



Think Automation and beyond...



IDEC 12.1" HG4F and 10.4" HG3F OIT Series

IDEC SmartTouch Family - Monitor your manufacturing line for increased produc



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.

The IDEC SmartTouch family of operator interfaces, brings you exceptional design, great functionality, and ease of programming that takes monitoring and control to the next level.





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.

For more information on the 5.7" and 4.6" OITs, or to order brochures visit www.IDEC.com/usa/smarttouch



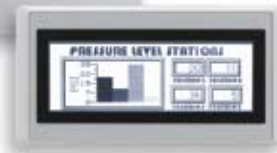
12.1" (HG4F)



10.4" (HG3F)



5.7" (HG2G)



4.6" (HG1F)

12.1" or 10.4" – Powerful features to increase your production efficiency

The 12.1" HG4F and 10.4" HG3F OITs are 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.



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 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



Smart Functionality



Basic Data Representation

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 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.

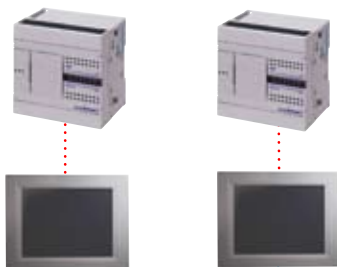
Compact Flash Card

IDECS 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.



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



Black bezel models available upon request



Slim design for space savings

To meet your application needs, IDEC offers the 12.1" and 10.4" TFT 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 (450 cdm² for the 10.4" and 400 cd/m² for the 12.1") 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 – 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 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 (FC5A/FC4A with Web Server Unit), Automation Direct (Koyo): DirectLogic-DL205/405 and Modicon: Modbus RTU or Modbus / TCP Client.

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.

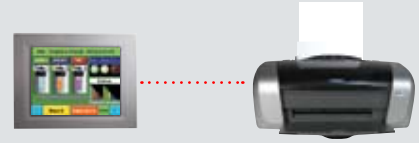
Pass Thru Function

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 and Q.

Approvals and International Ratings

The 10.4" and 12.1" screens are UL listed for use in hazardous locations (Class I Div. 2). In addition, they 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. Parallel Printers are supported on all 10.4" and 12.1" models.

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:

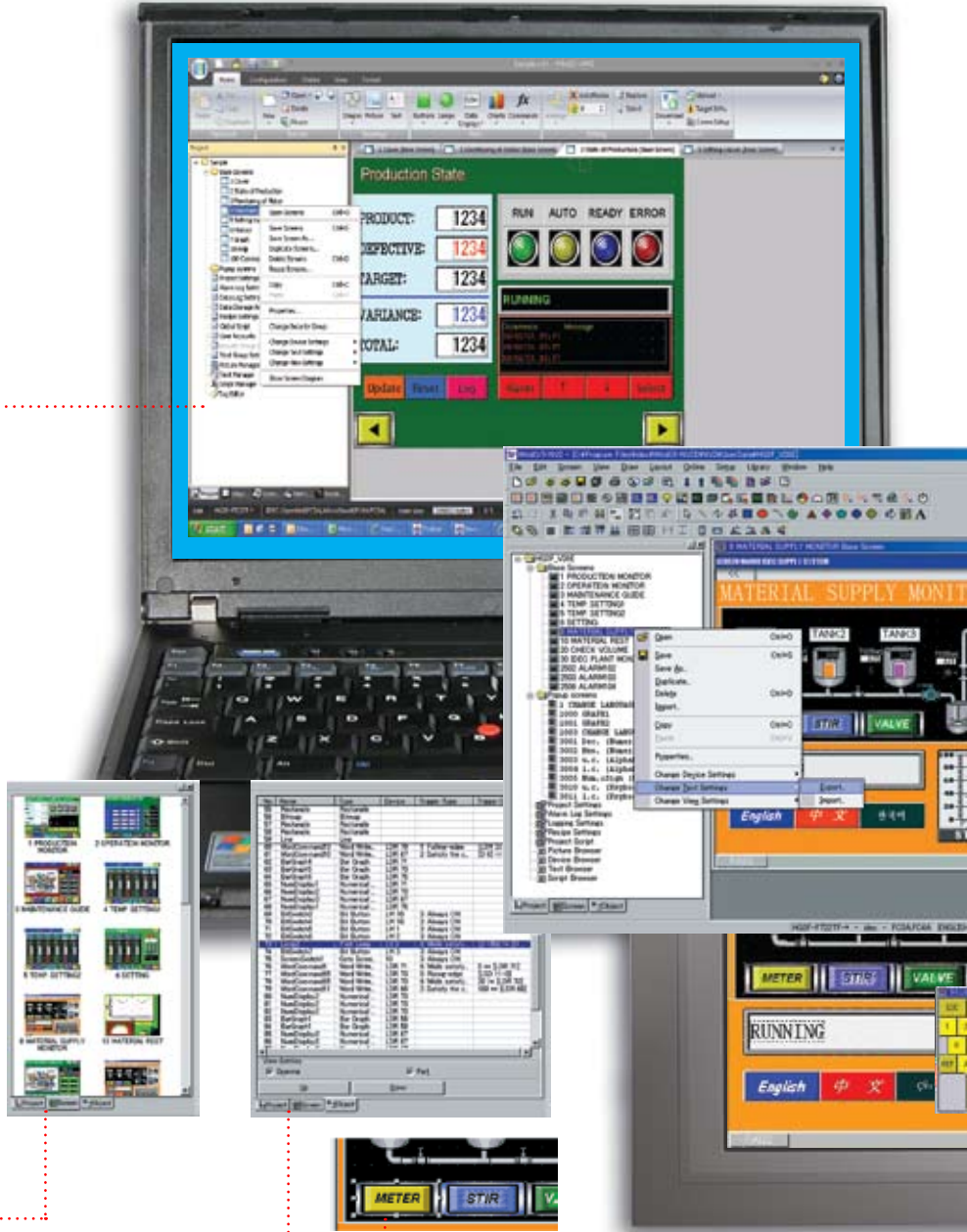
- Screens can easily be selected using the preview image function.

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.



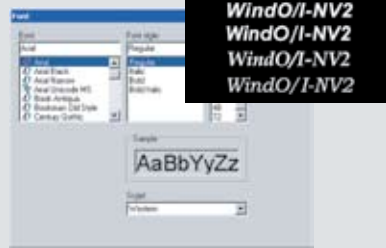
Monitor every plant function with colorful graphical interfaces

WindO/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.



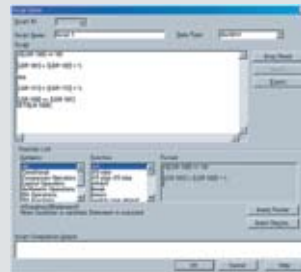
Compatible with Standard Windows Fonts

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



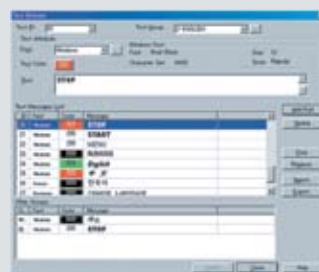
Easy Programming of Operating Conditions

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, Ukrainian, Bulgarian, Macedonian).

Large, high-resolution screens make viewing your operations easier than ever



Colorful graphical interfaces for your applications



Part Numbers

Size	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 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 package for SLC 500 (w/RJ45 connector)

*Black bezel models available upon request. Please contact IDEC.

Accessories

Item	Description	Part Numbers
Software	Automation Organizer Software Suite (Includes WindLDR, WindOI-NV2, & WindCFG)	SW1A-W1C
Programming Cable	Cable connecting PC to Touchscreen via RS-232 Serial Port	HG9Z-XCM1A or FC2A-KC4C
Communication Cables (between IDEC PLCs & HG3F/4F)*	Microsmart (FC4A)/Microsmart Pentra (FC5A) RS232	FC4A-KC2CA
	Microsmart (FC4A)/Microsmart Pentra (FC5A) RS485 with mini DIN connection (-PC2/-HPC2)	HG9Z-3C115A
	Microsmart (FC4A)/Microsmart Pentra (FC5A) RS485 with screw terminal connection (-PC3/-HPC3)	HG9Z-2C145A
Converters	USB to RS-232 Converter 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
Mounting Clips	For 10.4" HG3F & 12.1" HG4F (10 pcs. / pack)	HG9Z-4K1PN10
Replacement Backlight	For 12.1" HG4F	HG9Z-4FB
	For 10.4" HG3F	HG9Z-3FB
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
Compact Flash Card	128MB CF Card for 5.7" HG2F, 10.4" HG3F, 12.1" HG4F	HG9Z-MF128

* For other PLC manufacturers, refer to WindOI-NV2 Users Manual.

For more information on these and our other OITs visit www.IDEC.com/usa/smarttouch



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/smartztouch.

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



IEC Money-Saving Solution Package

Today's industrial machines require controls that are simple, versatile and user-friendly. With that in mind, IEC is offering a solution package that can solve all your control problems. Save up to 50 percent on specially-packaged IEC components that combine everything you need to install a graphical operator interface. This package includes an IEC Touchscreen and drivers, user-friendly software for easy programming, a Slim-Line Power Supply and MicroSmart PLC or IEC SmartRelay. IEC components in each package work together to give you a simple solution at a great price. For more information, visit www.IEC.com/usa/smarttouch.

More Drivers and Ethernet Connectivity

If you want an efficient way to monitor and control your industrial applications, then look no further than IEC 10.4" and 12.1" TFT LCD touchscreens. Competitively priced and bundled with countless features and functions, these touchscreens even have the flexibility to communicate with other brand PLCs. In fact, in addition to Web Server functionality, the available network drivers for these touchscreens support AB Ethernet/IP, Modbus TCP/IP or IEC. This enables you to remotely control, monitor and manage data over an Ethernet network from the convenience of your office. Built-in drivers can support over 100 different types of controllers. Major drivers supported are:

- IEC Microsmart, ONC, FA series
- IEC Webserver Module
- Allen Bradley Ethernet/IP
- Allen Bradley (DF1)
- Automation Direct
- Omron
- Mitsubishi
- Modicon
- Modbus TCP/IP
- GE Fanuc
- Siemens
- Aromat
- Keyence
- Yaskawa

Contact IEC for complete listing



12.1" HG4F

10.4" HG3F

Support Information

IEC SmartTouch Family:
www.IEC.com/usa/smarttouch

Software demos and upgrades:
www.IEC.com/software

Technical support:
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