

# **5.7"** HG2G Operator Interface

Think Automation and beyond...





# 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 TFT 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, the 5.7" OI Touchscreen offers many hardware and software upgrades compared with our previous operator interface. It has a superbright LCD screen with sharp visibility, a built-in Ethernet port for remote communications, and a slim design providing space savings. The OI Touchscreen 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



## Super Bright LCD Screens

This 5.7-inch monochrome LCD screen is the BRIGHTEST in the market with an impressive 500cd/m² and 15 shades of gray. That's more vivid than most TVs! The 256 TFT color LCD screen is no slouch either, boasting 400cd/m² 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/m²
- 256 TFT color LCD 400cd/m²



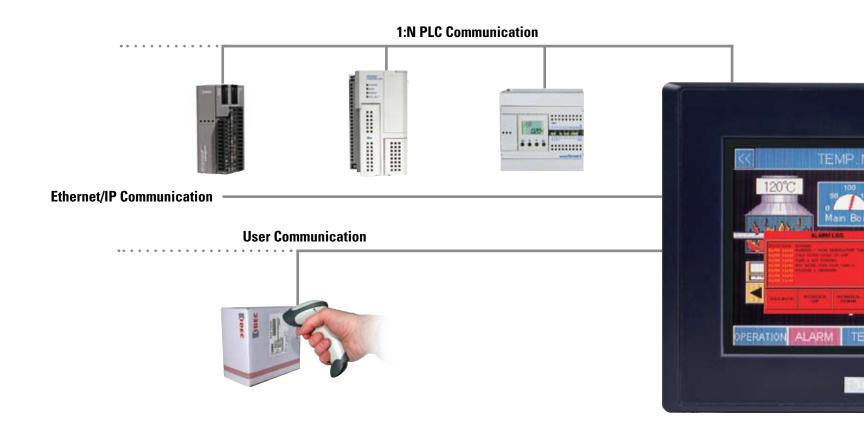
Panel space is always at a premium, which is why the 5.7" HG2G Series is constructed with a low-profile bezel. Extending only 36mm (5.7" Mono) or 41mm (5.7" Color TFT) behind the panel they require minimal room. Plus a power LED indicator on the front makes it easy to see your operator interface power status, while taking up no additional room.



## **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 OI Touchscreen and you're done!

# Impressive Communication



## **Major Brand PLC Communications**

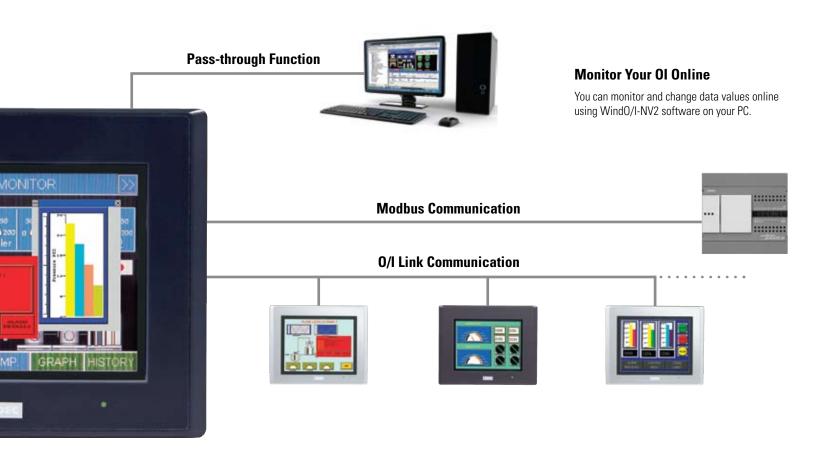
IDEC Operator Interface communication capabilities expand well beyond IDEC brand PLCs. Other major PLC manufacturers supported are: Allen Bradley, Mitsubishi, Omron, Automation Direct (Koyo), Keyence, GE, Modicon, Siemens, Sharp, Hitachi, Schneider, Yaskawa, Fanuc, Matsushita Electric Works (Panasonic)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

#### 1:N PLC Communication

Connect a single 5.7" HG2G OI Touchscreen to multiple PLCs for centralized control. One OI Touchscreen 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 5.7" OI Touchscreen 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.



### **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 5.7" OI Touchscreen can serve as a master while 15 other OI Touchscreens can be slaves in the O/I Link, with a total maximum distance of 200 meters.

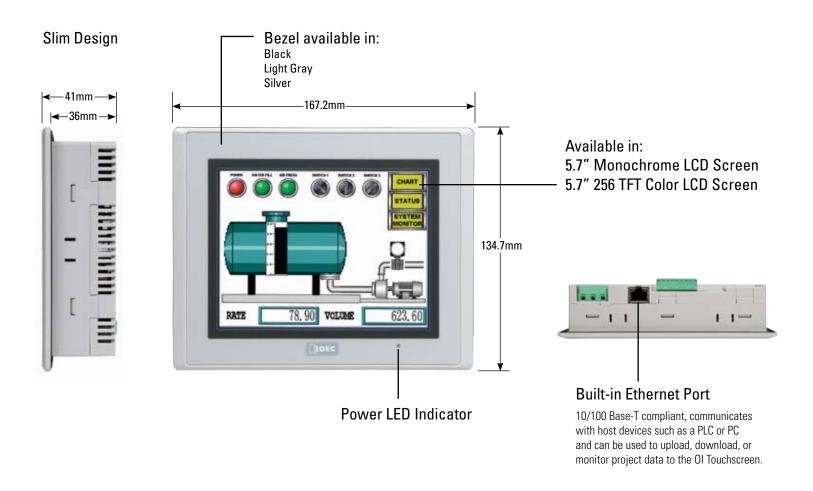
### **Pass-through Function**

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 O) 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*

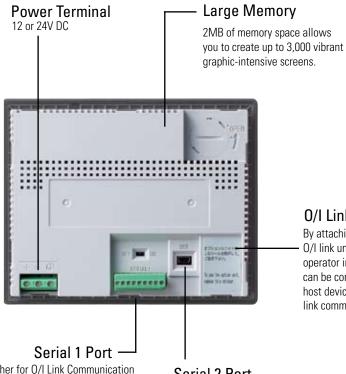


## **Depth Behind Panel**

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	3.0	

#### **Reliable Hardware - Versatile Touchscreen**

No matter where you are, 5.7" OI Touchscreens 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.



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.

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 RS232 (5.7" Monochrome) or USB mini-B (5.7" Color TFT) as a maintenance port. This port can also be used as an interface for user or sub host communications.

## **Global Approvals**



The 5.7" HG2G OI Touchscreens are designed to meet all standards and approvals for durability and control. Approvals include cUL, UL, as well as being rated for (5.7" Mono) IP 65, NEMA Type13 and UL1604, and for (5.7" Color TFT) IP 66.



#### **Operator Interface Part Numbers**

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Display Type	Rated Voltage	Ethernet Port	Body Color	Part Number
5.7" TFT 256 Color LCD	12-24V DC	Yes	Light gray	HG2G-5ST22TF-W
			Black	HG2G-5ST22TF-B
			Silver	HG2G-5ST22TF-S
		No *	Light gray	HG2G-5ST22VF-W
			Black	HG2G-5ST22VF-B
			Silver	HG2G-5ST22VF-S
5.7" STN Monochrome LCD	24V DC	Yes	Light gray	HG2G-SB22TF-W
			Black	HG2G-SB22TF-B
			Silver	HG2G-SB22TF-S
		No	Light gray	HG2G-SB22VF-W
			Black	HG2G-SB22VF-B
			Silver	HG2G-SB22VF-S
5.7" STN Monochrome LCD	12V DC	Yes	Light gray	HG2G-SB21TF-W
			Black	HG2G-SB21TF-B
		No	Light gray	HG2G-SB21VF-W
			Black	HG2G-SB21VF-B

<sup>\*</sup> HG2G-ST22VF does not support Power Failure Backup Data.

#### **HG2G Series to IDEC PLC Communication Cable**

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

<sup>1. \*</sup> For 1:1 direct connection. If using a network hub, use CAT 5 straight cable.

### **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 STN Monochrome display (8 Pin Mini Din port).	HG9Z-XCM1A or FC2A-KC4C
	Programming cable for HG2G TFT Color Display (USB miniB port)	HG9Z-XCM2A

<sup>2.</sup> For other PLC manufacturers, refer to WindO/I-NV2 Users Manual.

# 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.

IDEC 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	ś
7009/01/21/11/14/07	-	1
1008/01/23/01/34/08	-	1
2009/01/23/01/34/08	test1	Ī
2009/01/23 01:34:15	test1	Ī

## **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.



## **Security Function**

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



## 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.



## **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.

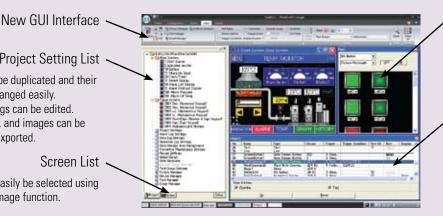
## Flexible Workspace allows for dynamic screen design

## 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.





# 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 TFT color LCD screens that function as standalone 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!

# **Packages Start at Only \$549**

For more information go to: www.IDEC.com/OI

#### www.IDEC.com

### **USA**

**IDEC Corporation** Tel: (408) 747-0550 opencontact@IDEC.com

#### Canada IDEC Canada Ltd. Tel: (905) 890-8561 sales@ca.IDEC.com

Australia IDEC Australia Pty. Ltd. Tel: +61-3-8523-5900 sales@au.IDEC.com

#### Japan **IDEC Corporation**

Tel: +81-6-6398-2571 products@IDEC.co.jp

#### **United Kinadom** IDEC Electronics Ltd. Tel: +44-1256-321000 IDEC@uk.IDEC.com

#### Germany IDEC Elektrotechnik GmbH

Tel: +49-40-253054-0 service@IDEC.de

#### Hona Kona IDEC (H.K.) Co., Ltd. Tel: +852-2803-8989 info@hk.IDEC.com

### China/Beijing IDEC (Beijing) Corporation

Tel: +86-10-6581-6131 idec@cn.IDEC.com

#### China/Shanghai IDEC (Shanghai) Corporation Tel: +86-21-5353-1000

Singapore IDEC Asia Pte. Ltd. Tel: +65-6746-1155 idec@cn.IDEC.com info@sg.IDEC.com

#### Taiwan **IDEC Taiwan Corporation** Tel: +886-2-2698-3929 service@tw.IDEC.com

China/Shenzhen

Tel: +86-755-8356-2977

IDEC (Shenzhen) Corporation

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