



HG3G Operator Interface Touchscreens



10.4"



8.4"

- 8.4" and 10.4" Color TFT LCD Display
- 65,536 Colors
- SVGA 800 x 600 Pixel Resolution
- Super Bright: 600cd/m² (8.4"), 800cd/m² (10.4")
- High-speed CPU Processor: 400MHz

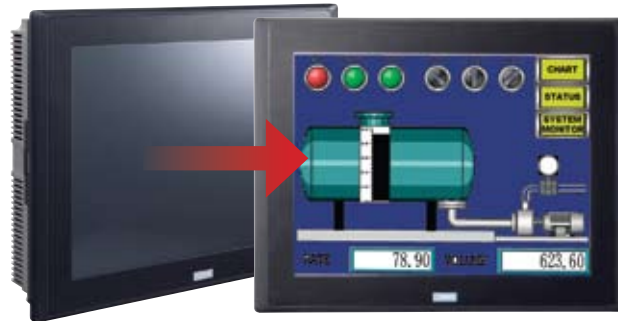
- User Memory: 12MB
- Analog Resistive Touch Panel
- Supports 2 Digital I/O Cards
- Serial, Ethernet and USB ports
- Audio Out

HG3G Series - Powerful, fast and easy to operate!

As the newest line of IDEC OI Touchscreens, the HG3G Series surpasses all standards with its powerful features. The 400MHz high-speed CPU processor allows data to be read and processed quickly. The SD card and USB flash drive, along with the serial, Ethernet and USB ports, provide many connectivity options.

The HG3G Series supports the addition of up to two IDEC MicroSmart digital I/O cards, saving space in the panel and making the HG3G Series a more flexible display to accommodate many application needs.

High-performance Touchscreens



3-second startup

Fast 400MHz CPU Processor

- Quick operation and immediate response to commands
- Fast startup (within 3 seconds)

Sharp Displays with Excellent Clarity

- SVGA Resolution (800 x 600 pixels)
- 65,536 available colors

Brightest in the Market

- 600cd/m² (8.4"), 800cd/m² (10.4")

Large Memory Capacity

- 12MB of user memory
- Additional memory using SD cards or USB flash drives



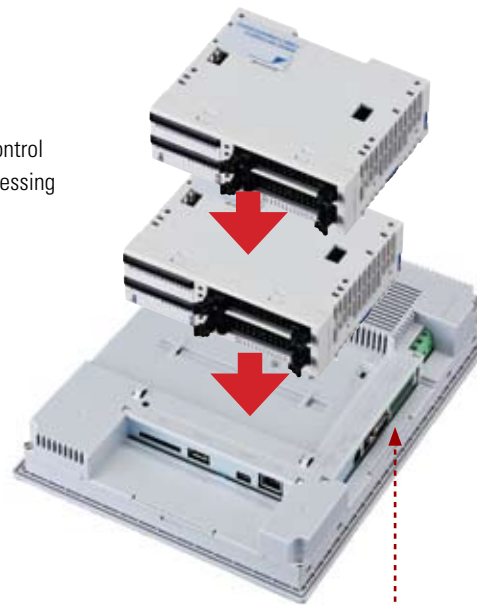
Audio Out

- External speaker with a built-in amplifier can be attached for sound output including prerecorded messages
- Store up to 1,024 sound files in WAV file format

Amazing Expandability – up to 64 I/O

Easy I/O Control

- Install up to two IDEC MicroSmart digital I/O cards for simple control
- Digital I/O is programmed using script commands or object addressing in the programming software



Powerful Connectivity

SD Card

- Supports up to a 32GB SD card for storage
- Store IDEC MicroSmart ladder and touchscreen programs, pictures, logging data, alarm logs, screen hard copies, recipe data, operation logs and audio files

USB Port A (USB 2.0)

- High-speed download or upload of OI and PLC programs
- Store logging data and screen capture
- Connect barcode readers for labelling
- Printers can be connected directly (future release*)

USB Port Mini B

- Make system maintenance easier by utilizing the high-speed data transfer
- Connect PC directly to the HG3G for program upload/download/monitor



2 Serial Ports:

Two serial ports, RS232 and RS485 (422)

- Host - communicate to a PLC/Device in a 1:1 or 1:N PLC Communication
- Subhost - communicates to an IDEC MicroSmart/Pentra PLC or Modbus RTU devices
- OI Link Communication – network to a single IDEC MicroSmart PLC with multiple HG2G/HG3Gs, where 1 is a master and up to 15 slaves can be connected
- User Communication – use transmit/receive instructions to build your own protocol

Ethernet Port

- 10BaseT or 100Base-TX connection
- Remote communication with the PLC, and download/upload/monitor PLC and OI touchscreen projects
- Remote access for monitor and control (future release*)

Programming Software - WindO/I-NV2

Intuitive, Drag-and-Drop Functionality

- Programming software for all IDEC OI touchscreens
- Built-in library of over 7,000 symbols
- Built-in PLC drivers to communicate with other manufacturers' PLCs, security, script, multilingual capabilities, and many more features



Specifications

General Specifications	Rated Power Voltage	24V DC	
	Power Voltage Range	20.4 to 28.8V DC	
	Power Consumption	25W maximum	
		15W maximum when not using USB interface (USB2) or expansion module interface (EXT)	
	Allowable Momentary Power Interruption	10ms maximum	
	Inrush Current	30A maximum	
	Dielectric Strength	1000V AC, 10mA, 1 minute between power and FG terminals	
	Insulation Resistance	10MΩ minimum between power and FG terminals (500V DC megger)	
	Operating Temperature	0 to +50°C	
	Operating Humidity	10 to 90% RH (no condensation)	
	Storage Temperature	-20 to +60°C	
	Storage Humidity	10 to 90% RH (no condensation)	
	Pollution Degree	2	
	Vibration Resistance	5 to 9Hz amplitude 3.5 mm, 9 to 150Hz, acceleration 9.8m/s ²	
		10 cycles (100 minutes) on each of three mutually perpendicular axes	
	Shock Resistance	147 m/s ² , 11ms	
		5 shocks on each of three mutually perpendicular axes	
	Noise Immunity	Fast transient/burst test, Power terminals: ±2kV, Communication line: ±1 kV (IEC 61131-2: 2007)	
	Electrostatic Discharge	Contact ±6kV, air ±8kV (IEC 61131-2: 2007)	
	Corrosion Immunity	Free from corrosive gases	
Mounting	Panel mounting		
Degree of Protection	IP66		
Dimensions	HG3G-8:	231.0W × 176.0H × 54.4D mm	
	HG3G-A:	270.0W × 212.0H × 52.7D mm	
Weight (approx.)	HG3G-8:	2.75lbs	
	HG3G-A:	3.64lbs	
Switching Element	Analog resistive membrane		
Operating Force	0.55 to 2.3N		
Mechanical Life	1,000,000 operations		
Sound	Electronic buzzer or speaker output		

Do not use the HG3G in an environment subject to strong ultraviolet rays, otherwise the LCD quality will deteriorate.

Part Numbers

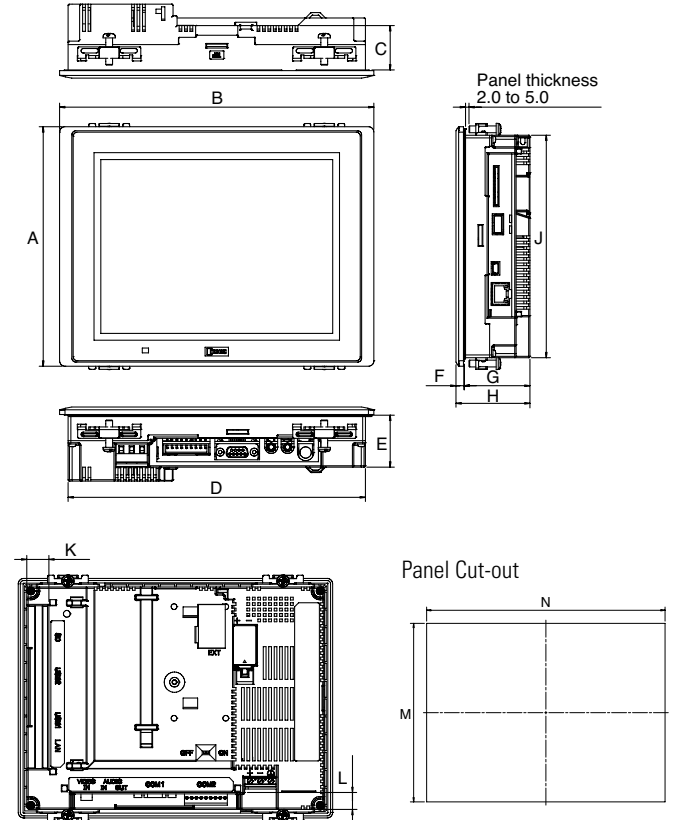
Display Screen	Housing/Bezel Color	Part Number
8.4-inch TFT color LCD	Light gray	HG3G-8JT22TF-W
	Dark gray (black)	HG3G-8JT22TF-B
10.4-inch TFT color LCD	Light gray	HG3G-AJT22TF-W
	Dark gray (black)	HG3G-AJT22TF-B

Accessories

Part Number	Qty	Description
HG9Z-XCM2A	1	USB Programming Cable
HG9Z-3D8	1	Protective Sheet for 8.4" Display
HG9Z-3DA	1	Protective Sheet for 10.4" Display
HG9Z-XMS2	1	SD Card, 2GB
HG9Z-PMT10L	1	L-shaped Terminal Block for MicroSmart I/O Module (10-pole)
HG9Z-PMT11	1	L-shaped Terminal Block for MicroSmart I/O Module (11-pole)
HG9Z-4K2	1	Replacement Mounting Clip (order in multiples of 4)
HG9Z-XU1	1	USB Cable Lock Pin
HG9Z-XJ1	1	Expansion Module Clamp (short size). Use with 1 module or combination of 8, 16 I/O module
HG9Z-XJ2	1	Expansion Module Clamp (long size). For supported comb. module, check WindOI-NV2 manual

Display Specifications	Display Color	TFT Color LCD	
	Color/Shade	65,536 colors	
	Effective Display Area	HG3G-8:	170.4W × 127.8H mm
		HG3G-A:	211.2W × 158.4H mm
	Display Resolution	800W × 600H pixels	
	View Angle	Right and left 80°, up 80°, down 60°	
	Backlight	LED	
	Backlight Life	60,000 hours nominal*	
	Brightness	HG3G-8: 600 cd/m ² , HG3G-A: 700 cd/m ²	
	Brightness Adjustment	32 shades	
User Memory	12MB (including expansion fonts)		

*The backlight life refers to the time until the surface brightness reduces by half after continuous use at room temperature.

Dimensions (mm)

Dimension Table (mm)

	8.4" HG3G-8	10.4" HG3G-A		8.4" HG3G-8	10.4" HG3G-A
A	176	212	H	54.4	52.7
B	231	270	J	163.5	199.5
C	32.6	30.9	K	21	50.2
D	218.5	257.5	L	12.4	12.4
E	38.2	36.5	M	164	200
F	6	6	N	219	258
G	48.4	46.7			


Support Information

Software demos & upgrades: www.IDEC.com/software

PLC drivers: www.IDEC.com/oi/drivers

OI to PLC Cables: www.IDEC.com/usa/HG3G