Architectural and Engineering Specifications

GV-AS1520 Controller

Revision Date: 12/25/2017

The document is written using industry standard formatting and language, and is designed for use by architects, consultants, and specifying engineers who are preparing bid specifications for security cameras, surveillance systems and access control systems.

The electronic version of these specifications may be copied into the appropriate sections of a complete bid specification by using the "cut and paste" method. They are written to highlight the features and specifications of GeoVision products. Section headings mention specific models only for clarity – these may be deleted after insertion into the complete specification.

Products covered in this document include:

- *GV-AS1520 Controller*

For more information on GeoVision products, please visit www.geovision.com.tw.

GV-AS1520 Controller

A. General Requirements

1. The controller shall be capable of being a parking gate controller with a built-in UHF reader.
2. The controller shall be capable of controlling parking gates.
3. The controller shall support 1 parking gate with one-way control or two-way control.
4. The controller shall operate between 922-928 MHz in Taiwan, 902-928 MHz in the United States and 865-868 MHz in Europe.
5. The controller shall have a receiving sensitivity of -85 dBm.
6. The controller shall support up to 2 GeoVision readers through RS-485 connection.
7. The controller shall support up to 100,000 user cards.
8. The controller shall be equipped with 1 digital input and 4 relay outputs.
9. The built-in reader shall read Radio Frequency Identification (RFID) tags within a distance of 10 m (32.8 ft).
10. The controller shall support TCP/IP connection with the access controller software GV-ASManager. With GV-ASManager, you shall be capable of accessing information and alarm messages from the controller.

11. The controller shall be accessible on a network using:
    - Fixed or dynamic IP address
    - DDNS domain name

B. Interface Requirements

1. The controller shall be equipped with 1 RS-485 interface for connection with up to 2 GeoVision readers.
2. The controller shall come with 1 TCP/IP interface to allow network connection with GeoVision network readers and GV-ASManager.

C. Web Interface Requirements: You shall be able to access the following settings through the Web interface of the controller.

1. You shall be able to export the controller settings, and then import the same settings to other controllers.
2. You shall be able to upgrade controller firmware.
3. You shall be able to manage login ID and password for the administrator account on the Web interface.
4. You shall be able to set up **Anti-Passback (APB)** across multiple parking gate controllers. When enabled, a card used on an entry gate cannot access the same entry gate again unless it has been used on a corresponding exit gate.
5. The controller shall support the following authentication modes.
    - **Local Unlock Mode:** Gates remain open.
    - **Local Lock Mode:** Gates remain locked.
    - **Fixed Card Mode:** Grants access after the card is presented.
    - **Fixed Card/Common Mode:** Grants access either after the card is presented or the door's/gate's password is entered.
    - **Authentication Schedule Mode:** Follows authentication schedule set on GV-ASManager.
6. You shall be able to assign a camera to capture snapshots upon an e-tag being detected by the controller or swiping a card on the connected reader with the **Camera Mapping** function.
7. You shall be able to configure the following UHF Setting.
    - **UHF RFID Band**: Separates the frequency channels in order to avoid co-channel interference when 2 or more RFID readers are installed together.
    - **UHF RFID Code**: Reads EPC or TID data of the e-tags.

8. You shall be able to set the time (between 1 and 600 seconds) that a gate shall remain open after which the gate shall be automatically closed in the **Relay On Time** parameter.
9. The controller shall support the following time settings: manually set a time for the controller, synchronize with PC's time, and enable / disable daylight saving time.
10. You shall be able to define the input device connected to the controller. The input sensor can be set to:
    - **Normally Open (NO)**: The e-tag shall be detected only upon input trigger.
    - **Normally Closed (NC)**: The e-tag shall not be detected whenever the input sensor is triggered.
    - **Disable**: The e-tag shall be detected regardless of the status of the input sensor.
11. You shall be able to define the GeoVision readers connected to the controller through network connection.
12. You shall be able to access the log information for specific time periods through the Log Viewer function.

D. Mechanical Requirements

1. The controller shall have dimensions of 228 x 228 x 52.33 mm / 8.97 x 8.97 x 2.04 in.
2. The controller shall have a weight of 590 g / 1.30 lb.
3. The controller shall be equipped with a LED indicator, which turns green or red momentarily, to show system status and access authorization.
4. The controller shall be equipped with wires for 1 digital input, dry contact, NO / NC. The controller shall support 1 type of input: sensor input, for example, the infrared sensor.
5. The controller shall be equipped with wires for 4 relay outputs of 30V DC, 1A; 110V AC~250V AC, 0.3A. The controller shall support 3 types of outputs, for example, the alarm, door and signal outputs.
6. The controller shall be equipped with a built-in reader that can be set to read the EPC or TID data on e-tags.

E. Power Requirements

1. The controller shall be capable of receiving power from 12V DC, 1.25 A / PoE+ (IEEE 802.3at).
2. The maximum power consumption of the controller shall be 25.5 W.

F. Environmental Requirements

1. The Operating temperature of the controller shall be within the range of -20 ~ 55° C / -4 ~ 131° F.
2. The operating humidity shall be within the range of 10% ~ 90% RH with no condensation.
3. The controller shall comply with IP56 protection classification.

G. Packing list shall include:

1. GV-AS1520
2. L-Bracket
3. Fixed-Clamp
4. U-Clip
5. Screw x 4
6. Quick Guide
7. Warranty Card

H. Certifications and Approvals

1. CE, FCC, RoHS compliant.
2. Electronic tag compliant with EPC Gen II (ISO18000-6C) standard

All specifications are subject to change without notice.