

Think Automation and beyond ...



# IDEC Touchscreen Family

## IDEC SmartTouch Family - Monitor your manufacturing line for increased prod



# IDEC Touchscreens – Smart Solutions to help control your bottom line

In today's market, effective monitoring and control of your manufacturing environment is critical to your bottom line. In order to stay ahead of the competition, you need to constantly look for new ways to increase productivity and lower your costs, while maintaining quality control and safety.

A typical manufacturing control panel has an overwhelming array of buttons, switches, relays and other devices that make it cumbersome and hard to manage. Most control panels are large and bulky and take up a lot of very expensive real estate. With so many different components, rising replacement and labor costs continue to eat at your profit margin. IDEC has focused on bringing smart solutions to the monitoring and control of the manufacturing environment. With the introduction of the touchscreen family of operator interfaces over 10 years ago, IDEC not only helps you control your manufacturing line, but also helps control your bottom line.

Now with the introduction of our new IDEC SmartTouch family of operator interfaces, we bring you exceptional design, great functionality, and ease of programming that takes monitoring and control to the next level.



# SmartTouch

## uctivity, quality control and safety

### IDEC SmartTouch Family:

### Smart design to fit your needs

From the large 12.1" TFT LCD Screen, to the compact 4.6" STN LCD, IDEC touchscreens consistently produce sharp images with excellent visibility. Screens feature high pixel resolutions in monochrome or 256 colors and since space is often a rare commodity, their slim design can be adapted to fit applications where room is limited. With up to 8MB of memory and a 200MHz 32-bit RISC CPU, these superbright IDEC touchscreens put control, power and speed at your fingertips.

### Versatile, high functionality

IDEC Touchscreens can function as a stand-alone controller or communicate with IDEC PLCs and a wide array of major manufacturers' PLCs. Touchscreens interface with any of your equipment to provide graphical data presentations in vivid color and to display bar graphs and meters to represent analog data. Illuminated pushbuttons can replace physical mechanical switches and pilot lamps can display on/off states and show almost any production information you need to monitor.

#### Programming power made easy

IDEC's powerful WindO/I-NV2 software lets you create colorful graphical interfaces for easier production supervision and control. A built-in library of over 5000 bitmap images helps you easily display almost every manufacturing activity you want to control. Our programming software is intuitive and user-friendly. With re-sizeable pop-up screens, Windows compatible fonts, and multilingual text capabilities, you enjoy the utmost flexibility in designing and programming.



### Powerful features to increase your production efficiency

The IDEC SmartTouch Family is ideally matched to today's sophisticated technology. Using a wide range of graphic options, you can clearly represent specific equipment, make production information immediately apparent and instantly display safety problems. Consolidating controls on an IDEC touchscreen interface eliminates costly investments in wiring and installation of multiple pushbutton indicators on the traditional control panel. Just think how you can benefit with touchscreens at critical spots in your plant.

### Expansion I/O

An expansion digital I/O module gives you the option of expanding your system with 16 DC inputs and 16 transistor outputs for basic PLC control. Excluding 4.6" HG1F touchscreen.

# Increased functionality gives you the power of control

#### Ethernet Support

The built-in 10BaseT Ethernet port - found on the 10.4" and 12.1" touchscreens - allows communications with PLCs using **NEW** Allen Bradley Ethernet/IP, Modbus TCP/IP or IDEC 1:N protocol. The touchscreens can also remotely monitor machine-operating status via the Internet or your Local Area Network using any web browser. Regardless of your location, you can use your PC's browser (Netscape or Internet Explorer) to collect CF Card data about any touchscreen project. You can efficiently monitor and manage production activity from your office without the time or expense of travel.



Remote Network

Ethernet

# **Smart Functionality**

#### **Basic Data Representation**

TANK 1 Level High

A built-in software library of over 5000 bitmap images lets you graphically represent almost any plant activity or equipment that you want to monitor or control. In addition to representing meters, bar graphs and switches, you can also incorporate keypads to facilitate changing values. Our user-friendly programming software lets you design each screen by simply selecting objects from a pull-down menu or from a row of object icons and dropping it onto the screen work area. All bitmap images are available in 256 colors and are easily re-configurable.

### Recipe, Alarm and Trend Logging



The Recipe function allows you to conveniently set operational parameters, which can be individually defined for different processes. The Alarm function stores historical events with a date and time stamp and **NEW** enhanced features compliant to the ISA (Instrument Society of America) Standards, give additional options to display and manage alarm messages. Trend Logging expresses data in graphical form according to the time period you define. Using these functions, you can quickly view production information and collect and manage valuable data.

### **Compact Flash Card**

IDEC Touchscreens support Compact Flash (CF) Cards with up to 512MB of memory. In addition to storing recipe, alarm and trending data, the CF Card can also store screen captures in a BMP format for documentation purposes. The CF Card can hold one or more projects and you can easily transfer a project directly to another touchscreen by simply inserting the card into the second touchscreen and downloading what you need. Excluding 4.6" HG1F touchscreen.

### New Password Protection

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

Local Area Network

## Smart design to keep you in control, and in communication

## Attention to detail in both function and form



Slim design for space savings

Black bezel models available upon request

To meet your application needs, IDEC offers a 12.1" and 10.4" TFT LCD screen and 5.7" STN LCD screen with 256 color or monochrome and 16 shades of gray to provide you with either multicolored or gray scale graphics. All screens have high pixel resolution and super bright LCD screens with 350cd/m<sup>2</sup> for the 12.1" and 10.4" screen and 250cd/m<sup>2</sup> for the 5.7" screen to provide sharp quality images. With RS-232 / RS-485 / RS-422 communication, all IDEC Touchscreens communicate with IDEC, as well as other industry-leading PLC manufacturers.

Their slim body style – 50mm depth for the 5.7" HG2F, 49.6mm depth for the 10.4" HG3F, and 52.1mm depth for the 12.1" HG4F – provides a great advantage in space and cost saving in a panel.

# **Smart Form**

#### Support of Leading Manufacturer's PLCs

IDEC Touchscreen's communications 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 (Aromat) and Yokogawa.

The 10.4" and 12.1" IDEC Touchscreens can remotely communicate with multiple devices or PLCs over an Ethernet network, using the **NEW** Allen Bradley Ethernet/IP, Modbus TCP/IP, or IDEC 1:N drivers. Only one centrally located IDEC touchscreen is necessary to communicate with up to 16 PLCs that are located in different locations. The Ethernet/IP driver supports the following Allen Bradley Series PLCs: Micrologix, SLC500, PLC5 and ControlLogix.

### **1:N PLC Communication**



This mode allows a single IDEC touchscreen to communicate with multiple PLCs. It is used when you need only one centrally located touchscreen to monitor and control PLCs in different locations. Depending on PLC type, a maximum of 31 PLCs can be connected to one touchscreen. PLC manufacturers supported for 1:N communication are: IDEC OpenNet Controller and MicroSmart, Automation Direct (Koyo): DirectLogic-DL205/405 and Modicon: Modbus RTU.

### **O/I Link Communication**



This link permits a single PLC to communicate with multiple IDEC touchscreens, where one touchscreen serves as the master and up to 15 as slaves. An O/I Link will accommodate communications over a maximum distance of 200 meters. The O/I Link should be used whenever you are using more than one touchscreen in a location to monitor and control a single PLC.

#### **Pass Thru Function**

This function lets you download a PLC program from a PC through the touchscreen without interrupting operations. Only one cable is needed to program both units. The Pass Thru communications function is applicable to the following PLCs: IDEC Micro3, Micro3C, OpenNet Controller, MicroSmart and Mitsubishi MELSEC-FX, FX3UC and Q.

### Approvals and International Ratings

The IDEC Touchscreen family is UL listed for use in hazardous locations (Class I Div. 2). In addition, the 4.6" and 5.7" screens are IP65 and Nema 13 rated, while the 10.4" and 12.1" screens are IP66, Nema 4, 4X, 13 rated so they can be used in the most demanding industrial applications.



#### **Printer Function**



You can use this capability to print alarm data so a hard-copy record of specific events can be maintained. Copies of screens can also be printed when needed for documentation.

Serial printers are supported on all IDEC Touchscreen displays. Parallel Printers supported on 10.4" and 12.1" models only.

#### **Barcode Reader Support**



IDEC Touchscreens provide a serial port that you can configure for use with special communication devices such as barcode readers. A barcode reader can send data directly to the touchscreen, where it can be used for quick viewing before being transferred to the PLC for further data manipulation.

#### **Debugging Functions**

Two modes are available for either monitoring data or troubleshooting. Once you download the project you created in WindO/I-NV2 to the touchscreen, you can use the Debugging Mode to communicate directly with the touchscreen and switch between screens, or view and modify batch data from the controls of your PC. In Simulation Mode, you can use simple On/Off control without connecting to the PLC.

### Easy programming: intuitive drag and drop functionality

The WindO/I-NV2 software for all IDEC Touchscreens is the programming tool that lets you create colorful graphical interfaces to visualize operating conditions. The software is very intuitive with drag and drop functionality. The Help menus are a great source of information and a built-in library of bitmaps provides over 5000 images to help expand your creativity. The software also includes a debug function that allows you to go online and access the touchscreen for monitoring and changing data.

### Flexible Screen Display for Efficient Editing

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

# Easy-to-manage Projects and Screens

Screens and Project Settings List: .....

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

#### Screen Preview List:

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

#### Object List:

- Each object displays its properties such as the type of device used, conditions and operations.

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

Monitor every plant function with colorful graphical interfaces



# Wind0/I-NV2 Software

#### **Extensive Image Library**



A built-in symbol library provides over 5000 bitmaps to help you create cutting-edge graphical screens. Image data from BMP, JPG, DXF, WMF, and ICO files can also be imported.





# Compatible with 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.



### 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.

### **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.

#### Multilingual Capabilities for Global Applications

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.

#### Applicable languages:

Win2000 and XP make it possible to input Japanese, Simplified Chinese, Traditional Chinese, Korean languages, Western European languages (English, German, French, Italian, Spanish, Dutch, Norwegian, Danish, Finnish, Swedish, etc.), Central European languages (Czech, Polish, Hungarian, Romanian, Croatian, Slovene, and Slavic), Baltic languages, and Cyrillic languages (Russian, Ukranian, Bulgarian, Macedonian).

## Large, high-resolution screens make your operations look better than ever

# Colorful graphical interfaces for most applications





|             | PART NUMBERS           | BEZEL COLOR | DESCRIPTION   |
|-------------|------------------------|-------------|---|
| 12.1"       | HG4F-JT22TFW           | Light Gray  | Color TFT LCD Touchscreen   |
|             | HG4F-JT22TFB           | Black*      | Color TFT LCD Touchscreen   |
|             | HG4F-JT22TFW-DH485-500 | Light Gray  | Color TFT LCD Touchscreen with DF1 / DH485 converter/cable<br>package for SLC 500 (w/RJ45 connector)  |
| 10.4"       | HG3F-FT22TFW           | Light Gray  | Color TFT LCD Touchscreen   |
|             | HG3F-FT22TFB           | Black*      | Color TFT LCD Touchscreen   |
|             | HG3F-FT22TFW-DH485-500 | Light Gray  | Color TFT LCD Touchscreen with DF1/DH485 converter/cable<br>package for SLC 500 (w/RJ45 connector)    |
| 5.7"        | HG2F-SS22VCF           | Light Gray  | Color STN LCD Touchscreen   |
|             | HG2F-SB22VCF           | Light Gray  | Monochrome STN LCD Touchscreen  |
|             | HG2F-SS22VCF-DH485-500 | Light Gray  | Color STN LCD Display with DF1 / DH485 converter/ cable package<br>for SLC500 ( w/RJ45 connector )    |
|             | HG2F-SB22VCF-DH485-500 | Light Gray  | Monochrome STN Color Display with DF1 / DH485 converter / cable package for SLC500 (w/RJ45 connector) |
| 5.7"        | HG2F-SS52VCF           | Light Gray  | Color STN LCD Touchscreen w/ CC Click Tactile Touchbutton Technology                                  |
| w/ CC Click | HG2F-SB52VCF           | Light Gray  | Monochrome STN LCD Touchscreen w/ CC Click Tactile Touchbutton Technology                             |

12.1"

10.4″

**IDEC SmartTouch Part Numbers** 

**IDEC SmartTouch Displays** 

### IDEC SmartTouch Functionality Table

|                          | 5.7"    | 5.7" w/ CC Click | 10.4"             | 12.1″             |
|--------------------------|---------|------------------|-------------------|-------------------|
| LCD Display Type         | STN     | STN              | TFT               | TFT               |
| 256 Color Screen Models  | Yes     | Yes              | Yes               | Yes               |
| Monochrome Models        | Yes     | Yes              | -                 | -                 |
| Memory                   | 2 MB    | 2 MB             | 8 MB*             | 8 MB*             |
| Resolution (Pixels)      | 320x240 | 320x160**        | 640x480           | 800x600           |
| Printer Support          | Serial  | Serial           | Serial / Parallel | Serial / Parallel |
| RS-232 / RS-485 / RS-422 | Yes     | Yes              | Yes               | Yes               |
| Compact Flash Slot       | Yes     | Yes              | Yes               | Yes               |
| Ethernet                 | -       | -                | Yes               | Yes               |
| O/I Link                 | Yes     | Yes              | Yes               | Yes               |
| 1:N PLC Communication    | Yes     | Yes              | Yes               | Yes               |
| Digital I/O              | Yes     | Yes              | Yes               | Yes               |
| Touch Regions            | 192     | 128              | 768               | 1200              |

#### **IDEC Touchscreen Accessories**

\*2Mb used for OS \*\*4 tactile pushregions (40X70 pixels)

| PART NUMBERS                  | ACCESSORIES   | DESCRIPTION       |
|-------------------------------|---|-------------------|
| Programming Tools             | WindO/I-NV2 Programming software for all IDEC Touchscreen Series    | HG9Y-ZSS2W        |
|                               | Cable connecting PC to Touchscreen via RS-232 Serial Port           | HG9Z-XCM1A        |
| Converters                    | USB to RS-232 Convertor for PCs without Serial Ports                | FC4A-USB          |
|                               | AB SLC500 (w/RJ45 connector) DF1 / DH485 Communication Package      | HG9Z-GWDF1DH485-2 |
| Protective Sheet              | For 12.1" HG4F (2 pcs. / pack)                                      | HG9Z-4DAPN02      |
|                               | For 10.4" HG3F (2 pcs. / pack)                                      | HG9Z-3DAPN02      |
|                               | For 5.7"HG2F (5 pcs. / pack)  | HG9Z-2D2          |
| Mounting Clips                | For 10.4" HG3F & 12.1" HG4F (10 pcs. / pack)                        | HG9Z-4K1PN10      |
|                               | For 5.7" HG2F (4 pcs. / pack)                                       | HG9Z-2K1PN04      |
| Replacement Backlight         | For 12.1" HG4F  | HG9Z-4FB          |
|                               | For 10.4" HG3F  | HG9Z-3FB          |
|                               | For 5.7" HG2F   | HG9Z-2B1          |
| O/I Link Unit                 | For 12.1" HG4F / 10.4" HG3F / 5.7" HG2F                             | HG9Z-2G1          |
| 32 Point Digital I/O          | For 10.4" HG3F & 12.1" HG4F (16 Inputs & 16 Outputs)                | HG9Z-3P102        |
|                               | For 5.7" HG2F (16 Inputs & 16 Outputs)                              | HG9Z-2P101        |
| Compact Flash Card            | 32MB CF Card for 5.7" HG2F, 10.4" HG3F, 12.1" HG4F                  | HG9Z-MF32         |
| IDEC PLC Communnication Cable | MicroSmart (FC4A) RS232   | FC4A-KC2CA        |
|                               | MicroSmart (FC4A) RS485 with mini DIN connection (-PC2/-HPC2)       | HG9Z-3C115A       |
|                               | MicroSmart (FC4A) RS485 with screw terminal connection (-PC3/-HPC3) | HG9Z-2C145A       |



**Touchscreen Driver Table** 

## Enjoy Touchscreen control even in limited space applications

#### IDEC SmartTouch Communication Driver List [Short Form]

For Complete List of Cables and Driver Configurations, please go to www.idec.com/usa/smarttouch.

| MANUFACTURER                           | SERIES  | APPLICABLE CPU   | HOST INTERFACE DRIVER  |
|--|---|--|--|
| IDEC                                   | FA-3S, FA-2J<br>Micro3, Micro3C<br>OpenNet<br>MicroSmart<br>Web Server Unit | PF3S-CP12/CP13<br>PF3S-CP11/CP11T, PF2J<br>FC2A<br>FC3A<br>FC4A/FC5A<br>FC3A/FC5A<br>FC3A/FC4A/FC5A  | FA-3S (CP12/13)<br>FA-3S (CP11/11T, FA2J)<br>MICRO3, MICRO3C<br>OpenNet/MicroSmart<br>OpenNet/MicroSmart<br>Web Server Unit  |
| Allen Bradley                          | PLC-5<br>SLC-5/03, SLC-5/04<br>SLC-5/05<br>MicroLogix<br>ControlLogix       | 1785<br>1747-L53, 1747-L54<br>1747-L551,1747-L552, 1747-L553<br>1747-L551<br>1000, 1200, 1500<br>5550, 5555  | PLC-5 (Half-Duplex) or *Ethernet/IP<br>MicroLogix/SLC500 (Full Duplex)<br>MicroLogix/SLC500 (Full Duplex)<br>*Ethernet/IP<br>MicroLogix/SLC500 (Full Duplex) or *Ethernet/IP<br>*Ethernet/IP |
| Automation Direct                      | DL405   | D4-430, D4-440   | DirectLogic-DL205/405  |
| (Koyo)<br>Siemens                      | DL205 (05/06)<br>S7-200   | (D2-240 (D2-230/250/260)<br>CPU 212, 214, 215, 216, 221, 222, 224,<br>226, 226XM   | S7-200 (PPI)   |
|  | S7-300<br>S7-400  | CPU 313, 314, 315, 315-2DP, 316, 318<br>CPU 412, 414, 416, 416F-2, 417   | S7-300 3964(R)/RK512   |
| Schneider<br>(Telemecanique, Square D) | Twido   | TWDLCAA16DRF, TWDLCAA24DRF<br>(10, 20, 40 CPUs)  | Modbus-RTU   |
| (1919-1999-1997)                       | Momentum<br>Others  | 171CC96020<br>Any PLCs that support<br>MODBUS/TCP protocol   | MODBUS/TCP   |
| Aromat                                 | FP  | FP0<br>FP1<br>FP Sigma<br>FP10, FP10SH<br>FP2, FP2SH   | MEWNET   |
| Omron                                  | SYSMAC-C<br>CS1   | CP1, CPM1A<br>CPM2A<br>C500, C500F, C1000H, C2000, C2000H<br>C1000HF<br>C200HS<br>C200HE, C200HG, C200HX<br>C120, C120F<br>CQM1H, C200HS-CPU21/23/31/33<br>C200HE-CPU42, C200HG-CPU43/63,<br>C200HX-CPU44/64<br>CS1G, CS1H | SYSMAC C Series<br>SYSMAC CS1 Series   |
| Keyence                                | KV Series<br>KV-700   | KV 10, 16, 24, 40, 80<br>KV-700  | KV/KZ<br>KV-700  |
| GE Fanuc                               | VersaMax Nano/Micro<br>Series 90-30   | NV-700<br>10 I/Os, 14 I/Os<br>23 I/Os, 28 I/Os<br>CPU 311, 313, 323, 331, 341, 350,<br>351, 352, 360, 363, 364, 374<br>CPU 331, 341, 350, 351, 352,<br>360, 363, 364, 374  | Series 90 (SNP-X)  |
|  |   |  | *Only for HC3F and HC4F  |

\*Only for HG3F and HG4F

**Compact Touchscreen Display** 

#### HG1F - Big screen features on a small screen

Fast response, bright displays and clear instructions to operators are hallmarks of a smart HMI—one that surpasses every button and every old panel. The HG1F includes a high-speed CPU processor that responds to commands and changes displays almost instantaneously. Plus it's easy to read, even from an angle, and you can set contrasts to create the ideal display for any lighting condition. The higher-resolution screen gives you more real estate than other small screens, so you can take as much space as you need to make the elements and text on your screen as understandable as possible. This compact screen has it all, including:

- High performance CPU for fast response
- Super bright monochrome LCD screen: 500 cd/m<sup>2</sup>
- Analog resistive touch panel
- Screen orientation: landscape or portrait
- Large memory capacity of 1MB
- High resolution: 300 X 100 pixels
- Supports major brand PLC manufacturers
- Approvals: UL, c-UL, Hazardous Locations Class 1 Div. 2, NEMA Type 13, IP65, CE



#### 4.6" HG1F Touchscreen Part Numbers

| DESCRIPTION                                  | COMMUNICATION TYPE | PART NUMBER   |
|--|--------------------|---------------|
| 4.6" Monochrome LCD Screen, Light Gray Bezel | RS-232             | HG1F-SB22BF-W |
| 4.6" Monochrome LCD Screen, Black Bezel      | RS-232             | HG1F-SB22BF-B |
| 4.6" Monochrome LCD Screen, Light Gray Bezel | RS-485/RS-422      | HG1F-SB22YF-W |
| 4.6" Monochrome LCD Screen, Black Bezel      | RS-485/RS-422      | HG1F-SB22YF-B |

#### Software

| DESCRIPTION                                 | SOFTWARE NAME | PART NUMBER |
|---|---------------|-------------|
| Programming software for all Touchscreens.  | WindO/I-NV2   | HG9Y-ZSS2W  |
| Software includes PLC Drivers for:          |               |             |
| IDEC, Allen Bradley-DF1, Omron, Mitsubishi, |               |             |
| Modicon, Aromat, Siemens, Koyo (Automation  |               |             |
| Direct), Keyence, Toshiba, and many more.   |               |             |

#### Programming Cable: Connects HG1F to PC

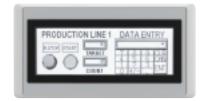
|   | DESCRIPTION               | PART NUMBER                         |              |
|---|---------------------------|-------------------------------------|--------------|
|   | RS-232 programming cable* | HG9Z-XCM1A (Cable FC2A-KC4C can al: | so be used)  |
| *if computer only has USB, an additional cable (FC4A-USB) must be used. |                           |                                     |              |
| Cable Part Numbers: Connects HG1F to PLC*                               |                           |                                     |              |
|   | IDEC PLC Model            | COMMUNICATION TYPE                  | PART NUMBER  |
|   | MicroSmart (FC5A & FC4A)  | RS-232 (FC4A-PC1 or FC4A-HPC1)      | HG9Z-XC183** |
|   |                           |                                     |              |

| MicroSmart (FC5A & FC4A) | RS-232 (FU4A-PUT OF FU4A-HPUT)             | HG9Z-XC183^^ |
|--------------------------|--|--------------|
| MicroSmart (FC5A & FC4A) | RS-232 Built-in Port (8pin Mini-Din)       | FC4A-KC1CA   |
| MicroSmart (FC5A & FC4A) | RS-485 (FC4A-PC3 or FC4A-HPC3)             | HG9Z-1C131A  |
| MicroSmart (FC5A & FC4A) | RS-485 (FC4A-PC2 or FC4A-HPC2)             | HG9Z-1C121A  |
| OpenNet or Micro3C       | RS-232 Built-in Port (8pin Mini-Din)       | HG9Z-XC183   |
| OpenNet or Micro3C       | RS-485 Built-in Port (Screw terminal type) | HG9Z-1C131A  |
| Micro3                   | RS-485 Built-in Port (8 pin Mini-Din)      | HG9Z-1C121A  |
|                          |  |              |

\*Other cables for supported PLCs available. For more information, visit www.idec.com/usa/hg1f \*\*Cable FC4A-KC1CA can also be used



**Portrait Orientation** 



Landscape Orientation

| - | ← 35.3mm → |
|---|------------|
|   |            |
|   | =          |

Side View

### Text message screens fit your special communications needs

#### **HG1X** Text display for small applications

The HG1X series are text message displays with built-in user definable function keys, which make them an excellent tool for small applications. The bright, back-lit LCD screens can display data, alarms, errors and data entry. The user can define as many screens as allowed by the memory and create multiple alarms with basic acknowledgements. In addition, they can communicate with IDEC PLCs, as well as many major brand PLCs.

- · Models available:
- 2-line, 16 character display with 24KB memory 4-line, 20 character display with 24KB memory 8-line, 20 character display with 64KB memory
- All keys are programmable to do multiple tasks
- Screen Password protection
- LEDs are programmable for On/Off state
- Serial port for printing screens and alarms
- Numeric keypad for easy data entry (4 and 8-line displays only)
- Bitmap import capability (8-line displays only)
- Communication available for most major PLC manufacturers
- Class 1 Div 2 (UL 1604) for hazardous locations, UL508
- All models are programmable with WINDMSG software

Cost effective displays

#### Screens

Users can easily define as many screens as allowed by the memory. A list of tasks can be assigned for each screen. All screens can be password protected providing an increased level of security. Various types of objects can be placed on the screens such as text, data display, alarm object, data entry, bar graphs, and a user can even import images (8 line display model only).

#### Keys

The keys are user definable. Each key can have multiple tasks assigned to it, making them extremely powerful tools for simple machine control. Create simple alarms with keys assigned to acknowledge alarms and print or view next/previous alarms.

#### LED

The LEDs provide on/off status for users to provide for simple monitoring.

#### **Changing Data**

Cursor control (for 2-line display) or keypad (for 4-line and 8-line display) operations are available for easy data entry.

#### Serial Port

Supports serial printing to print screens. Great for keeping records or for documentation purposes.



2 Line Display



4 Line Display



8 Line Display

# for small applications.



#### **HG1X Part Numbers**

| DESCRIPTION   | COMMUNICATION TYPE | PART NUMBERS |
|---|--------------------|--------------|
| 2-Line Text Message Display, No External Power Required | RS-232             | HG1X-252     |
| 2-Line Text Message Display, 24VDC Power Required       | RS-232 / RS-485    | HG1X-222     |
| 4-Line Text Message Display, No External Power Required | RS-232             | HG1X-452     |
| 4-Line Text Message Display, 24VDC Power Required       | RS-232 / RS-485    | HG1X-422     |
| 8-Line Text Message Display, 24VDC Power Required       | RS-232 / RS-485    | HG1X-822     |

# **Character Displays**

#### HG1X Software:

User-friendly WINDMSG software programs all text message displays. It has drop down menus and icons for convenient function selection. Objects are easily configured using step-by-step navigation. PLC drivers are built into the software, which allows for extended communication with IDEC and many other popular PLC manufacturers.



#### Software

| DESCRIPTION                                 | SOFTWARE NAME | PART NUMBER |  |
|---|---------------|-------------|--|
| Programming software for all HG1X Series    | WINDMSG       | WINDMSG     |  |
| PLC Drivers are included with the software: |               |             |  |
|   |               |             |  |

#### **Programming Cable**

| DESCRIPTION                                    | PART NUMBER |
|--|-------------|
| Programming cable for HG1X Series (PC TO HG1X) | HG9Z-PC125A |

#### Cable Part Numbers: Connect between HG1X-252 / 452 to PLC

| MANUFACTURER             | MODEL             | COMMUNICATION TYPE | PART NUMBERS                     |
|--------------------------|-------------------|--------------------|----------------------------------|
| ALLEN BRADLEY            | Micrologix Series | RS-232             | HG9Z-SCI007                      |
| AROMAT                   | FP0/FPM           | RS-232             | HG9Z-SCI015                      |
| IDEC                     | Micro 3           | RS-232             | HG9Z-SCI25A (built-in converter) |
|                          | Micro 3C          | RS-232             | HG9Z-SCI25B                      |
|                          | MicroSmart        | RS-232             | HG9Z-SCI25B                      |
|                          | OpenNet           | RS-232             | HG9Z-SCI25B                      |
| Automation Direct (KOYO) | DL 205 Series     | RS-232             | HG9Z-SCI023                      |
| MITSUBISHI               | FXO               | RS-232             | HG9Z-SCI008 (built-in converter) |
| SIEMENS                  | S7-200            | RS-232             | HG9Z-SCI029                      |

#### Cable Partnumbers: Connect between HG1X-222 / 422 / 822 and PLC

| MANUFACTURER             | MODEL             | COMMUNICATION TYPE | PART NUMBERS |
|--------------------------|-------------------|--------------------|--------------|
| ALLEN BRADLEY            | Micrologix series | RS-232             | HG9Z-SCI100  |
|                          | SLC 500 series    | RS-232             | HG9Z-SCI120  |
| AROMAT                   | FP0/FPM           | RS-232             | HG9Z-SCI500  |
| IDEC                     | Micro 3           | RS-485             | HG9Z-SCI220  |
|                          | Micro 3C          | RS-232             | HG9Z-SCI200  |
|                          | MicroSmart        | RS-232             | HG9Z-SCI200  |
|                          | OpenNet           | RS-232             | HG9Z-SCI200  |
| Automation Direct (KOYO) | DL 205 Series     | RS-232             | HG9Z-SCI400  |
| MITSUBISHI               | FXO               | RS-232             | HG9Z-SCI600  |
| SIEMENS                  | S7-200            | RS-485             | HG9Z-SC1300  |

\*For Complete List of Cables and Driver Configurations, please go to www.idec.com/usa/smarttouch.



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- Allen Bradley Ethernet/IP \*NEW\*
- Allen Bradley (DF1)
- Automation Direct
- Omron
- Mitsubishi
- Modicon
- Modbus TCP/IP \*NEW\*
- GE Fanuc
- Siemens
- Aromat
- Keyence
- Yaskawa
- Contact IDEC for complete listing

#### Support Information

IDEC SmartTouch Family: www.idec.com/usa/smarttouch

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