

7" HMI HG2J Series

Sleek. Stylish. Smart.



PRODUCT DESCRIPTION

Stylish smart capacitance touchscreens with an input voltage of 12-24V DC make the HG2J HMI a leading choice for applications across a variety of industries, including industrial, solar, and vehicle applications. Offered in a popular size form factor, HG2J uses Projected-Capacitive (PCAP) technology to provide a slimmer and sleeker appearance, small installation footprint, improved performance, and longer life.

An industry-leading three year warranty and exceptionally wide operating temperature range, as well as IP66/67F, Type 4X, 12, 13, and Class I Div 2 approval ratings, assure reliable operation even in the toughest environments.

GENERAL SPECIFICATIONS

Rated Power Voltage	12 to 24V DC
Power Voltage Range	10.2 to 28.8V DC
Power Consumption	13W maximum 5W maximum when not using USB1 or USB2 3W maximum when Backlight OFF
Allowable Momentary Power Interruption	10ms max. (power supply voltage 20.4 to 28.8V DC) 1ms max. (power supply voltage 10.2 to 20.4V DC)
Inrush Current	30A maximum
Dielectric Strength	500V AC, 10 mA, 1 minute between power and FG terminals
Operating Temperature	-20 to +60°C (no freezing)
Operating Humidity	10 to 90%RH (no condensation)
Storage Temperature	-20 to +70°C (no freezing)
Storage Humidity	10 to 90%RH (no condensation)
Pollution Degree	2
Vibration Resistance	5 to 8.4 Hz single amplitude 3.5 mm, 8.4 to 150 Hz acceleration, 9.8M/s ² on each of three mutually perpendicular axes (IEC61131-2)
Shock Resistance	147m/s ² , 11ms, 5 shocks on each of three mutually perpendicular axes (IEC61131-2)
Noise Immunity	Fast transient/burst test Power terminals: 2 kV Communication line: 1kV (IEC/EN61131-2)
Electrostatic Discharge	Contact: 6 kV Air: 8kV (IEC/EN61131-2)
Corrosion Immunity	Free from corrosive gases
Mounting	Panel mount (panel thickness: 1.0 to 5.0 mm)
Degree of Protection	When panel thickness is less than 1 to 5mm: IP66F (IEC60529) When panel thickness is less than 1.6 to 5mm: IP66F, IP67F (IEC60529) TYPE 4X, TYPE 13
Dimensions	186 (W) x 128 (H) mm x 30.4 (D) mm
Weight (approx.)	500g

Do not use the HG2J in an environment subject to strong ultraviolet rays, otherwise the LCD quality will deteriorate.

KEY FEATURES

- 800 x 480 High Resolution
- 50,000 Hours Backlight Life
- 500 cd/m² Brightness
- -20 to +60°C Extreme Operating Temp
- Remote Access, FTP, Email, Mobile App and Custom Web Page
- Support 4 protocols simultaneously



DISPLAY SPECIFICATIONS

Display	TFT color LCD (TN type)	
Color / Shade	65,536 colors (16-bit color)	
Effective Display Area	154.08 (W) x 85.92 (H) mm	
Display Resolution	800 (W) x 480 (H) pixels	
DPI	0.1926 (W) x 0.179 (H) mm	
View angle	Left/right/top: 80°, bottom 60°	
Backlight	White LED	
Backlight Life	50,000 hours minimum (* 1)	
Brightness	500 cd/m ² (Typ.) (*2)	
Brightness Adjustment	48 levels	
Backlight Replacement	Not replaceable by user (must be replaced by IDEC)	
Font	Shift_JIS (Japanese) ISO8859-1 (European) GB2312 (Simplified Chinese) BIG5 (Traditional Chinese) KSC5601 (Korean)	ANSI1250 (Central European language) ANSI1251 (Baltic) ANSI1251 (Cyrillic) ASCII (7-seg)
Character Size	8 to 512	
Character Attribute	Blink (1 or 0.5 sec period), reverse	
Graphics	Straight line, polyline, rectangle, circle, arc, circle/ellipse, equilateral polygons (3, 4, 5, 6, 8) picture	
Window Display	3 popup screens + 1 system screen	

*1) The backlight life is not guaranteed and refers to the time until the brightness reduces by half after use at 25°C. The actual life depends on operating environments and conditions.

*2) Brightness of the LCD alone at an ambient temperature of 25°C.

OPERATION SPECIFICATIONS

Switching Element	PCAP (Projected capacitance) method
Multiple Operations	Up to 2 points
Acknowledgement Sound	Electronic buzzer or audio output

FUNCTION SPECIFICATIONS




Screen Types	Base screen, popup screen, system screen
No. of Screens	Base screen: 3,000 max. Popup screen: 3,015 max.
User Memory	Approx. 24MB
Parts	Bit Button, Word Button, Goto Screen, Print Button, Key Button, Multi Button, Keypad, Numerical Input, Character Input, Pilot Lamp, Multi-State Lamp, Picture Display, Message Display, Message Switching Display, Alarm List Display, Alarm Log Display, Data Log Display, Numerical Display, Bar Graph, Trend Chart, Pie Chart, Meter, Calendar, Bit Write Command, Word Write Command, Goto Screen Command, Print Command, Timer, Screen Script Command, Multi Command
Calendar	Year, Month, Day, Hour, Min., Sec., Day of Week±90 sec per month (at 25°C)
Power Failure Backup Data	Calendar, log data, keep relay, internal register
Backup Time	20 days (Typ.) (*3)

*3) If the power is cut off for more than 20 days, the error message "Backup data lost" will be displayed at the next start-up and the clock data will be initialized to "00:00:00 January 1, 2000".

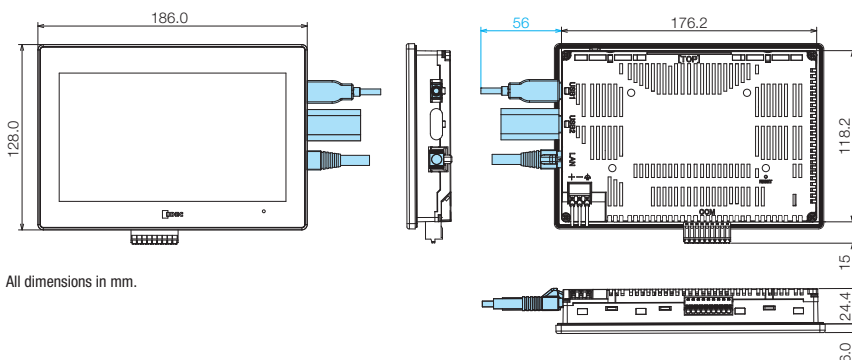
TOUCHSCREEN PART NUMBER

Part Number	Display Type	Bezel Color
HG2J-7UT22TF-B	7" TFT Color LCD, Projected Capacitive Touchscreen	Black

ACCESSORIES

Part Number	Description	Quantity
SW1A-W1C	Automation Organizer Software	1
HG9Z-4K2PN04	 Mounting Clip	4
HG9Z-XT09P	 Serial Interface, Removable Push-in Connector	1
HG9Z-2D7PN05	 Protective Sheets	5

DIMENSIONS (mm)



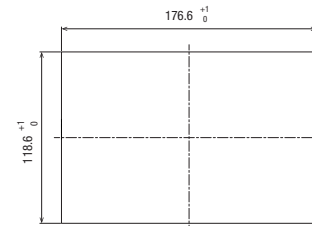
All dimensions in mm.

Dimensions in blue show the mounting dimensions of the cable.

Dimensions in the figure may vary depending on the type of cable connected. The information listed here should be used as a guide for reference when designing.

Install the operator interface into a panel cut-out by tightening the six mounting clips (supplied with the operator interface) to a torque of 0.5 to 0.6 N·m. Do not tighten with excessive force, otherwise the operator interface may become distorted. Also, waterproof characteristics may be lost.

PANEL CUT-OUT



Panel Thickness: 1.0 to 5.0mm