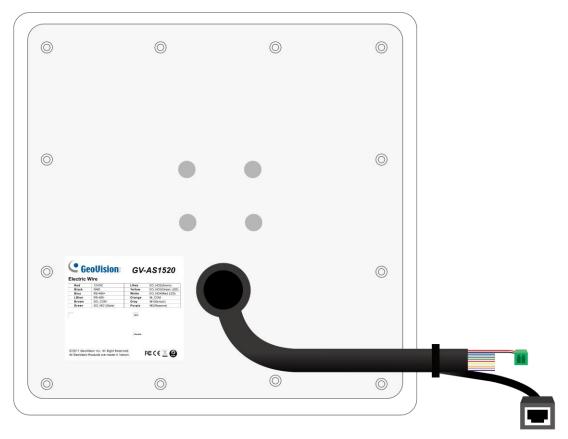
- 1. GV-AS1520 is a controller with a built-in UHF RFID reader and therefore it cannot be used as an independent reader.
- 2. The reading range of 10 m (33 ft) is achieved when GV-AS1520 and the RFID tag are installed at the same height, facing each other. The reading range is heavily dependent on the readability of the RFID tags being recognized. Therefore, the reading range may be affected by a variety of environmental and situation factors, which are exemplified by but not limited to the following:
 - The view angle and height of the GV-AS1520 installed, relative to:
 - The position of the RFID tag being recognized
 - The position and curve of angle, if any, of the driving lane
 - The stability of the power supply of GV-AS1520
 - The quality and conditions of the RFID tag being recognized
 - Whether there is any obstruction, especially metal or other materials such as an insulation film on the windshield, between GV-AS1520 and the RFID tag
 - Whether there is any electromagnetic interference near the installation site of GV-AS1520
 - Whether there is any channel-interference among multiple RFID Readers installed close to each other.
 - When facing opposite directions, RFID Readers must be placed 20 cm (7.9 in) apart or more.
 - When facing the same direction, RFID Readers must be assigned to separate bands (available upon request when purchasing).
- 3. Specifications are subject to change without notice.



Packing List

- GV-AS1520
- L-Bracket
- Fixed-Clamp
- U-Clip
- Screw x 4
- Quick Guide
- Warranty Card

Wire Definitions



Wire color	Definition	Wire color	Definition
Red	12V DC	Light Red	DO NO2 (Alarm)
Black	GND	Yellow	DO NO3 (Green LED)
Blue	RS-485+	White	DO NO4 (Red LED)
Light Blue	RS-485-	Orange	IN COM
Brown	DO COM	Gray	IN1 (Sensor)
Green	DO NO1 (Gate)	Purple	IN2 (Not Functional)

-3-GV-AS1520 January 13, 2021



Options

Optional devices can expand the capabilities and versatilities of your GV-AS Controllers. Consult your sales representative for more information.

GV-AS ID Card / Key Fob & GV-UHF Tag	125 KHz and 13.56 MHz cards / key fobs, 900 MHz UHF Tag are available.
GV-CR420	GV-CR420 is a card reader with a built-in 4MP wide angle IP camera. The card reader recognizes identification cards and transmits live view through network connection.
GV-CR1320	GV-CR1320 is a card reader with a built-in 2MP wide angle IP camera. The card reader recognizes identification cards and transmits live view through network connection.
GV-DFR1352	GV-DFR1352 is a card reader that uses a 13.56 MHz frequency. The reader has both Wiegand and RS-485 outputs that can be connected to any standard access control panel.
GV-FWC	GV-FWC can integrate GV-Face Recognition Cameras and GV-AI FR into access control systems by sending access card data, paired to Face IDs, to controllers either through TCP/IP or Wiegand connection.
GV-GF Fingerprint Readers	GV-GF1921 / 1922 is a fingerprint reader, supporting three operation modes: Fingerprint only, Fingerprint + Card and Card Only. Readers with optical and capacitance sensors are available.
GV-POE Switch	GV-POE Switch is designed to provide power along with network connection for IP devices. The GV-POE Switch is available in various models with different numbers and types of ports.
GV-R1352	GV-R1352 is a card reader that uses a 13.56 MHz frequency. The reader has both Wiegand and RS-485 outputs that can be connected to any standard access control panel.
GV-RK1352	GV-RK1352 is a card reader with keypad that uses a 13.56 MHz frequency. The reader has both Wiegand and RS-485 outputs that can be connected to any standard access control panel.
GV-SR1251	GV-SR1251 is a card reader that uses a 125 kHz frequency. It has both Wiegand and RS-485 outputs that can be connected to any standard access control panel.
GV-WTR	GV-WTR is a converter designed for converting Wiegand interface to RS-485 interface, and vice versa. It enables 3rd party readers to be connected to RS-485 GV-Controllers, as well as allowing GV-AI FR (software) and GV-RS1320 (RS-485 camera reader) to be connected to 3 rd -party Wiegand controllers.
Power Adapter	Contact our sales representatives for the countries and areas supported.