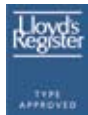




High Performance OI Touchscreens

Key Features

- New 5.7" Color TFT LCD Displays
- New 8.4", 10.4" and 12.1" Color TFT LCD Displays with Multi-Media
- 65,536 Color LCD
- High Resolution Display: 800 x 600 (8.4", 10.4", 12.1"), 640 x 480 (5.7")
- Super Bright: up to 800cd/m²
- Mounts Portrait or Landscape
- Remote Access, Monitor and Control
- Audio and Video Interface (8.4", 10.4", 12.1")
- Supports Expansion I/O Modules
- Serial, Ethernet and USB ports



Display Specifications

| | 5.7" | 8.4" | 10.4" | 12.1" |
|--|---|---|---|---|
| Model | HG2G-5FT22TF | HG3G-8JT22MF | HG3G-AJT22MF | HG4G-CJT22MF |
| Display Type | Color TFT LCD | Color TFT LCD | Color TFT LCD | Color TFT LCD |
| Color Depth | 65,536 | 65,536 | 65,536 | 65,536 |
| Portrait or Landscape Mounting | √ | √ | √ | √ |
| User Memory | 12MB | 12MB | 12MB | 12MB |
| Display Resolution | 640W × 480H pixels | 800W × 600H pixels | 800W × 600H pixels | 800W × 600H pixels |
| Backlight | LED | LED | LED | LED |
| Backlight Life *1 | 50,000 hours | 60,000 hours min. | 60,000 hours min. | 60,000 hours min. |
| Brightness *2 | 800 cd/m ² | 600 cd/m ² | 700 cd/m ² | 550 cd/m ² |
| Brightness Adjustment | 48 scales | 48 scales | 48 scales | 48 scales |
| SD Card Slot | √ | √ | √ | √ |
| MicroSmart Digital I/O Cards Supported | 2 | 4 | 4 | 4 |
| Ethernet Port | 1 RJ-45 | 1 RJ-45 | 1 RJ-45 | 1 RJ-45 |
| USB Port | 1 Type A & 1 mini-B | 1 Type A & 1 mini-B | 1 Type A & 1 mini-B | 1 Type A & 1 mini-B |
| Serial Ports | 2 (RS-232, RS-485, RS-422 configurable) | 2 (RS-232, RS-485, RS-422 configurable) | 2 (RS-232, RS-485, RS-422 configurable) | 2 (RS-232, RS-485, RS-422 configurable) |
| Video In | – | Composite Video RCA connector (NTSC or PAL) | Composite Video RCA connector (NTSC or PAL) | Composite Video RCA connector (NTSC or PAL) |
| Audio In/Out | – | 3.5mm audio mini-jack (Stereo) | 3.5mm audio mini-jack (Stereo) | 3.5mm audio mini-jack (Stereo) |
| Remote Monitor & Control | √ | √ | √ | √ |

*1 The backlight life refers to the time until the surface brightness reduces by half after continuous use at 25°C.

*2 Brightness of the LCD only.

General Specifications

| | 5.7" | 8.4" | 10.4" | 12.1" |
|--|---|---|------------------------|---|
| Model | HG2G-5FT22TF | HG3G-8JT22MF | HG3G-AJT22MF | HG4G-CJT22MF |
| Rated Power Voltage | 24V DC | 24V DC | | 24V DC |
| Power Voltage Range | 20.4 to 28.8V DC | 20.4 to 28.8V DC | | 20.4 to 28.8V DC |
| Power Consumption | 19W maximum 10W maximum when not using USB interface (USB2) or expansion module interface (EXT) | 25W maximum 15W maximum when not using USB interface (USB2) or expansion module interface (EXT) | | 27W maximum 18W maximum when not using USB interface (USB2) or expansion module interface (EXT) |
| Allowable Momentary Power Interruption | 10 ms maximum | 10 ms maximum | | 10 ms maximum |
| Inrush Current | 30A maximum | 30A maximum | | 30A maximum |
| Dielectric Strength | 1,000V AC, 10 mA, 1 minute between power and FG terminals | 1,000V AC, 10 mA, 1 minute between power and FG terminals | | 1,000V AC, 10 mA, 1 minute between power and FG terminals |
| Insulation Resistance | 10 MΩ minimum between power and FG terminals (500V DC megger) | 10 MΩ minimum between power and FG terminals (500V DC megger) | | 10 MΩ minimum between power and FG terminals (500V DC megger) |
| Operating Temperature | 0 to +50°C (no freezing) | 0 to 50°C (no freezing) | | 0 to +50°C (no freezing) |
| Operating Humidity | 10 to 90% RH (no condensation) | 10 to 90% RH (no condensation) | | 10 to 90% RH (no condensation) |
| Storage Temperature | -20 to +60°C (no freezing) | -20 to +60°C (no freezing) | | -20 to +60°C (no freezing) |
| Storage Humidity | 10 to 90% RH (no condensation) | 10 to 90% RH (no condensation) | | 10 to 90% RH (no condensation) |
| Pollution Degree | 2 | 2 | | 2 |
| Vibration Resistance | 5 to 8.4 Hz amplitude 3.5 mm, 8.4 to 150 Hz, acceleration 9.8 m/s ² 10 cycles (100 minutes) on each of three mutually perpendicular axes | 5 to 8.4 Hz amplitude 3.5 mm, 8.4 to 150 Hz, acceleration 9.8 m/s ² 10 cycles (100 minutes) on each of three mutually perpendicular axes | | 5 to 8.4 Hz amplitude 3.5 mm, 8.4 to 150 Hz, acceleration 9.8 m/s ² 10 cycles (100 minutes) on each of three mutually perpendicular axes |
| Shock Resistance | 147 m/s ² , 11 ms 5 shocks on each of three mutually perpendicular axes | 147 m/s ² , 11 ms 5 shocks on each of three mutually perpendicular axes | | 147 m/s ² , 11 ms 5 shocks on each of three mutually perpendicular axes |
| Noise Immunity | Fast transient/burst test, Power terminals: ±1 kV, Communication line: ±0.5 kV (IEC/EN61131-2: 2007) | Fast transient/burst test, Power terminals: ±2 kV, Communication line: ±1 kV (IEC 61131-2: 2007) | | Fast transient/burst test, Power terminals: ±2 kV, Communication line: ±1 kV (IEC/EN61131-2: 2007) |
| Electrostatic Discharge | ESD-3 (RH-1), Level 3 (Contact ±6 kV, air ±8 kV) (IEC/EN61131-2: 2007) | ESD-3 (RH-1), Contact ±6 kV, air ±8 kV (IEC 61131-2: 2007) | | ESD-3 (RH-1), Level 3 (Contact ±6 kV, air ±8 kV) (IEC/EN61131-2: 2007) |
| Corrosion Immunity | Free from corrosive gases | Free from corrosive gases | | Free from corrosive gases |
| Degree of Protection *1 | IP66 (IEC 60529) (front part when mounted) Type 4X, 13 (Pending) | IP66 (IEC 60529) (front part when mounted) Type 4X, Type 13 (Pending) | | IP66 (IEC 60529) (front part when mounted) Type 4X, 13 (Pending) |
| Switching Element | Analog resistive membrane | Analog resistive membrane | | Analog resistive membrane |
| Operating Force | 3N maximum | 0.55 to 2.3N | 0.55 to 2.3N | 3N maximum |
| Mechanical Life | 1,000,000 operations | 1,000,000 operations | | 1,000,000 operations |
| Sound Acknowledgement | Electronic buzzer | Electronic buzzer or speaker output | | Electronic buzzer or speaker output |
| Dimensions | 167.2W × 134.7H × 54.4D mm | 231W × 176H × 54.4D mm | 270W × 212H × 52.7D mm | 314W × 240H × 54.1D mm |
| Weight (approx.) | 0.65 kg | 1.25 kg | 1.65 kg | 2.1 kg |
| Approvals | Safety Standards: UL508, CSA C22.2 No.142 Ship Classification Standards: ABS, LR, NK | Safety Standards: UL508, CSA C22.2 No.142, CSA C22.2 No.213, ANSI/ISA-12.12.01-2007 Ship Classification Standards: ABS, LR, NK | | Safety Standards: UL508, CSA C22.2 No.142 Ship Classification Standards: ABS, LR, NK |

Do not use the touchscreen in an environment subject to strong ultraviolet rays, otherwise the LCD quality will deteriorate.

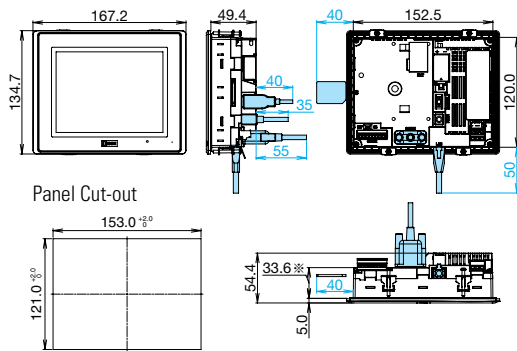
*1 Protection degree of the front surface after mounting. Operation not guaranteed in certain environments.

Touchscreen Part Numbers

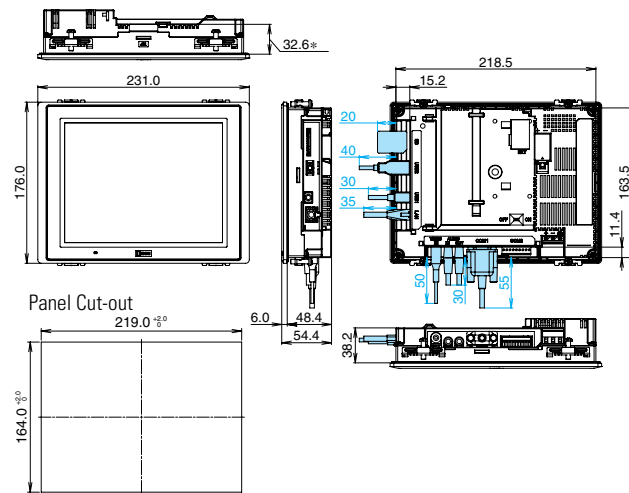
| | 5.7" | 8.4" | 10.4" | 12.1" |
|------------|----------------|----------------|----------------|----------------|
| Light gray | HG2G-5FT22TF-W | HG3G-8JT22MF-W | HG3G-AJT22MF-W | — |
| Black | HG2G-5FT22TF-B | HG3G-8JT22MF-B | HG3G-AJT22MF-B | HG4G-CJT22MF-B |
| Silver | HG2G-5FT22TF-S | — | — | — |

Dimensions (mm)

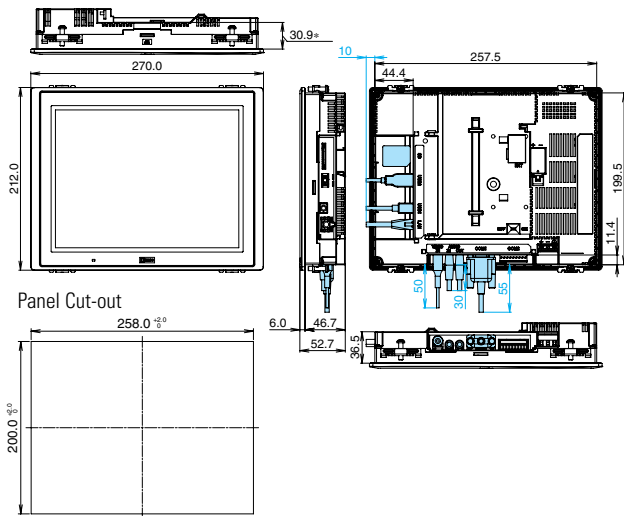
5.7" HG2G-5FT22TF



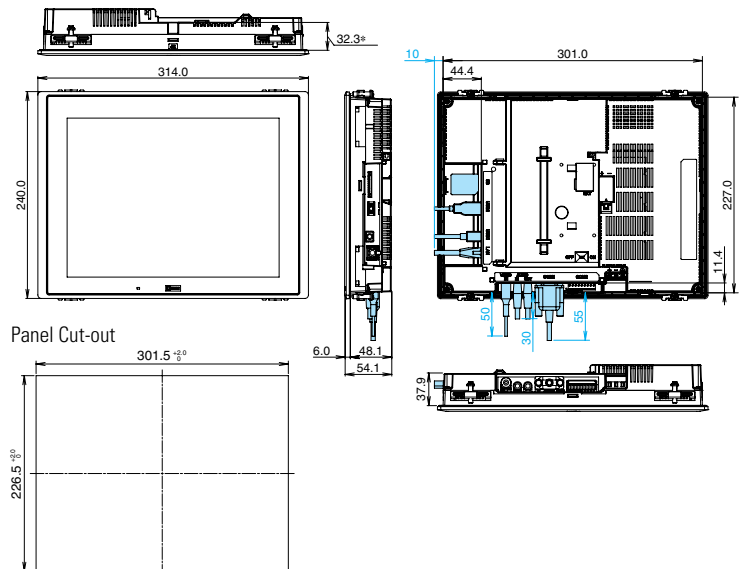
8.4" HG3G-8JT22MF



10.4" HG3G-AJT22MF



12.1" HG4G-CJT22MF



Accessories

| | Part Number | Description | Applicable Model | | |
|--|-------------|---|------------------|--------------|-------|
| | | | 5.7" | 8.4" / 10.4" | 12.1" |
| Programming Software | SW1A-W1C | Automation Organizer | √ | √ | √ |
| USB Maintenance Cable | HG9Z-XCM2A | USB Programming Cable USB-miniB (2m) | √ | √ | √ |
| Mounting Clip | SLD-K02 | Replacement clips (min. 10 pcs) (4 pcs are supplied with HMI) | √ | - | - |
| | HG9Z-4K2 | Replacement clips (min. 10 pcs) (4 pcs are supplied with HMI) | - | √ | √ |
| Host Communication Plug | HG9Z-XT09V | Replacement terminal block plug. (1 is supplied with HMI) | √ | - | - |
| | HG9Z-XT09 | Replacement terminal block plug. (1 is supplied with HMI) | - | √ | √ |
| Replacement Battery | HG9Z-XR1 | Lithium battery CR2032 (one battery is supplied with HMI) | √ | √ | √ |
| USB Cable Lock Pin | HG9Z-XU1 | Used to lock USB cable (for USB2). | √ | √ | √ |
| USB panel-mount extension cable | HG9Z-XCE11 | For USB-A port (1m) | √ | √ | √ |
| | HG9Z-XCE21 | For USB-mini B port (1m) | √ | √ | √ |
| Memory Card | HG9Z-XMS2 | SD Memory Card (2GB) | √ | √ | √ |
| Protective Cover | HG9Z-2E2 | Use with 5.7" HMI. Covers entire front of HMI. (min. 3 pcs) | √ | - | - |
| Protective Sheet *1 | HG9Z-2D5 | Use with 5.7" HMI. Sheet lays over LCD area. (min. 5 pcs) | √ | - | - |
| | HG9Z-3D8 | Use with 8.4" HMI. Sheet lays over LCD area. (min. 2 pcs) | - | √ | - |
| | HG9Z-3DA2 | Use with 10.4" HMI. Sheet lays over LCD area. (min. 2 pcs) | - | √ | - |
| | HG9Z-4DC | Use with 12.1" HMI. Sheet lays over LCD area. (min. 2 pcs) | - | - | √ |
| Expansion Module Clamp *2 | HG9Z-XJ3 | Short type for installing expansion I/O modules (Total width 17.6 to 41.1mm) | √ | √ | √ |
| | HG9Z-XJ4 | Long type for installing expansion I/O modules (Total width 47 to 68.8mm) | √ | √ | √ |
| | HG9Z-XJ5 | Extra-Long type for installing expansion I/O modules (Total width 70.1 to 93.9mm) | √ | √ | √ |
| L-shaped Terminal Block Connector for I/O Module | HG9Z-PMT10L | For 10 pole MicroSmart I/O Module (min. 2 pcs) | √ | √ | √ |
| | HG9Z-PMT11L | For 11 pole MicroSmart I/O Module (min. 2 pcs) | √ | √ | √ |
| Panel Mount Adaptor | HG9Z-2A1 | Adaptor for mounting HG2G to the panel cut-out of HG2F. | √ | - | - |
| | HG9Z-2A2 | Adaptor for mounting HG2G to 156 x 123.5 mm panel cut-out (other manufacturer). | √ | - | - |

*1 The protective sheet is UV resistant, however, resistance against direct sunlight in outdoor usage is not guaranteed.

*2 Use the expansion module clamp when using expansion modules.

Order the module clamp by referring to the width of the module shown in the dimensions of each module.

Note: When connecting more than 3 expansion modules to the HG3G/4G, note the limits shown below:

- Current flow rate at 5V: 130 mA max. Total width: 92.3 mm max.
- Current flow rate at 24V: 150 mA max.

