# 7" HMI HG2J Series



Sleek. Stylish. Smart.



## **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/s2 on each of three mutually perpendicular axes (IEC61131-2)		
Shock Resistance	147m/s2, 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.

#### **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.

#### **KEY FEATURES**

- 800 x 480 High Resolution
- 50,000 Hours Backlight Life
- 500 cd/m<sup>2</sup> 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		
<b>Display Resolution</b>	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 <sup>2</sup> (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, equilat- eral 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.

### **TOUCHSCREEN PART NUMBER**

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

#### **OPERATION SPECIFICATIONS**

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

#### **FUNCTION SPECIFICATIONS**

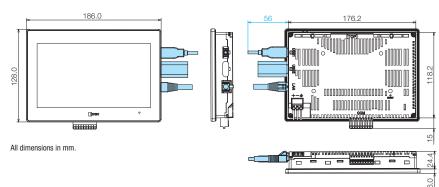
Screen Types	Base screen, popup screen, system screen	
No. of Screens	Base screen: 3,000 max. Popup screen: 3,015 max.	
User Memory	Approx. 24MB	
Parts	Bit Button, Word Button, Goto Screen, Print Button, Key Button, Multi Button, Keypad, Numerical Input, Character Input, Pilot Lamp, Multi-State Lamp, 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".

# 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)

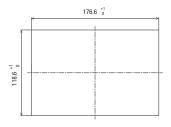


#### Dimensions in blue show the mounting dimensions of the cable.

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

