Enhanced HMI
5.7" HG2G-5T Series

IDEC

Portrait Monochrome 5.7" HMI

Landscape Color 5.7" HMI

PRODUCT DESCRIPTION

The 5.7″ HG2G Enhanced HMI is a significant upgrade from the previous 5.7" Basic series. Choose from a super-bright 65K color TFT LCD screen with 500cd/m² or a 16 shade monochrome version with 1100cd/m² resolution, featuring an LED backlight life of 100,000 hours. With powerful features and the ability to remotely access, monitor and control applications, the new HG2G series also supports up to four protocols simultaneously and offers a wide operating temperature of -20°C to 60°C, making it ideal for harsh environments.

KEY FEATURES

- 5.7-inch TFT LCD HMI
- 65K color, 16 shade monochrome
- Super-bright display:
  - 500 cd/m² (color)
  - 1100 cd/m² (monochrome)
- Wide range of operating temperatures: -20°C to 60°C
- Backlight Longevity: >100,000 hours
- Remote monitor and control
- Support up to four protocols simultaneously
- Portrait and landscape mounting
- Resistive analog touchscreen
- 2 Serial, 2 USB and Ethernet ports
- Rated Power Voltage: 12 – 24VDC
- IP 66F, Type 4X, Class I Div 2

SPECIFICATIONS

Model	HG2G-5TT (Color) / HG2G-5TN (Monochrome)
Rated Power Voltage	12-24V DC
Power Voltage Range	10.2 to 28.8V DC
Power Consumption	8W maximum 4W maximum when not using USB interface (USB2)
Allowable Momentary Power Interruption	10ms maximum (Voltage 20.4 to 28.8V DC) 1ms maximum (Voltage 10.2 to 20.4V DC)
Inrush Current	40A maximum
Dielectric Strength	1000V AC, 10 mA, 1 minute between power and FG terminals
Insulation Resistance	50 MΩ minimum between power and FG terminals (500V DC megger)
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 amplitude 3.5 mm, 8.4 to 150 Hz, acceleration 9.8 m/s² 10 cycles (100 minutes) on each of three mutually perpendicular axes
Shock Resistance	147 m/s², 11 ms 5 shocks on each of three mutually perpendicular axes
Noise Immunity	Fast transient/burst test, Power terminals: ±2 kV, Communication line: ±1 kV (IEC/EN61000-4-4)
Electrostatic Discharge	ESD-3 (RH-1) Level 3 (Contact ±6 kV, air ±8 kV) (IEC/EN61000-4-2)
Corrosion Immunity	Free from corrosive gases
Mounting	Panel mounting
Degree of Protection	IP66F (IEC 60529) (front part when mounted) *1 TYPE 4X TYPE 13 *2
Dimensions	167.2 W ×134.7 H × 40.9 D mm
Weight (approx.)	0.5 kg

Do not use the HG2G 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
*2 Operation not guaranteed when used with certain types of oils under certain environments.

PART NUMBERS

Display Type	Bezel Color	Part Number
5.7" TFT Color LCD, 65536 Colors	Light Gray	HG2G-5TT22TF-W
	Black	HG2G-5TT22TF-B
	Silver	HG2G-5TT22TF-S
5.7" TFT Monochrome LCD	Light Gray	HG2G-5TN22TF-W
	Black	HG2G-5TN22TF-B
	Silver	HG2G-5TN22TF-S

SOFTWARE AND PROGRAMMING CABLES

Description	Part Number
Automation Organizer Software Suite (Includes WindLDR (for PLCs), WindO/I-NV2 (for HMIs),WindO/I NV4 (new HG2G) and WindCFG (system configuration tool)	SW1A-W1C
USB Programming Cable	HG9Z-XCM2A

SPECIFICATIONS

Display

Model	HG2G-5TT	HG2G-5TN
Display	TFT Color LCD	TFT Monochrome LCD
Color/Shade	65,536	16 shades
Effective Display Area	115.2W × 86.4H mm	
Display Resolution	320W × 240H pixels	
View Angle	Right and left 80°, up 80°, down 80°	Right and left 65°, up 80°, down 60°
Backlight	LED	
Backlight Life	100,000 hours minimum*1	
Brightness	500 cd/m² *2	1100 cd/m² *2
Brightness Adjustment	32 levels	
Backlight Replacement	Not possible	

*1 The backlight life refers to the time until the brightness reduces by half after use at 25°C.
*2 Brightness of the LCD only.

Function

Screen Types	Base screen, popup screen, system screen
No. of Screens	Base screen: 3,000 max. Popup screen: 3,015 max.
User Memory	5 MB (including expansion fonts)
Parts	Bit Button, Word Button, Goto Screen,Print Button Key Button, Multi Button, Keypad, Selector Switch, Potentiometer, Numerical Input, Character Input, Pilot Lamp, Multi-State Lamp, Picture Display, Message Display, Message Switching Display, Alarm List Display, Alarm Log Display, Numerical Display, Bar Graph, Trend Chart, Pie Chart, Meter, Calendar, Bit Write Command, Word Write Command, Goto Screen Command,Print Command Screen Script Command, Multi Command,Timer
Calendar	Year, Month, Day, Hour, Min., Sec., Day of Week ±60 sec per month (at 25°C)
Power Failure Backup Data	Calendar, log data, keep internal relay, keep internal register
Battery	Recommended replacement span: every 4 years (at 25°C)

Operation

Switching Element	Analog resistive membrane
Operating Force	3N maximum
Mechanical Life	1,000,000 operations
Acknowledgement Sound	Electronic buzzer

Interface

Serial Interface 1 (COM1)*	RS232C	Electrical Characteristics	EIA RS232C compliant
		Transmission Speed	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200 bps
		Synchronization	Asynchronous
		Communication Method	Half or full duplex
		Control System	Hardware control or none
		Connector	Detachable 9-pin terminal block
	EIA RS422/485	Electrical Characteristics	EIA RS422/485 compliant
		Transmission Speed	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200, 187500 bps (Note)
		Synchronization	Asynchronous
		Communication Method	Half or full duplex
		Control System	None
		Connector	Detachable 9-pin terminal block
Ethernet Interface (LAN)		Interface	IEEE802.3u (10BASE-T/100BASE-TX) compliant
		Connector	Connector (RJ-45)
USB Interface (USB2)		Interface	USB 2.0 full speed (12 Mbps)
		Connector	USB Type Mini-A connector
USB Interface (USB1)		Interface	USB 2.0 high speed (480 Mbps)
		Connector	USB Type Mini-B connector

*RS232C and RS 422/485 can be used simultaneously.
Note: 187,500 bps is available only with SIEMENS SIMATIC S7-300/400 series (MPI port direct connection).
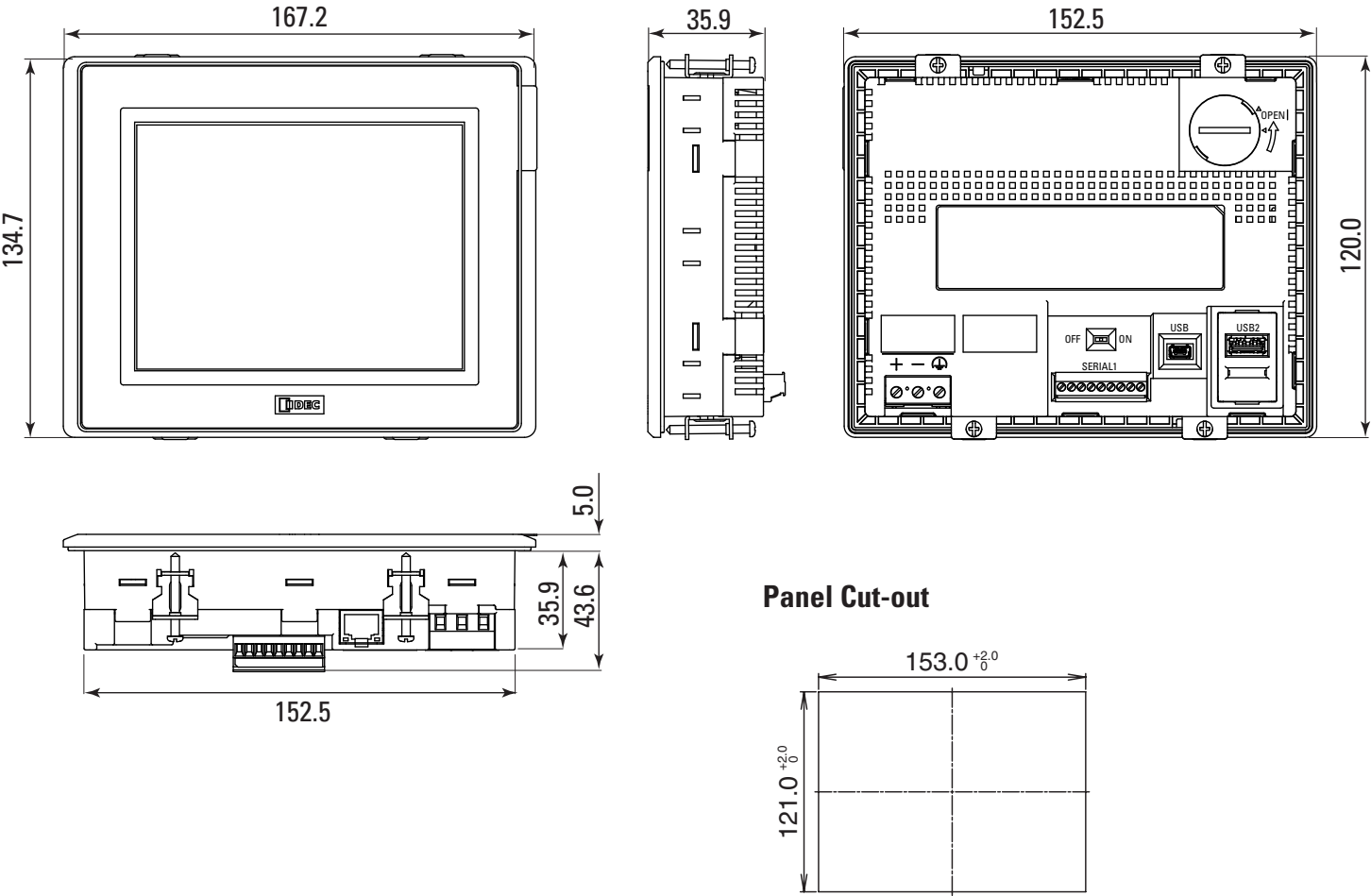
ACCESSORIES

Accessory	Description	Part Number
Mounting Clip	Replacement clips (1pc.)	SLD-K02
Terminal Plug	Replacement Terminal block for HG2G Host communication port (1pc.)	HG9Z-XT09V
Battery	Replacement Lithium Battery (1 pc.)	HG9Z-XR1
USB Cable Lock Pin	To lock the USB cable in place (1 pc.)	HG9Z-XU1
Protective Cover	Covers entire front of HMI (1 pc.)	HG9Z-2E2
Protective Sheet	Sheet lays over LCD area (1 pc.)	HG9Z-2D5
Panel Mount Adaptor	Adaptor for mounting the 5.7" HG2G to the panel cut-out of HG2F (1 pc.)	HG9Z-2A1
	Adaptor for mounting HG2G to 156 x 123.5mm panel cut-out for other mfr.(1 pc.)	HG9Z-2A2

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

DIMENSIONS

(All dimensions in mm)

Panel Cut-out

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[IDEC]():
HG2G-5ST22TF-W HG2G-5ST22TF-B HG2G-5ST22VF-S HG2G-SS22TF-S HG2G-5FT22TF-S HG2G-SB21TF-W
HG2G-SS21TF-W HG2G-SS22TF-B HG2G-5TN22TF-S HG2G-SB21VF-W HG2G-SS22VF-B HG2G-5ST22TF-S
HG2G-SB22TF-S HG2G-SB21TF-B HG2G-5TT22TF-W HG2G-SS21TF-B HG2G-SB22VF-S HG2G-SS22TF-W
HG2G-5TN22TF-W HG2G-5TT22TF-B HG2G-SB22VF-W HG2G-5ST22VF-W HG2G-SB22VF-B HG2G-5ST22VF-B
HG2G-5TN22TF-B HG2G-5TT22TF-S HG2G-SB22TF-W HG2G-SS22VF-S HG2G-SB21VF-B HG2G-SS22VF-W
HG2G-SB22TF-B HG2G-SS21VF-B HG2G-SS21VF-W