# GC-1000

Main controller Standard type

*Please note that accessories depicted in the image are for illustrative purposes only and may not be included with the product.

## Specifications

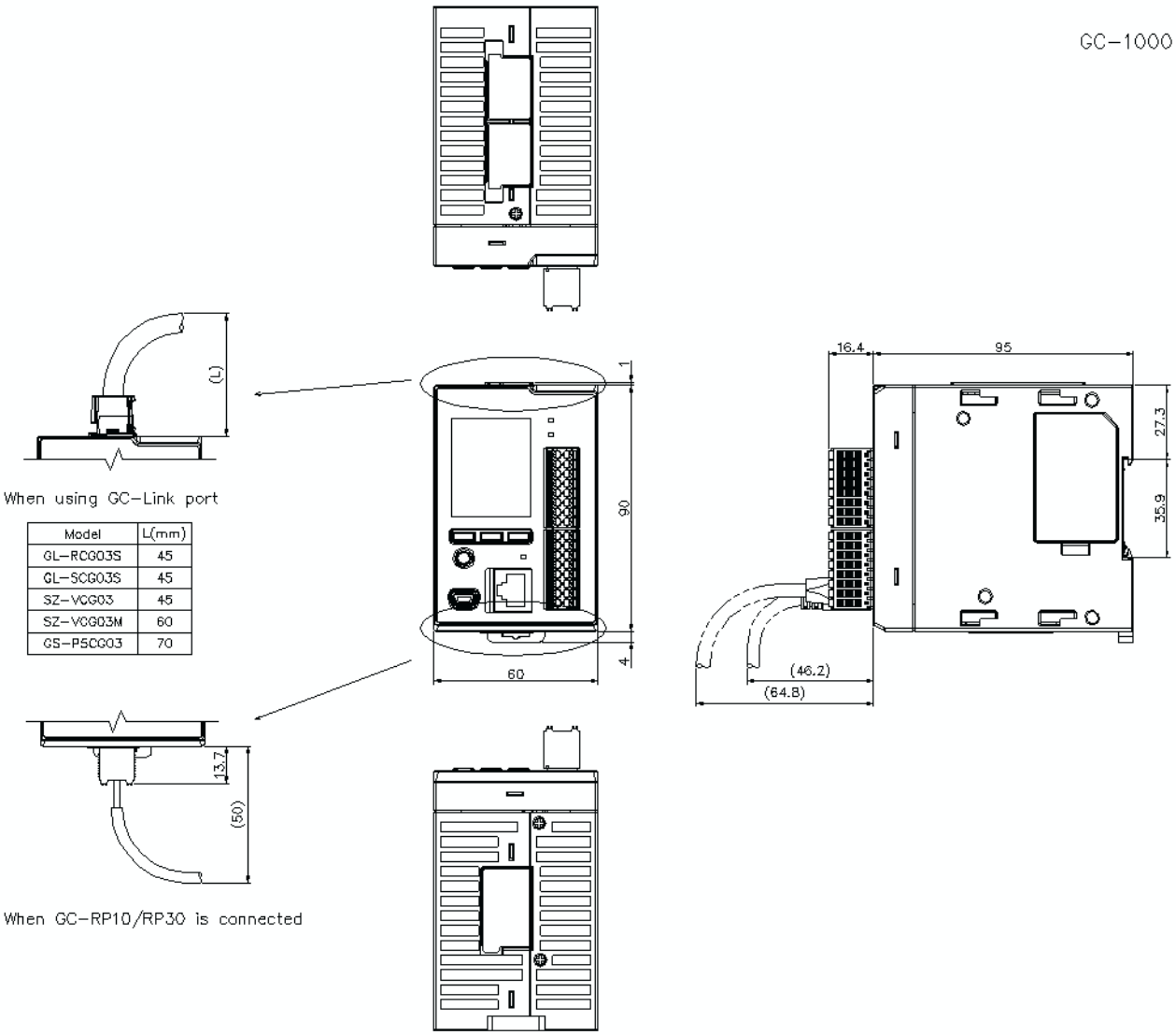
| | | |
|---|---|---|
| Model | | GC-1000 |
| Input/output points | Safety inputs | 16 |
| | Safety outputs | 6 |
| | Safety relay output | - |
| | AUX outputs | 4 |
| | Test outputs | |
| Maximum number of connectable expansion units | | 10*1 |
| Maximum number of connectable remote I/O modules | | 4 |
| GC-Link ports | | 2 ports |
| Safety input specifications | Input device | Contact output device or PNP output device |
| | Input type | Type3 |
| | ON level (voltage/current) | Min. 11 V/2 mA |
| | OFF level (voltage/current) | Max. 5 V/1.5 mA |
| | Short-circuit current | Si 0 to 3: Approx. 5 mA<br>Si 4 to 15: Approx. 3 mA |
| | Protection circuit | Surge protection circuit, wrong wiring protection circuit |
| | Maximum cable length | Max. 100 m 328.1' |
| Safety output specifications | Output type | PNP transistor output (DC-13, Type 0.5, Protected outputs)*2 |
| | Maximum load current | 500 mA |
| | Residual voltage (during ON) | Max. 2.0 V |
| | Leakage current (during OFF) | Max. 0.5mA |
| | Maximum capacitive load | 0.5 µF |
| | Load wiring resistance | Max. 2.5Ω |
| | Protection circuit | Overcurrent protection circuit, reverse connection protection circuit |
| | Maximum cable length | Max. 30 m 98.4' |
| Safety relay output specifications | Output type | - |
| | Rated load (resistance load) | |
| | Rated load (inductive load) | |
| | Relay output mechanical life | |
| | Maximum cable length | |
| | B10d | |
| Test output specifications | Output type | PNP transistor output*3 |
| | Maximum load current | 100 mA |
| | Protection circuit | Overcurrent protection circuit, reverse connection protection circuit |
| | Maximum cable length | Max. 100 m 328.1'*4 |
| AUX output specifications | Output type | Transistor output (PNP/NPN selectable by wiring) |

| | | |
|---|---|---|
| | | PNP output (DC-13, Type 0.1, Protected outputs)*2*3 |
| | Maximum load current | PNP: 100 mA, NPN: 20 mA |
| | Residual voltage (during ON) | Max. 2.0 V |
| | Leakage current (during OFF) | Max. 0.5 mA |
| | Protection circuit | Overcurrent protection circuit, reverse connection protection circuit |
| | Maximum cable length | Max. 30 m 98.4' |
| Communication interface | USB | USB2.0 |
| | Ethernet | 100BASE-TX<br>STP (shielded twisted pair) cable of Category 5 or higher |
| Network functionality | | EtherNet/IP™ *5, PROFINET, Modbus/TCP, MC protocol, UDP |
| Others | LCD display | 1.77-inch color LCD |
| | Display buttons | 4 points (3 operation keys + 1 BACK key) |
| Applicable standards | EMC | EMS: IEC 61131-2/-6, EN61131-2/-6<br>EMI: IEC 61131-2, FCC Part15B Class A,<br>ICES-003, Class A |
| | Safety | IEC 61508, EN 61508 SIL3<br>IEC62061 SIL CL3<br>ISO/EN13849-1:2015 Cat. 4, PL e, UL1998 |
| Dimensions | | 60×95×90 mm 2.36"× 3.74"×3.54" (W×D×H) |
| Power supply | Power voltage | 24 VDC (-30 to +20%) Class 2 |
| | Power consumption | Max. 200 mA |
| Environmental resistance | Ambient temperature | −10 to +55 °C 14 to 131 °F (No freezing) |
| | Relative humidity | 5 to 85% (No condensation) |
| | Storage temperature | −25 to +70 °C -13 to 158 °F (No freezing) |
| | Operating altitude | Max. 2000 m 6561.7' |
| | Overvoltage category | II |
| | Pollution degree | 2 |
| | Vibration resistance | Frequency: 5 to 9 Hz, Half amplitude: 3.5 mm 0.14"<br>Frequency: 9 to 150 Hz, Acceleration: 10 m/s²<br>10 times each in X, Y, Z directions |
| | Shock resistance | Acceleration: 150 m/s², Operating time: 11 ms, 3 times each in X, Y, Z directions |
| Material | | Polycarbonate |
| Weight | | Approx. 260 g |

*1 The bus extension unit “GC-B30” is not included in this number, and only one set of “GC-B30” can be used per setup.
*2 Paragraph 6.4.6 Temporary overload of IEC 61131-2 supports up to 1.2 times the maximum load current.
*3 AUX outputs (NPN output) and test outputs do not comply with paragraph 6.4.6 of IEC 61131-2.
*4 When the test output is branched and connected to multiple safety input devices, the total branched cable length must not exceed 400 m 1312.3'.
*5 EtherNet/IP™ is a trademark of ODVA. inc.

# Dimensions

* Download CAD file or product manual for larger image/text and more detail.




| Model | L(mm) |
|---|---|
| GL-RCG03S | 45 |
| GL-SCG03S | 45 |
| SZ-VCG03 | 45 |
| SZ-VCG03M | 60 |
| GS-PSCG03 | 70 |