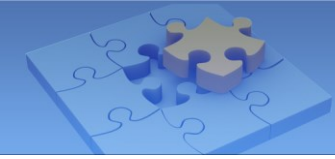


# Comparison for GV-AS Controllers

|                                                                                                           |   |
|-----------------------------------------------------------------------------------------------------------|---|
| GV-AS100 / GV-AS110 / GV-AS120 / GV-AS1010 / GV-AS1110 / GV-CS1320.....                                   | 2 |
| GV-AS210 / 2110 / 2120, GV-AS410 / 4110 / 4111 Kit / 810 / 8110 / 8111 Kit, GV-AS1520, and GV-AS1620..... | 4 |
| GV-IA1330 .....                                                                                           | 7 |



## Comparison for GV-AS Controllers

**GV-AS100 / GV-AS110 / GV-AS120 / GV-AS1010 / GV-AS1110 / GV-CS1320**

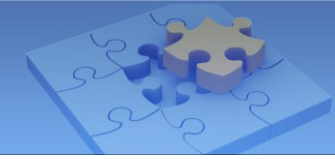
| Models                 |          | GV-AS100                                                                          | GV-AS110                                                                          | GV-AS120                                                                            | GV-AS1010                                                                           | GV-AS1110                                                                           | GV-CS1320                                                                           |
|------------------------|----------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                        |          |  |  |  |  |  |  |
|                        |          | Hardware                                                                          |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Communication          |          | RS-485<br>TCP/IP (with GV-ASBox / ASNet)                                          |                                                                                   |                                                                                     | TCP/IP                                                                              |                                                                                     | TCP/IP                                                                              |
| Built-in Reader        |          | O (Reads UID only)                                                                |                                                                                   |                                                                                     | O (Reads GID or UID)                                                                |                                                                                     | O (Reads GID or UID)                                                                |
| Keypad                 |          | O                                                                                 | O                                                                                 | X                                                                                   | O                                                                                   | O                                                                                   | X                                                                                   |
| Micro SD Card          |          | X                                                                                 | X                                                                                 | X                                                                                   | X                                                                                   | X                                                                                   | O                                                                                   |
| Battery Types          |          | Replaceable Button Cell                                                           | Built-in Battery                                                                  |                                                                                     |                                                                                     |                                                                                     | Built-in Battery                                                                    |
| Backup Battery Support |          | O (with GV-ASBox / ASNet)                                                         |                                                                                   |                                                                                     | N/A                                                                                 |                                                                                     | N/A                                                                                 |
|                        |          | Function                                                                          |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Doors Supported        | One-way  | 1<br>2 (with GV-ASBox)                                                            |                                                                                   |                                                                                     | 1                                                                                   |                                                                                     | 1                                                                                   |
|                        | Two-way  | 1<br>2 (with GV-ASBox)                                                            |                                                                                   |                                                                                     | 1                                                                                   |                                                                                     | 1                                                                                   |
| Readers Supported      | Wiegand  | 1<br>2 (with GV-ASBox)                                                            |                                                                                   |                                                                                     | N/A                                                                                 |                                                                                     | N/A                                                                                 |
|                        | RS-485   | 1<br>3 (with GV-ASNet)<br>5 (with GV-ASBox)                                       | 2 (with GV-ASNet)<br>4 (with GV-ASBox)                                            |                                                                                     | 2                                                                                   | N/A                                                                                 | 2<br>(RS-485 / OSDP <sup>1</sup> )                                                  |
|                        | TCP/IP   | 2 (with GV-ASNet)<br>4 (with GV-ASBox)                                            |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     | 2                                                                                   |
| I/O Supported          | Standard | 3 in / 2 out                                                                      |                                                                                   | 2 in / 1 out                                                                        | 3 in / 2 out                                                                        | 2 in / 1 out                                                                        | 2 in / 1 out                                                                        |
|                        | Optional | 11 in / 10 out<br>(with GV-ASBox)                                                 |                                                                                   | 10 in / 9 out<br>(with GV-ASBox)                                                    | N/A                                                                                 |                                                                                     | N/A                                                                                 |



| Models                                                | GV-AS100                                                    | GV-AS110                                    | GV-AS120                                       | GV-AS1010                                         | GV-AS1110                                   | GV-CS1320                                    |
|-------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------|------------------------------------------------|---------------------------------------------------|---------------------------------------------|----------------------------------------------|
| Bell Button Support                                   | N/A                                                         |                                             |                                                |                                                   |                                             | O                                            |
| Number of User Cards                                  | 1000 / 40,000 Cards (Standalone / networked or RS-485 mode) |                                             |                                                | 1000 / 40,000 cards (standalone / networked mode) |                                             | 100,000 cards                                |
| Event Buffer                                          | 65,536                                                      |                                             |                                                |                                                   |                                             | 50,000                                       |
| TCP/IP Based Data Input                               | O (with GV-ASBox / Net)                                     |                                             |                                                | O                                                 |                                             | O                                            |
| Weigand Card Format                                   | 26 ~ 64 bits                                                |                                             |                                                | 26 bits                                           |                                             | 26 bits                                      |
|                                                       | Camera                                                      |                                             |                                                |                                                   |                                             |                                              |
| Camera Resolution                                     | N/A                                                         |                                             |                                                |                                                   |                                             | 2 MP                                         |
| IR LED Quantity                                       | N/A                                                         |                                             |                                                |                                                   |                                             | 2 IR LEDs                                    |
| Audio Support                                         | N/A                                                         |                                             |                                                |                                                   |                                             | Two-way Audio                                |
|                                                       | General                                                     |                                             |                                                |                                                   |                                             |                                              |
| Operating Temperature                                 | 0 ~ 65°C /<br>32 ~149°F                                     | -35 ~ 65°C / -31 ~ 149°F                    |                                                | 0 ~ 65°C /<br>32 ~149°F                           | -35 ~ 65°C /<br>-31 ~ 149°F                 | -10 ~ 50 °C (14 ~ 122 °F)                    |
| Operating Humidity                                    | 10% ~ 90% RH (non-condensing)                               |                                             |                                                |                                                   |                                             |                                              |
| Power                                                 | 12V DC, 1A                                                  | 12V DC, 1.25A                               |                                                |                                                   |                                             | 12V DC, 2.5A<br>PoE (IEEE 802.3at)           |
| Power Supply Output<br>(For GV-AS Kit only)           | N/A                                                         |                                             |                                                |                                                   |                                             | N/A                                          |
| Power Adapter Board<br>Output (For GV-AS Kit<br>only) | N/A                                                         |                                             |                                                |                                                   |                                             | N/A                                          |
| Dimension (L x W x H)                                 | 96 x 137 x 27 mm /<br>3.78 x 5.39 x 1.06 in                 | 95 x 108 x 23 mm /<br>3.74 x 4.25 x 0.91 in | 65.8 x 115.6 x 20.5 mm<br>/ 2.6 x 4.6 x 0.8 in | 96 x 137 x 27 mm /<br>3.78 x 5.39 x 1.06 in       | 95 x 108 x 23 mm /<br>3.74 x 4.25 x 0.91 in | 137 x 80 x 34.5 mm /<br>5.4 x 3.15 x 1.36 in |
| Weight                                                | 250 g / 0.55 lb                                             | 200 g / 0.44 lb                             | 138 g / 0.3 lb                                 | 250 g / 0.55 lb                                   | 270 g / 0.59 lb                             | 315 g / 0.69 lb                              |
| Ingress Protection                                    | IP54                                                        |                                             | IP66                                           | IP54                                              | IP66                                        |                                              |
| Certification                                         | CE, FCC, RoHS                                               |                                             |                                                |                                                   |                                             | CE, FCC, RCM, RoHS                           |

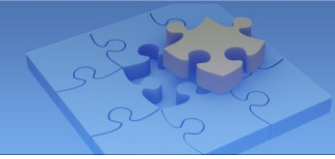
**Note:**

- For the RS-485 interface, connect only one of the following readers to the GV-CS1320 controller: GV RS-485 readers or OSDP compliant readers.
- All specifications are subject to change without notice.



## GV-AS210 / 2110 / 2120, GV-AS410 / 4110 / 4111 Kit / 810 / 8110 / 8111 Kit, GV-AS1520, and GV-AS1620

| Models                 |         | GV-AS210 / 2110 / 2120                                                            | GV-AS410 / 4110 / 810 / 8110                                                                               | GV-AS4111 / 8111 Kit                                                                            | GV-AS1520                                                                           | GV-AS1620                                                                           |
|------------------------|---------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                        |         |  |                          |              |  |  |
|                        |         | Hardware                                                                          |                                                                                                            |                                                                                                 |                                                                                     |                                                                                     |
| Communication          |         | TCP/IP                                                                            |                                                                                                            |                                                                                                 |                                                                                     |                                                                                     |
| Built-in Reader        |         | X                                                                                 | X                                                                                                          | X                                                                                               | O                                                                                   | X                                                                                   |
| Keypad                 |         | X                                                                                 | X                                                                                                          | X                                                                                               | X                                                                                   | X                                                                                   |
| Micro SD Card          |         | O                                                                                 | O                                                                                                          | O                                                                                               | X                                                                                   | X                                                                                   |
| Battery Types          |         | AS210: Built-in Battery (Irreplaceable)<br>AS2110 / 2120: Replaceable Button Cell | AS410 / 810: Built-in Battery (Irreplaceable)<br>AS4110 / 8110: Replaceable Button Cell                    | Replaceable button cell<br>(CR2032)                                                             | Built-in Battery                                                                    | X                                                                                   |
| Backup Battery Support |         | O                                                                                 |                                                                                                            |                                                                                                 | X                                                                                   | X                                                                                   |
|                        |         | Function                                                                          |                                                                                                            |                                                                                                 |                                                                                     |                                                                                     |
| Doors Supported        | One-way | 4                                                                                 | AS410 / 4110: 4<br>AS810 / 8110: 8                                                                         | AS4111: 4<br>AS8111: 8                                                                          | 1                                                                                   |                                                                                     |
|                        | Two-way | 2 (Wiegand only)<br>4 (RS-485 / Network)<br>4 (Wiegand + RS-485 / Network)        | AS410 / 4110: 4<br>AS810 / 8110: 4 (Wiegand only), 8 (RS-485 / Network),<br>8 (Wiegand + RS-485 / Network) | AS4111: 4<br>AS8111: 4 (Wiegand only)<br>8 (RS-485 / Network)<br>8 (Wiegand + RS-485 / Network) | 1                                                                                   |                                                                                     |
| Readers Supported      | Wiegand | 4                                                                                 |                                                                                                            | 8                                                                                               | N/A                                                                                 | 2                                                                                   |
|                        | RS-485  | 8 <sup>(2)</sup>                                                                  | AS410 / 4110: 8 <sup>(2) (3)</sup><br>AS810 / 8110: 16 <sup>(2)</sup>                                      | AS4111: 8 <sup>(2) (3)</sup><br>AS8111: 16 <sup>(2)</sup>                                       | 2                                                                                   | 2<br>(RS-485 / OSDP <sup>(1)</sup> )                                                |
|                        | TCP/IP  | 8                                                                                 | AS410 / 4110: 8<br>AS810 / 8110: 16                                                                        | AS4111: 8<br>AS8111: 16                                                                         | 2                                                                                   |                                                                                     |

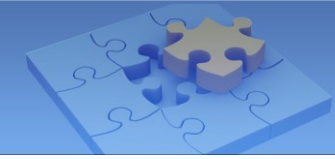


| Models                                          |          | GV-AS210 / 2110 / 2120                                                                    | GV-AS410 / 4110 / 810 / 8110                                         | GV-AS4111 / 8111 Kit                                                                                            | GV-AS1520                                                  | GV-AS1620                                              |
|-------------------------------------------------|----------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------|
| I/O Supported                                   | Standard | 8 in / 8 out                                                                              | 16 in / 24 out <sup>(4)</sup>                                        | 16 in / 24 out <sup>(4)</sup>                                                                                   | 1 in / 4 out                                               | 4 in / 4 out                                           |
|                                                 | Optional | N/A                                                                                       |                                                                      |                                                                                                                 |                                                            |                                                        |
| Number of User Cards                            |          | 100,000 cards                                                                             |                                                                      |                                                                                                                 |                                                            |                                                        |
| Event Buffer                                    |          | 1,000,000                                                                                 |                                                                      |                                                                                                                 | 65,535                                                     |                                                        |
| TCP/IP Based Data Input                         |          | O                                                                                         |                                                                      |                                                                                                                 |                                                            |                                                        |
| Weigand Card Format                             |          | 26 ~ 64 bits                                                                              |                                                                      |                                                                                                                 | 64 bits                                                    | 26 ~ 64 bits                                           |
|                                                 |          | General                                                                                   |                                                                      |                                                                                                                 |                                                            |                                                        |
| Operating Temperature                           |          | 0 ~ 65°C / 32 ~ 149°F                                                                     |                                                                      |                                                                                                                 | -20 ~ 55 °C /-4 ~ 131°F                                    | 0°C ~ 65°C /32°F ~ 149°F                               |
| Operating Humidity                              |          | 10% ~ 90% RH (non-condensing)                                                             |                                                                      |                                                                                                                 |                                                            | 5% ~ 95% RH (Non-Condensing)                           |
| Power                                           |          | <b>AS210 / 2110:</b> 12V DC, 3A<br><b>AS2120:</b> 12V DC, 3A / PoE+ (IEEE 802.3at, 25.5W) | <b>AS410 / 4110:</b> 12V DC, 3.5A<br><b>AS810 / 8110:</b> 12V DC, 5A | <b>US Standard (UL 294):</b><br>AC 110 ~120V, 50 ~ 60Hz, 1.7A<br><b>EU Standard:</b><br>AC 200 ~240V, 50 ~ 60Hz | 12V DC, 1.25A / PoE+ (IEEE 802.3at, provides up to 25.5 W) | 12V DC, 3A / PoE+ (IEEE 802.3at, provides up to 25.5W) |
| Power Supply Output (For GV-AS Kit only)        |          | N/A                                                                                       |                                                                      | <b>DC Voltage Range:</b><br>11V ~ 13V (Nominal 12V)<br><b>Rated Current:</b> 13A<br><b>Rated Power:</b> 150 W   | N/A                                                        |                                                        |
| Power Adapter Board Output (For GV-AS Kit only) |          | N/A                                                                                       |                                                                      | <b>DC Voltage Range:</b> 12V<br><b>Rated Current:</b> 0.5A<br><b>Rated Power:</b> 6 W                           | N/A                                                        |                                                        |
| Dimension (L x W x H)                           |          | 210 x 204 x 46.6 mm / 8.27 x 8.03 x 1.83 in (case included)                               | 210 x 187 x 40 mm / 8.27 x 7.36 x 1.57 in                            | 420 x 300 x 110 mm / 16.5 x 11.8 x 4.33 in                                                                      | 228 x 228 x 52.3 mm / 8.97 x 8.97 x 2.04 in                | 111.4 x 27.5 x 101 mm / 4.39 x 1.08 x 3.98 in          |
| Weight                                          |          | 810 g / 1.79 lb (case included)                                                           | 900 g / 2 lb                                                         | 4.4 kg / 9.68 lb                                                                                                | 590 g / 1.30 lb                                            | 235 g / 0.52 lb                                        |
| Ingress Protection                              |          | N/A                                                                                       |                                                                      |                                                                                                                 | IP56                                                       | IP54                                                   |
| Certification                                   |          | CE, FCC, RoHS                                                                             |                                                                      | UL 294, CE, FCC, RoHS                                                                                           | CE, FCC, RoHS                                              |                                                        |



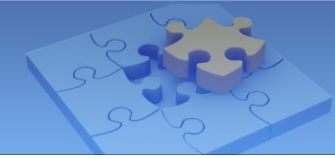
**Note:**

1. For the RS-485 interface, connect only one of the following readers to the GV-AS1620 controller: GV RS-485 readers, OSDP compliant readers, or GV-QR1352 / DES1352 readers.
2. For the RS-485 interface, connect only one of the following readers to the GV-AS21 / 41 / 81 series controllers: GV RS-485 readers or GV-QR1352 / DES1352 readers.
3. Only GV-AS4110/4111 Cloud support OSDP via RS-485.
4. GV-AS4110/4111 Cloud only support 16 output devices.
5. All specifications are subject to change without notice.



## GV-IA1330

| Models                 |          | GV-IA1330                                                                         |
|------------------------|----------|-----------------------------------------------------------------------------------|
|                        |          |  |
| Hardware               |          |                                                                                   |
| Communication          |          | TCP/IP                                                                            |
| Built-in Reader        |          | O (Reads UID only)                                                                |
| Keypad                 |          | X                                                                                 |
| Micro SD Card          |          | O                                                                                 |
| Battery Types          |          | Built-in Battery                                                                  |
| Backup Battery Support |          | N/A                                                                               |
| Function               |          |                                                                                   |
| Doors Supported        | One-way  | 1                                                                                 |
|                        | Two-way  | 1                                                                                 |
| Readers Supported      | Wiegand  | N/A                                                                               |
|                        | RS-485   | 2<br>(RS-485 / OSDP <sup>(*)</sup> )                                              |
|                        | TCP/IP   | N/A                                                                               |
| I/O Supported          | Standard | 4 in / 2 out                                                                      |
|                        | Optional | N/A                                                                               |



| Models                                                | GV-IA1330                              |
|-------------------------------------------------------|----------------------------------------|
| Bell Button Support                                   | O                                      |
| Number of User Cards                                  | 100,000 cards                          |
| Event Buffer                                          | 65,535                                 |
| TCP/IP Based Data Input                               | O                                      |
| Weigand Card Format                                   | 26 bits                                |
| <b>Camera</b>                                         |                                        |
| Camera Resolution                                     | 2 MP                                   |
| IR LED Quantity                                       | 2 IR LEDs                              |
| Audio Support                                         | Two-way Audio                          |
| <b>General</b>                                        |                                        |
| Operating Temperature                                 | -30°C ~ 60°C (-22°F ~ 140°F)           |
| Operating Humidity                                    | 10 ~ 90% (no condensation)             |
| Power                                                 | 12V DC ±25%, 1A<br>PoE (IEEE 802.3af)  |
| Power Supply Output<br>(For GV-AS Kit only)           | N/A                                    |
| Power Adapter Board<br>Output (For GV-AS Kit<br>only) | N/A                                    |
| Dimension (L x W x H)                                 | 79 x 171 x 34 mm<br>3.1 x 6.7 x 1.3 in |
| Weight                                                | 0.267 kg / 0.59 lb                     |
| Ingress Protection                                    | IP65                                   |
| Certification                                         | CE, FCC, LVD, RoHS, UL                 |

**Note:**

- For the RS-485 interface, connect only one of the following readers to the GV-IA1330 controller: GV RS-485 readers or OSDP readers.
- All specifications are subject to change without notice.