



# 5.7" HG2G Operator Interface

*Think Automation and beyond...*

**Starting  
at only  
\$450**



# 5.7" Screen

# HGG2G



Light Gray



Black



Silver

# The Ideal Solution

**Having a tight budget doesn't mean you have to compromise**

- Affordable
- Durable
- Easy-to-use
- Powerful
- Reliable
- Versatile

The 5.7" HG2G series are superior-quality operator interfaces with the advanced features and flexibility your applications demand, at a cost that promises to keep you under budget. These economical 5.7-inch monochrome and color LCD screens are the best value in the market today, guaranteed!

IDEC has brought touchscreen solutions to the manufacturing industry for more than a decade. As a next generation product, HG2G offers many hardware and software upgrades compared with our previous operator interface. It has a super-bright LCD screen with sharp visibility, a built-in Ethernet port for remote communications, and a slim design providing space savings. HG2G has been designed to meet the needs of our customers. IDEC offers improved technology and performance at an even better price!





# 3 New Features *You Can't Live Without*



## One Super Bright LCD Screens

This 5.7-inch monochrome LCD screen is the BRIGHTEST in the market with an impressive 500cd/m<sup>2</sup> and 15 shades of gray. That's more vivid than most TVs! The 256-color LCD screen is no slouch either, boasting 350cd/m<sup>2</sup> illumination. In addition, this analog resistive touchscreen provides a flexible layout. Just place objects or images anywhere on the screen, making it easy to design a custom screen for your specific application or project.

- **Monochrome LCD 500cd/m<sup>2</sup>**
- **256-color LCD 350cd/m<sup>2</sup>**



## Two Slim Design

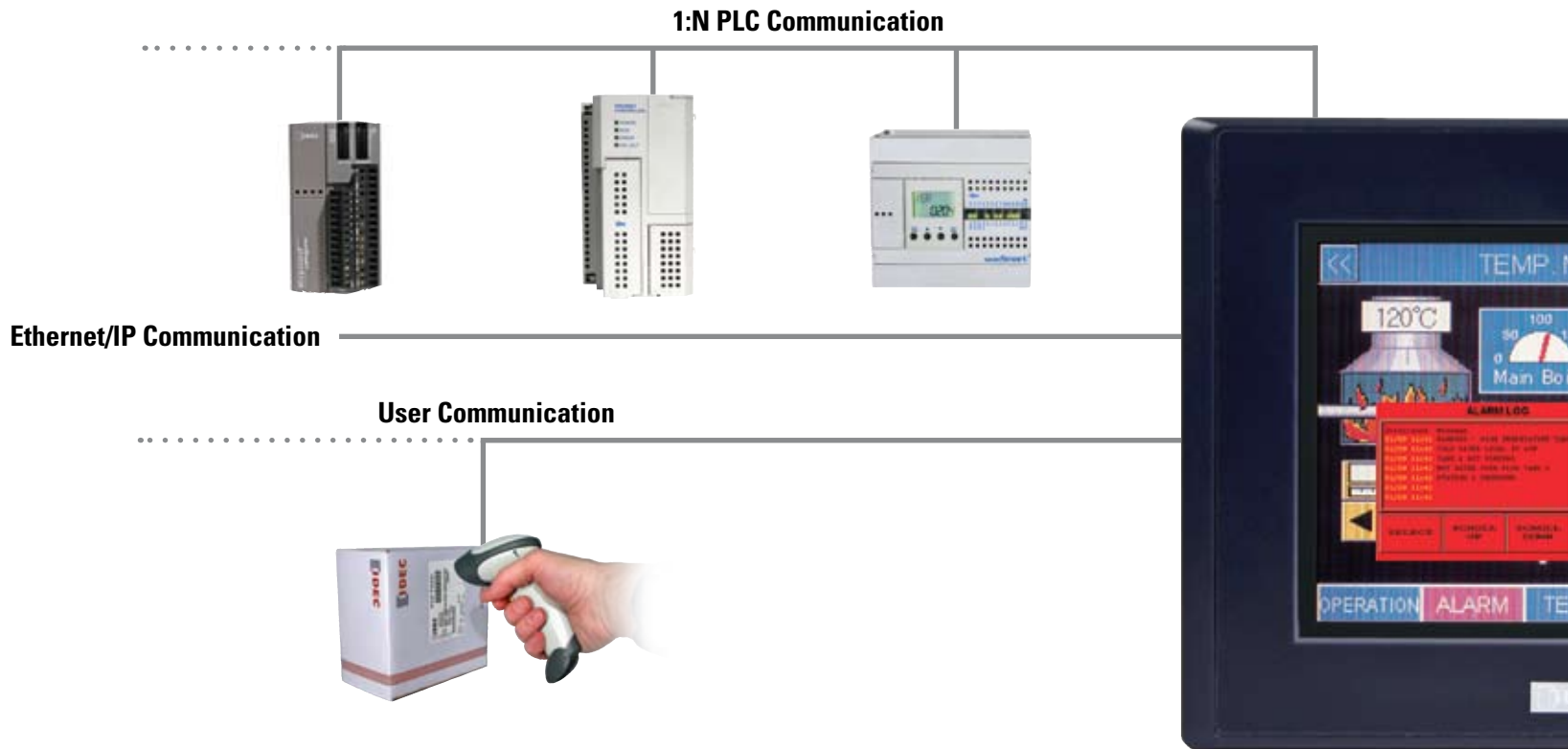
Panel space is always at a premium, which is why HG2G is constructed with a low-profile bezel extending only 36mm deep behind the panel and requiring minimal room. That's a space savings of over 14mm compared with our previous model! Plus a power LED indicator on the front makes it easy to see your operator interface power status, while taking up no additional room.



## Three Built-in Ethernet Port

Remote communication is simple using 1:1 or 1:N Communications with some of the major network drivers: IDEC with Web Server module, Allen Bradley Ethernet/IP or Modbus TCP/IP. You can't beat the convenience of uploading, downloading and monitoring projects and data over the Ethernet; all from your desk. No need to spend extra time or money sending someone out to the field, just set up your HG2G and you're done!

# Impressive *Communication*



## Major Brand PLC Communications

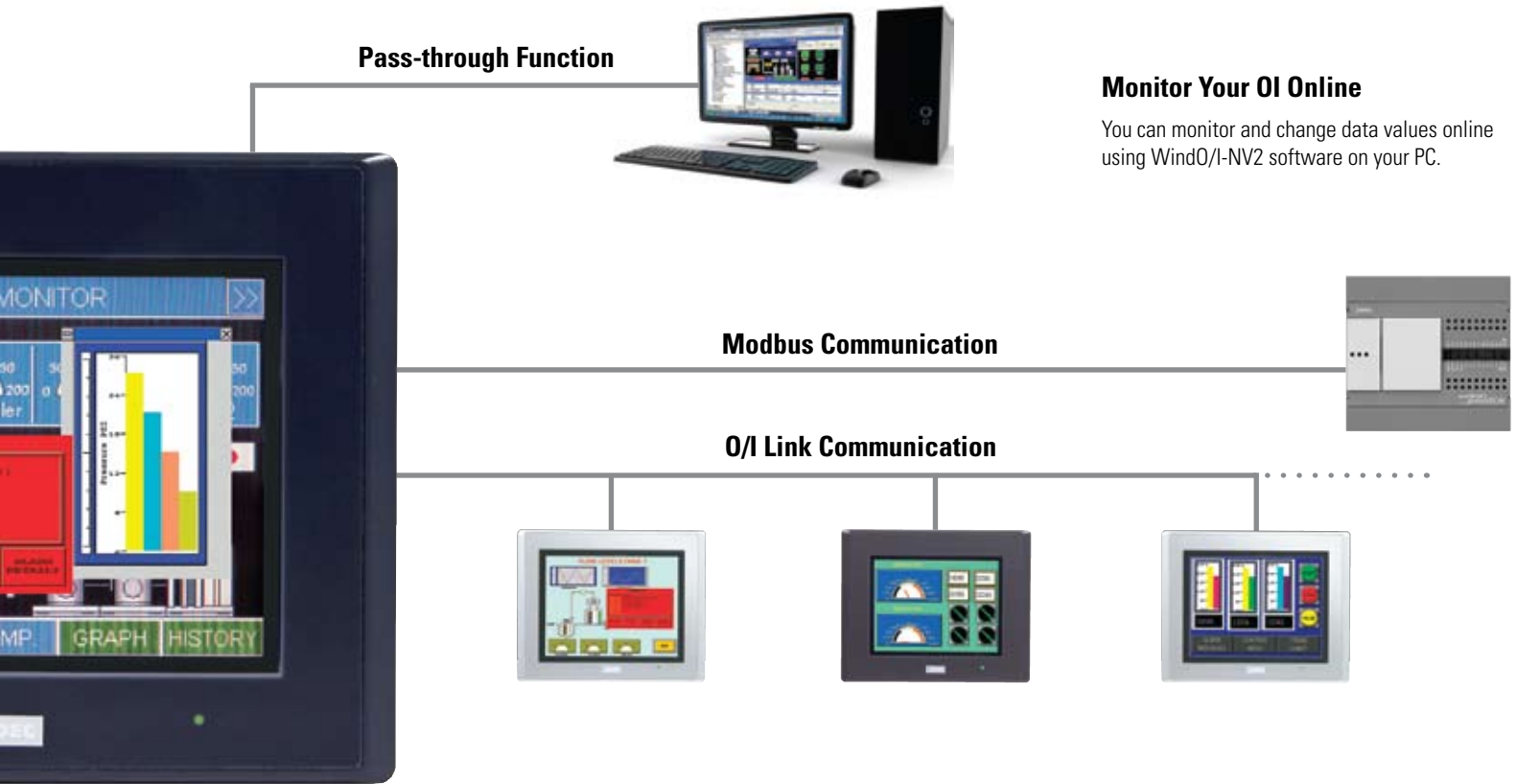
IDEC Operator Interface communication capabilities expand well beyond IDEC brand PLCs. Other major PLC manufacturers supported are: Allen Bradley, Mitsubishi, Omron, Automation Direct (Koyo), Keyence, GE, Modicon, Siemens, Sharp, Hitachi, Schneider, Yaskawa, Fanuc, Matsushita Electric Works (Panasonic) and Yokogawa.

## 1:N PLC Communication

Connect a single HG2G to multiple PLCs for centralized control. One HG2G can monitor and control PLCs in several different locations. The maximum number of PLCs that can be connected depends on the PLC brand. See the WindO/I-NV2 manual for supported manufacturers.

## User Communication

Get better component interaction by setting the HG2G communication protocol to the one required by your serial devices, for example a barcode reader. This function uses transmit and receive instructions to build your own protocol.



### Pass-through Function

### Monitor Your OI Online

You can monitor and change data values online using WindO/I-NV2 software on your PC.

### Modbus Communication

### O/I Link Communication

### O/I Link Communication

Create an OI network where multiple HMIs in different locations are connected to the same PLC for convenient monitoring and controlling in expansive operations. One HG2G can serve as a master while 15 other HG2G operator interfaces can be slaves in the O/I Link, with a total maximum distance of 200 meters.

### Pass-through Function

Conveniently download a PLC program from a PC through the operator interface. Only one cable is needed to program both units. The Pass-through function is applicable to IDEC (MicroSmart and OpenNet Controller) and Mitsubishi (MELSEC-FX, FX3UC and Q) PLCs.

### Sub Host Communication

Easily communicate with two different PLC Protocols at the same time. Supported protocols include IDEC MicroSmart and Modbus RTU.

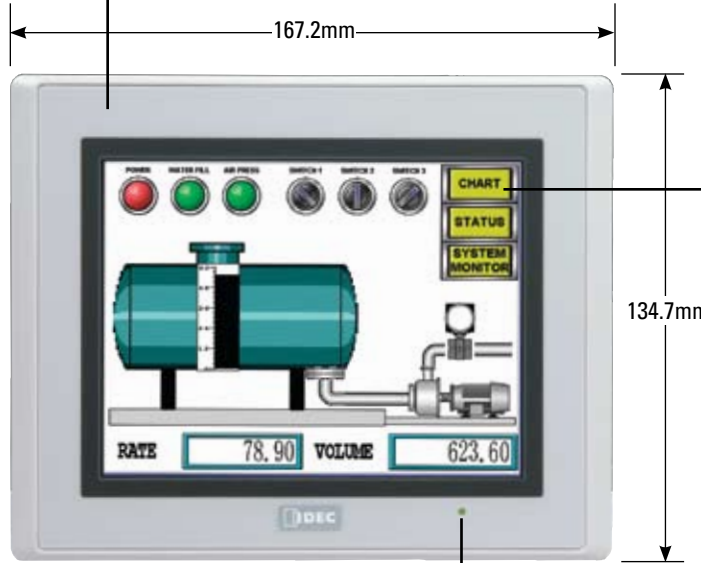
# Versatile *Hardware*

## Slim Design

41mm  
36mm

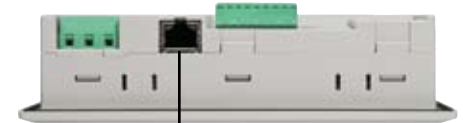


Bezel available in:  
Black  
Light Gray  
Silver



Power LED Indicator

Available in:  
5.7" Monochrome LCD Screen  
5.7" 256 Color LCD Screen



Built-in Ethernet Port

10/100 Base-T compliant, communicates with host devices such as a PLC or PC and can be used to upload, download, or monitor project data to the HG2G.

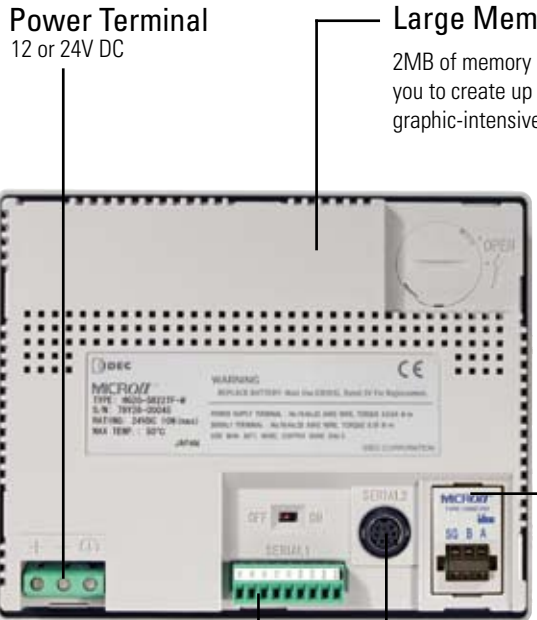
## Depth Behind Panel

Manufacturer	Series	Depth behind the panel (mm)
IDEC	HG2G	35.9
Automation Direct	EA7-S6	38.1
Maple Systems	HMI520T	40.0
Mitsubishi	PV600	50.0
Proface (Panasonic)	ST3301B	54.5
Allen Bradley	PV600Plus	98.0

## Reliable Hardware - Versatile Touchscreen

No matter where you are, HG2G can be clearly viewed from a wide variety of angles due to a bright display supporting 15-tone monochrome shades or 256 colors. A fine resolution of 320 x 240 also means you can fit more buttons and displays on every screen, making it perfect for even the most complex projects.





**Power Terminal**  
12 or 24V DC

**Large Memory**  
2MB of memory space allows you to create up to 3,000 vibrant graphic-intensive screens.

**O/I Link Interface**  
By attaching an optional O/I link unit, up to 16 operator interface units can be connected to one host device using the O/I link communication.

**Serial 1 Port**

Use either for O/I Link Communication or to communicate to the host device using either RS232C or RS485(422).

**Serial 2 Port**

Communicates with a PC using RS232C, as a maintenance port. This port can also be used as an interface for user or sub host communications.

**Global Approvals**

HG2G is designed to meet all standards and approvals for durability and control. Approvals include cUL, UL, as well as being rated for IP65 and NEMA Type 13. HG2G is also UL1604 Class 1 Div 2 Listed for hazardous locations. HG2G works when you need it, where you need it!



**Operator Interface Part Numbers**

Display Type	Comm. Type	Ethernet Port	Body Color	Part Number	List Price	
5.7" Monochrome LCD	24V	No	Light gray	HG2G-SB22VF-W	\$450	
			Black	HG2G-SB22VF-B		
			Silver	HG2G-SB22VF-S		
	12V	Yes	RS232C RS485 RS422 (9 Pin Terminal)	Light gray	HG2G-SB22TF-W	\$550
				Black	HG2G-SB22TF-B	
				Silver	HG2G-SB22TF-S	
5.7" 256 Color LCD	24V	No	Light gray	HG2G-SB21VF-W	\$450	
			Black	HG2G-SB21VF-B		
			Silver	HG2G-SB21VF-S		
	12V	Yes	RS232C RS485 RS422 (9 Pin Terminal)	Light gray	HG2G-SB21TF-W	\$550
				Black	HG2G-SB21TF-B	
				Silver	HG2G-SB21TF-S	
5.7" 256 Color LCD	24V	No	Light gray	HG2G-SS22VF-W	\$625	
			Black	HG2G-SS22VF-B		
			Silver	HG2G-SS22VF-S		
	12V	Yes	RS232C RS485 RS422 (9 Pin Terminal)	Light gray	HG2G-SS22TF-W	\$725
				Black	HG2G-SS22TF-B	
				Silver	HG2G-SS22TF-S	
5.7" 256 Color LCD	24V	No	Light gray	HG2G-SS21VF-W	\$625	
			Black	HG2G-SS21VF-B		
			Silver	HG2G-SS21VF-S		
5.7" 256 Color LCD	12V	Yes	Light gray	HG2G-SS21TF-W	\$725	
			Black	HG2G-SS21TF-B		
			Silver	HG2G-SS21TF-S		

**HG2G Series to IDEC PLC Communication Cable**

IDEC PLC	Communication Type	Link Unit Used	Part Number
MicroSmart Pentra FC5A MicroSmart FC4A	RS232	Built-in Port	HG9Z-AC102
		FC4A-PC1/HPC1	HG9Z-AC102
		FC5A-SIF2	Use shielded pair
	RS485	FC4A-PC2/HPC2	HG9Z-AC172
		FC4A-PC3/HPC3	Use shielded pair
		Ethernet	FC4A-SX5ES1E
OpenNet Controller	RS232	Built-in Port	HG9Z-AC162
	RS485	Built-in Port	Use shielded pair
	Ethernet	FC4A-SX5ES1E	CAT 5 Ethernet* crossover cable

1. \* For 1:1 direct connection. If using a network hub, use CAT 5 straight cable.  
2. For other PLC manufacturers, refer to WindO/I-NV2 Users Manual.

**Software & Programming Cable**

Description	Part Number
Software Automation Organizer Includes WindO/I NV2 (IDEC OIs), WindLDR (IDEC PLCs) and WindCFG (Configuration Tool)	SW1A-W1C
Cable Programming cable for HG2G Series (PC to HG2G Series)	HG9Z-XCM1A or FC2A-KC4C

# WindO/I-NV2 Programming Software



Automation Organizer is a software suite that includes WindCFG (a system configuration tool), WindO/I-NV2 (for IDEC operator interface programming), and WindLDR (for IDEC PLC programming). WindCFG software allows users to create a layout of components (i.e. PLC, OI, Barcode Reader, etc.) then directly configure each component.

IEDEC WindO/I-NV2 software is easy and intuitive using drag-and-drop functionality. An extensive built-in symbol library and built-in PLC drivers, easy-to-manage projects and screens, along with multilingual capabilities, as well as security, script and many other functions give you all the choices you need to keep your projects running smoothly.

Operation Log		
Time	User Name	St
2009/01/23 01:34:07	---	St
2009/01/23 01:34:09	---	St
2009/01/23 01:34:08	hend1	St
2009/01/23 01:34:10	hend1	St

## New Operation Log Function

With upgraded WindO/I-NV2 software, you can record information about every operation made with your operator interface. Help analyze and solve causes of problems and system errors by checking who, when, what and where operations were performed.



## Multilingual Capabilities

The IDEC Touchscreen family can support other languages. With the text group function you can create a text database in different languages. Once the touchscreen is in a different country (e.g. China or Mexico) the customer can easily switch all text messages from English to Chinese or Spanish by a touch of a button.



## Security Function

Provides different levels of security and restrictions for multiple users on editing projects or while displaying screens and objects.



## Supports Standard Windows Fonts

Fonts used in Windows can be used on the IDEC Touchscreens, making it possible to choose from a variety of text styles.

## Flexible Workspace allows for dynamic screen design



**New GUI Interface**

**Screen and Project Setting List**

- Screens can be duplicated and their properties changed easily.
- Project settings can be edited.
- Devices, text, and images can be imported or exported.

**Screen List**

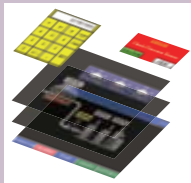
- Screens can easily be selected using the preview image function.

**Buttons**

- A button selected from an object list is shown on the editing screen.

**Object List**

- Each object's properties are displayed such as the type of device used, conditions and operations.



### Flexible Screen Display

With WindO/I-NV2 software, screens can be easily arranged. A total of 3000 base screens can be created (as allowed by memory size). Sub-screens known as pop-up menus can be resized, made using the superimpose function, and can appear anywhere around the base screen.



### Easy Programming of Operating Conditions

Operating conditions for objects such as switches, lamps, bit/word write, screen switching, and many more are easy to use. Step-by-step wizards guide the user through the set-up process.



### Extensive Image Library

A built-in symbol library provides over 7,000 images to help you create cutting edge graphical screens.



### Script Function

Users with basic programming knowledge in "C" can combine conditional statements, mathematical operations, and other functions to create simple and complex processes, greatly reducing the programming required in the PLC. A syntax check function is also available to provide easy program troubleshooting.



# Packages Start at Only \$549

## Save Big!

Get superior products, advanced features and a network of support, at a price you won't believe! These Automation Packages include a bundle of products, which work together to provide everything you need to get started.

Choose from monochrome or color LCD screens that function as stand-alone devices or communicate with IDEC or other major brand PLCs. Choose an Automation Package that includes a PLC and you get a top-of-the-line IDEC MicroSmart Pentra, the fastest micro-PLC on the market. You can't go wrong. So why wait? Buy today and save!

### HG2G Automation Packages

LCD Type	Ethernet	PLC*	Part Number	Reg. Price	Package Price
Monochrome	24V	No	SMARTTOUCH-2G-M	\$934	\$549
			MM-PENTRA-24-HG2G-M	\$1,358	\$949
		Yes	SMARTTOUCH-2G-EM	\$1,034	\$649
			MM-PENTRA-16-HG2G-EM	\$1,428	\$1,049
	12V	No	SMARTTOUCH-2G-M12V	\$934	\$549
			MM-PENTRA-24-HG2G-M12V	\$1358	\$949
Color	24V	No	SMARTTOUCH-2G-C	\$1,109	\$699
			MM-PENTRA-24-HG2G-C	\$1,533	\$1,149
		Yes	SMARTTOUCH-2G-EC	\$1,209	\$799
			MM-PENTRA-16-HG2G-EC	\$1,603	\$1,249
	12V	No	SMARTTOUCH-2G-C12V	\$1109	\$699
			MM-PENTRA-24-HG2G-C12V	\$1533	\$1149

All packages come with Automation Organizer software suite, programming cable and 30W power supply.

\*PLC is either Pentra 24 I/O all-in-one or 16 I/O slim. For more information go to: [www.IDEC.com/usa/HG2G](http://www.IDEC.com/usa/HG2G)

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