IDEC

Think Automation and beyond...

IDEC High-Performance OI Touchscreens

IDEC High-Performance

The next generation in exceptional performance

OI Touchscreens

and cutting-edge features

The High-Performance Series brings performance to a whole new level with advanced features and intuitive software. The best value in the market, these high-quality touchscreens offer flexible solutions and remote access and control for your HMI applications. Features include:

- Vivid Display
- Superior Design
- Adaptable Hardware
- Comprehensive Control
- User-friendly Programming

Multiple Levels of Service

When you buy an IDEC OI Touchscreen, you get more than just a great product; you get the entire IDEC team of resources at your fingertips. We feel it's important to provide you with innovative technology and quality products, as well as world-class service, something no other company offers.

FREE software upgrades
FREE technical support
FREE training with Starter Kit

IDEC

Vivid Display

Our high-performance OI Touchscreens are so vivid thanks to cutting-edge color conversion technology, the same technology used in LCD TVs. These screens deliver a superior experience with intense screens.

Groundbreaking OI Touchscreens are the brightest on the market!

High-Definition Quality TFT LCD displays

Brightest on the market

With an LED backlight shining up to 800 cd/m^2, OI Touchscreens create a very powerful visual presentation. Immediately after the touchscreen is turned on, the screen lights up and lasts much longer than a CCFL (Cold Cathode Florescent Lamp) with a lifespan of 50,000 hours or greater. A 48-level adjustment also provides flexibility, allowing you to determine the brightness.

SVGA resolution

The High Definition Quality TFT LCD Screens with SVGA resolution (8.4", 10.4" and 12.1" OI Touchscreens) provide sharp images and superior visibility. The high resolution also gives you more space to create additional images and parts for your project, while enjoying exceptional clarity.

65,536 Colors

With so many colors, screen views are realistic and crisp, providing true-to-life images and making it easy to view precise readings of data and images. Distinctly different from 8-bit, 256 color screens, the high-performance series offers an intense depth-of-color perfect for graphical displays.

A visible difference

256 Colors

65,536 Colors

Touch Panel

A front panel power LED indicator makes it easy to check your status or to troubleshoot, while the analog resistive touch panel itself was designed to be intuitive, making it simple to place any size object anywhere on the screen. Plus the IDEC logo is easily removable, so you can customize the touchscreen with your own logo or image.

Superior Design

Fast. Flexible. Environmentally-friendly!

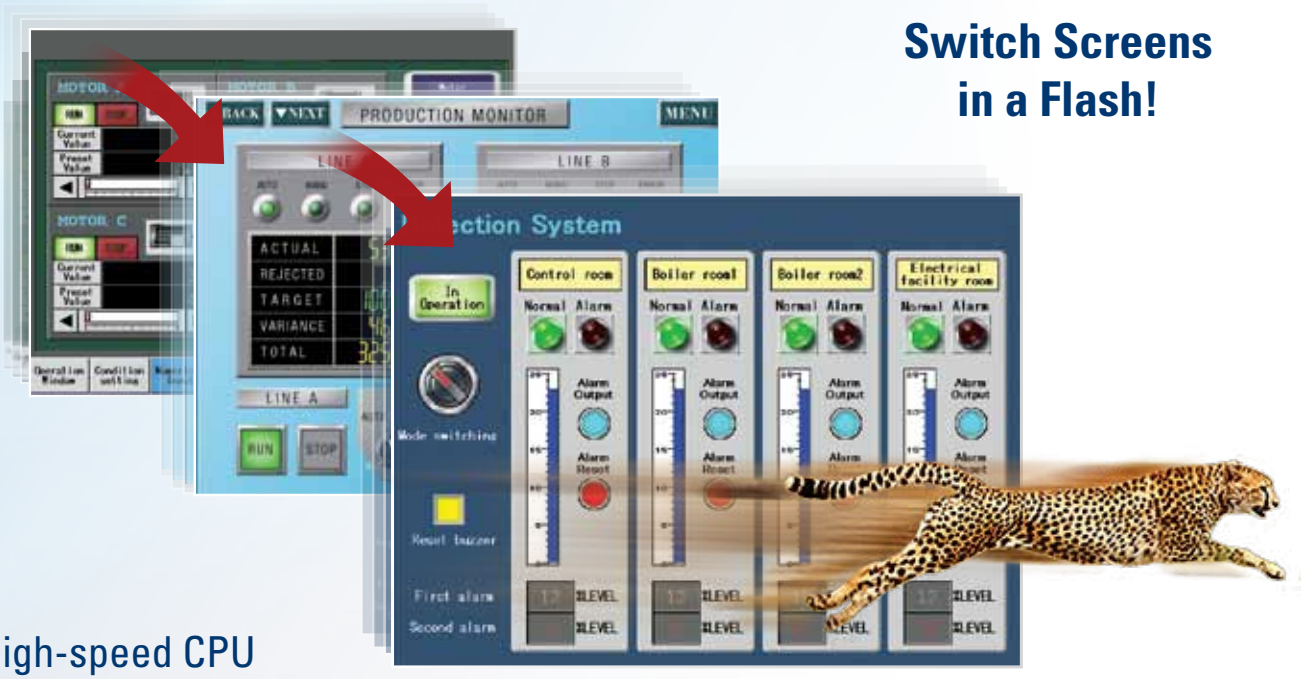
Landscape

Portrait

Mounting Flexibility

All High-Performance series can be mounted with the screen orientation set to portrait or landscape mode depending on space requirements. This allows you the flexibility of mounting the touchscreen according to your specific application needs. Plus OI Touchscreens are designed with a slim body style, providing a big advantage in situations where panel space is at a premium.

Switch Screens in a Flash!



High-speed CPU

The fastest in its class, a 400MHz RISC processor means that these touchscreens have quick operation and response times, as well as exceptional performance. Not to mention, start-up is 3 seconds from power on, so you can start working without delay.

Low Energy Consumption

Designed with an energy-saving design and LED backlight, these touchscreens use 50% less energy compared with conventional models. While all OI Touchscreens in the high-performance series consume a maximum of 27 watts of power (depending on model size), if a USB Host and Expansion I/O are not used, less wattage is used. For instance, the 8.4" and 10.4" consume a maximum of 15 watts when not using these devices. Similarly, having full control of how and when the LED backlight dims or goes to sleep mode allows you to save more energy.

Approvals

We are dedicated to ensuring the safety of life and property at sea. To that end, IDEC OI Touchscreens are trusted and approved by leading maritime classification agencies, such as the American Bureau of Shipping (ABS Type Approval), Lloyd's Register and NK. This means our touchscreens meet technical and safety needs that allow them to be used in marine, offshore structures and shore-based installations. All high-performance models are also CE-marked and c-UL-us listed.

Adaptable Hardware

Expand your control

With a wide range of connectivity options, our high-performance OI Touchscreens offer a communication solution for every application. Store programming or log data with up to 12MB of user memory, communicate with multiple controllers and devices and even remotely monitor and control. If extra storage is needed, an SD card or USB flash drive can easily be used.

SD Card

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

USB Port A (USB 2.0)

- Connect a USB flash drive
  - Store IDEC MicroSmart ladder and touchscreen programs, log data and screen capture (if transferred from SD card)
- Connect barcode readers

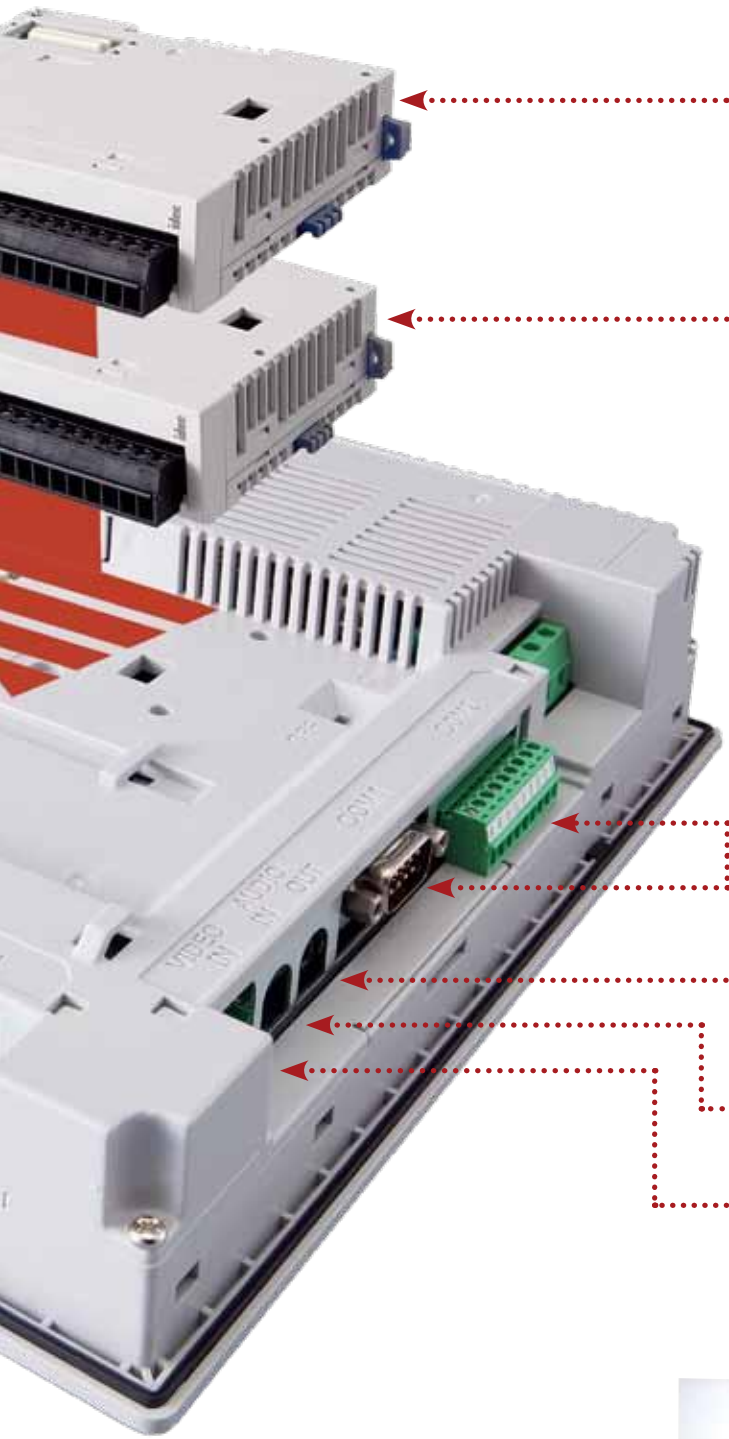
USB Port mini B

- Connect PC directly to OI Touchscreen for high speed transfer of program upload, download, or monitoring
- Connect to a USB printer

Ethernet Port

- 10BaseT or 100Base-TX connection
- Remote communication with the PLC and download, upload or monitor PLC and OI Touchscreen projects
- Allows remote access for monitor and control

The connectivity you want, the flexibility you need



Expansion Module

Depending on your application and OI Touchscreen size, up to 4 MicroSmart expansion digital I/O modules can be connected. They easily snap on the back of any High-performance Series OI Touchscreen to offer simple I/O control with the option to perform independently of the touchscreen scan time using Cyclic Script.

2 Serial Ports

RS232 and RS485 (422)

- Host – Communicate with a PLC/device using 1:1 or 1:N PLC communication
- Sub Host – Communicate with an IDEC MicroSmart PLC or Modbus RTU device
- O/I Link – Various PLCs including the IDEC MicroSmart PLC can network with multiple OI Touchscreens, where one is a master and up to 15 slaves are connected
- User – Communicate using transmit or receive instructions to build your own protocol

Audio Out Port:

- Connects to speakers to playback pre-saved .WAV audio files for custom alarms or alerts

Audio In Port

- Connects to a microphone to listen and monitor audio sounds

Video In Port

- Connects to a video camera to display video images on the touchscreen

Comprehensive Control

Real-time video monitoring

Play movie files and audio right on your touchscreen

The high-performance series (8.4", 10.4" and 12.1" OI Touchscreens) features a built-in video interface (Video In) and audio interface (Audio In/Out). That means a video camera, microphone and speaker can be connected to the OI Touchscreen and used in the following ways:

- Display video images on the touchscreen display
- Play movie files on the touchscreen display (MP4 supported)
- Play audio files on the touchscreen display
- Record video for viewing on the touchscreen display

Using the video and audio interfaces, you can monitor and record machine faults or conditions on the plant floor simply by using a video camera and microphone, and setting it to display on the OI Touchscreen. You can also play your operation manual as a movie or play movie files to give information or instructions to a user or customer. This makes it easy to explain detailed information and makes it a useful feature for troubleshooting.

Remote access, monitoring & control

Connect anytime, anywhere using your PC, PDA or Smart Phone

Distance isn't an issue with our high-performance line of OI Touchscreens. When you need access to your machine or equipment, but can't get to the factory floor or even to the office, all you need is a computer, PDA or Smartphone and you can remotely access, monitor and control your touchscreen through a web browser. It's that simple!

Monitor current values or processes, click pushbuttons to control operation, print, switch screens or even change program values just as if you were in front of your touchscreen on site. You can also troubleshoot, test and do maintenance.

- No additional software tools or modules needed to use the Remote Monitor & Control function
- Up to 5 clients can remotely monitor and control simultaneously
- Simple configuration to enable remote access

Instant Communications

1:N PLC Communication

Connect a single OI Touchscreen to multiple PLCs for centralized control. One touchscreen can monitor and control each system with PLCs in several different locations.

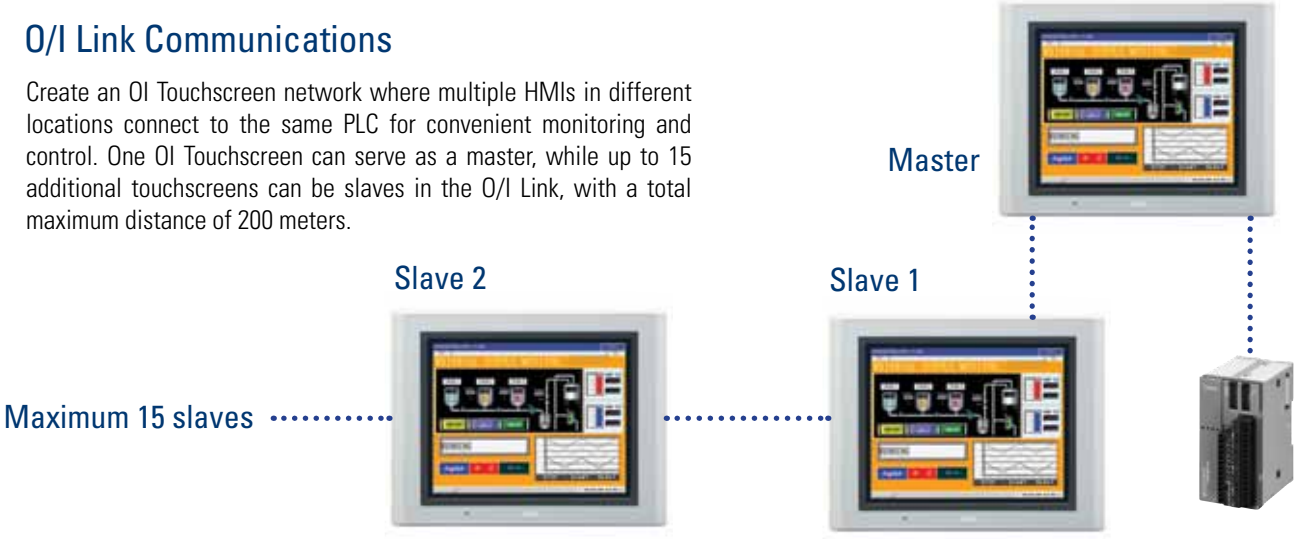
Note: The maximum number of connected PLCs depends on the PLC brand. See WindO/I-NV2 manual for supported manufacturers.

Sub Host Communication

Communicate with two different PLC/devices at the same time. A serial or Ethernet port can be configured from our list of supported PLC manufacturers as a host, and the other serial port can be configured as a Sub Host communication with supported protocols including IDEC MicroSmart and Modbus RTU.

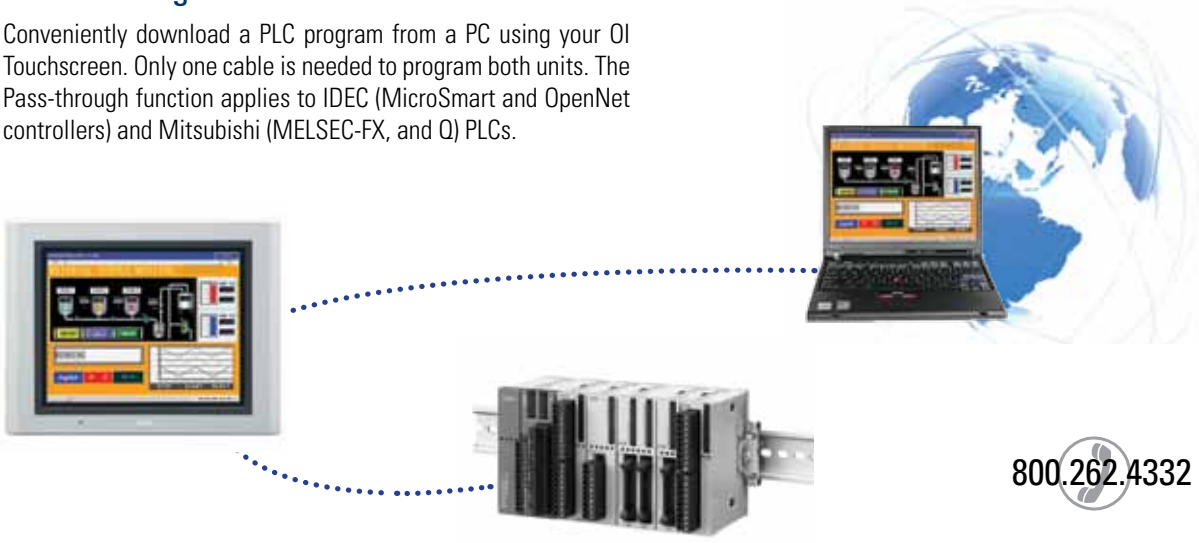
O/I Link Communications

Create an OI Touchscreen network where multiple HMIs in different locations connect to the same PLC for convenient monitoring and control. One OI Touchscreen can serve as a master, while up to 15 additional touchscreens can be slaves in the O/I Link, with a total maximum distance of 200 meters.



Pass-Through Communication

Conveniently download a PLC program from a PC using your OI Touchscreen. Only one cable is needed to program both units. The Pass-through function applies to IDEC (MicroSmart and OpenNet controllers) and Mitsubishi (MELSEC-FX, and Q) PLCs.



800.262.4332

User Communication

Simply set the OI Touchscreen communication protocol to the one required by your serial devices. This function uses transmit and receive instructions to build your own protocol.

Over 100 Serial & Networking Drivers are Supported

Allen-Bradley
KEYENCE
Siemens
GE Fanuc
Schneider
MODBUS
MITSUBISHI
GE
Toshiba
SHARP
OMRON
Yokogawa
Modicon
Panasonic
Automation Direct (Koyo)
Hitachi
and More!

Automation Organizer

A one-stop automation software package for all IDEC PLC and OI Touchscreens

Automation Organizer (AO), the IDEC software suite combining the latest versions of our popular PLC programming software (WindLDR) and OI programming software (WindO/I-NV2) with new system configuration software (WindCFG) , is made to enable you to see the layout of your system design and basic configuration of devices. AO gives you a powerful and easy-to-use tool to design, debug, and document control systems, saving valuable time and money.

Intuitively working with you, WindO/I-NV2 walks you through an easy step-by-step configuration of your images and your workspace. Dragging and dropping makes screen creation fast, even for beginners. Plus debugging, previewing and editing can be handled through WindO/I-NV2's easy-to-use graphic user interface. Designed with a modern look and feel, similar to MS Office 2007 style, a customizable toolbar and workspace with drop down menu and ribbon control make it simple to select parts, objects and functions. You can also change the toolbar by adding icons frequently used on your project, saving programming time and allowing you to customize your workspace.

Automation Organizer **WindLDR**

PLC programming with WindLDR

Automation Organizer **WindO/I-NV2**

OI programming with WindO/I-NV2

Automation Organizer **WindCFG**

System Configuration with WindCFG

Easy-to-manage Projects and Screens

With WindO/I-NV2 software, up to 3,000 base screens can be created (as allowed by the memory size). Sub-screens or pop-up menus can be resized, created (showing backgrounds) using the superimpose function, and made to appear anywhere around the base screen.
In addition:

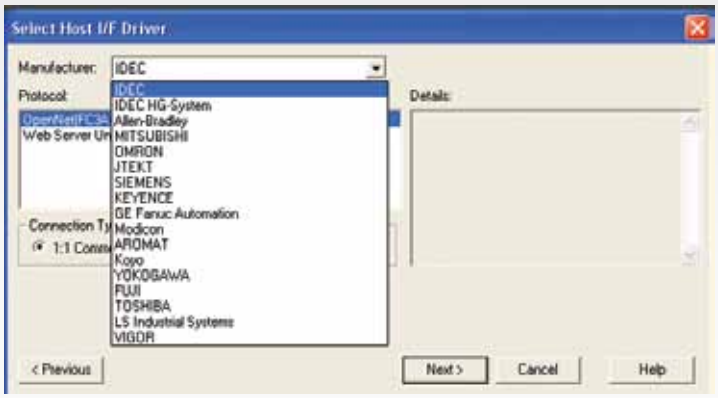
- Project settings can be edited
- Device addresses, text and images can be imported or exported
- Screens can be duplicated and properties changed

User-friendly Programming

It's as easy as 1, 2, 3!

1 Create

Creating a project is simple! Just name a project file and select your parameters (OI type and model, protocol type, and optional settings).

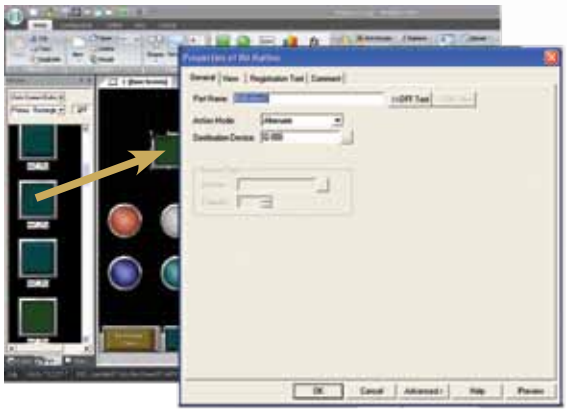


2 Configure

Select a functional part and assign a device address. The other tabs allow you to change image, color, or add more parameters.

Drag and Drop Screen Design

Easy step-by-step configuration

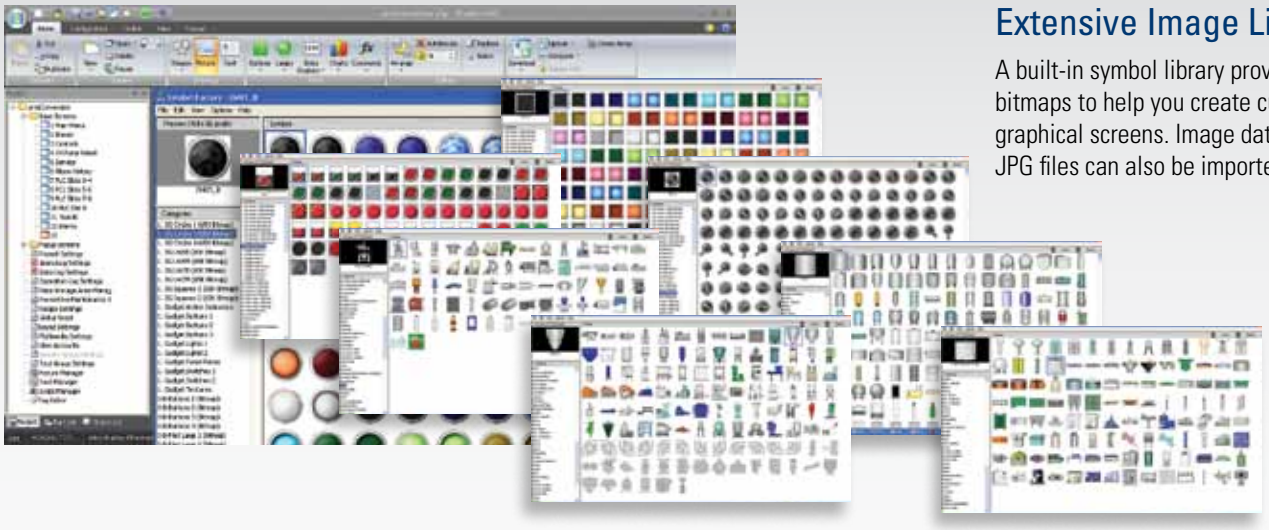


3 Download

Once your project is ready to be downloaded to the touchscreen, select "Online" and then "Download." You can now debug or monitor your program as needed. It's as simple as that!

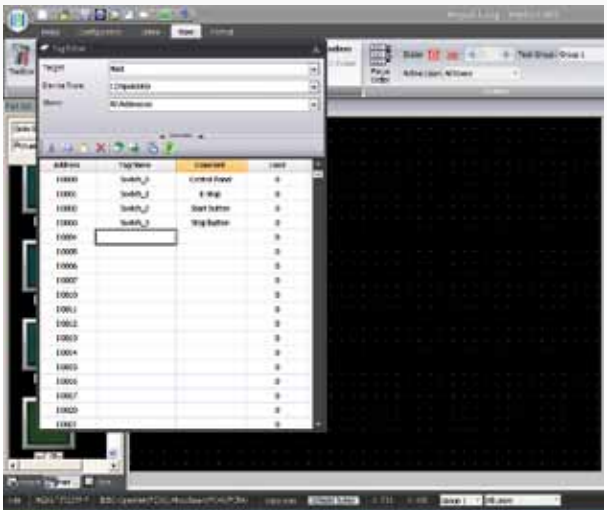
User-friendly Programming

Create a powerful graphical display



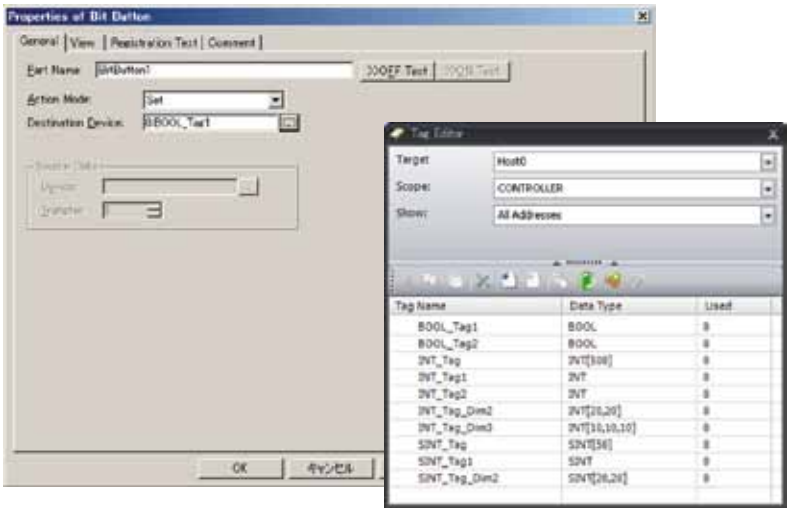
Extensive Image Library

A built-in symbol library provides over 7,000 bitmaps to help you create cutting-edge graphical screens. Image data from BMP and JPG files can also be imported.



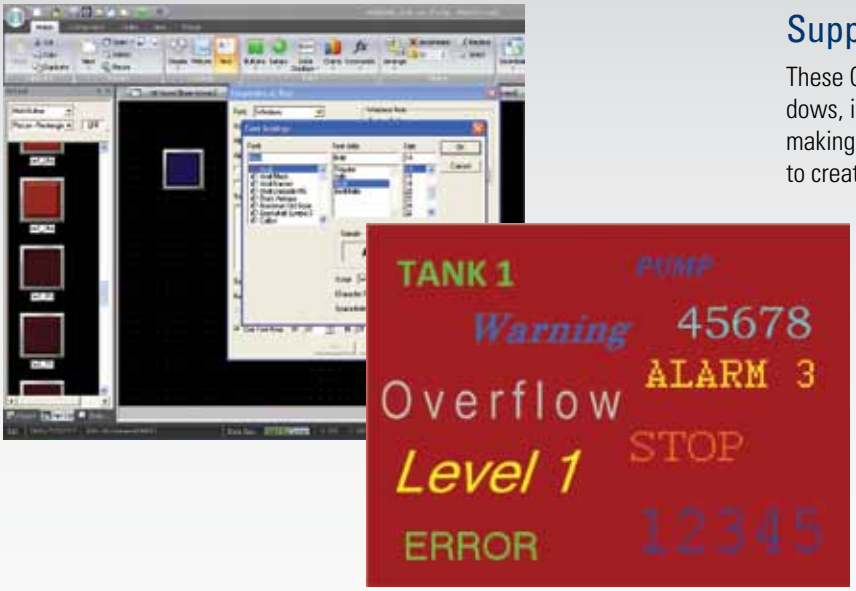
Tag Database

You can create a database of device addresses, including Tag Names, which help you label each address to best match your information or documentation. By creating a Tag database, you can choose addresses used to read data from the PLC or Host device, or write data to the PLC or device. Even more convenient, if you have a list of IDEC PLC addresses already made in WindLDR, you can easily import it to the Tag Database.



Allen Bradley Logix Native Tag Import

The High-Performance models support "Allen Bradley Logix Native Tag Import," which means you can easily import any tag database file (L5K or CSV file) created with Allen Bradley PLC software. Once registered in the Tag Editor, you simply select the Tag name for your part.

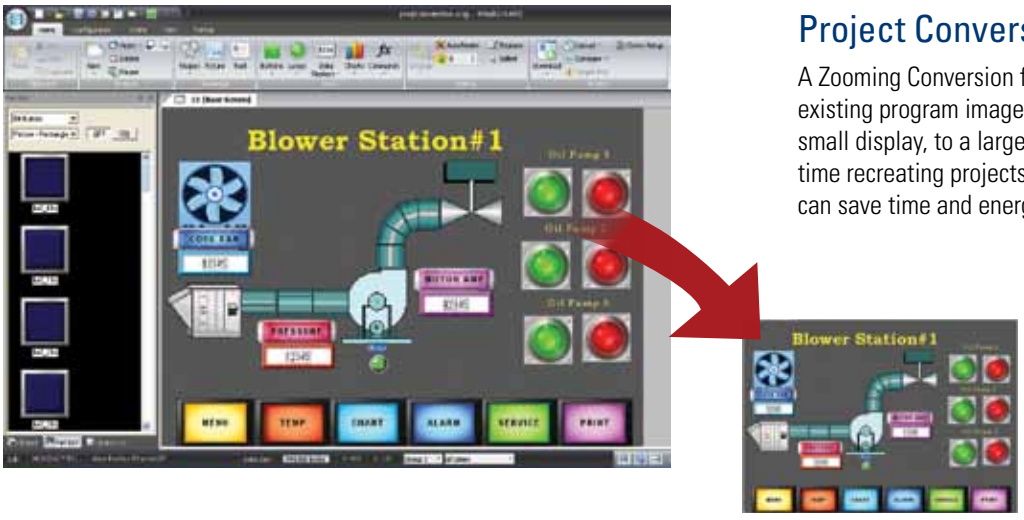


Supports Standard Windows Fonts

These OI Touchscreens support all fonts used in Windows, including Stroke and 7 Segment Display fonts, making it possible to choose from a variety of text styles to create the look and feel you want to achieve.

Multilingual Capabilities for Global Applications

The IDEC Touchscreen family supports many different languages. Using the Text Group function you can create a text database in Japanese, Chinese, Korean, Taiwanese, as well as Baltic, Cyrillic and other European languages. Plus, you can easily switch text messages from English to Japanese or any other supported language with the touch of a button.



Project Conversion

A Zooming Conversion function makes it easy to convert existing program images and functional parts, created for a small display, to a larger display or vice versa. Don't waste time recreating projects for a different display when you can save time and energy by using this easy-to-use tool!

User-friendly Programming

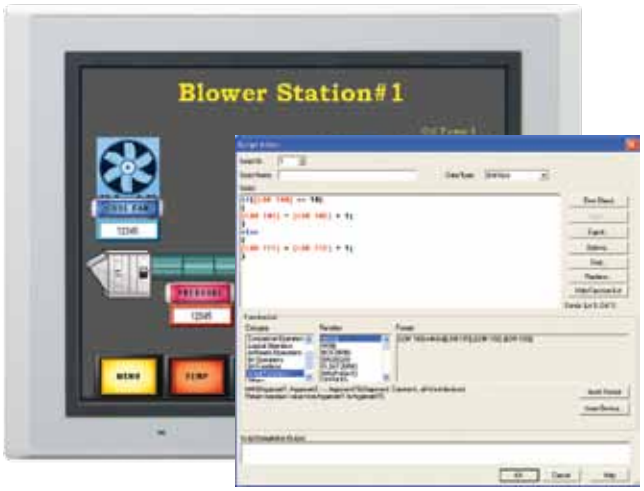
Security Function

When you have multiple users editing projects or displaying screens and parts, it may be necessary to have different levels of security and restrictions. With the Security Function, you can password protect programs, screens and parts from other users.

Operation and Alarm Log Functions

The operating log helps investigate, analyze and solve problems and system errors by checking who, when, what and where operations were performed. Plus, once you setup up the Alarm Log function for messages and alerts, it can monitor alarm conditions from a PLC and store historical events with a date and time stamp on a memory card (in CSV format). The high-performance series also meets ISA standards for visual alarm management.

Target Events for Record	Record Information						
	Sampling Time	User	Screen No.	Event Name	Part Name	Device	Change to
Power ON	x	-	x	x	-	-	-
Switch to Base Screens	x	x	x	x	-	-	x
Change Users	x	x	x	x	-	-	x
Change Operation Modes	x	x	x	x	-	-	x
Press Buttons	x	x	x	x	x	-	-
Write Data any Devices	x	x	x	x	-	x	x



Script Function

Users with basic programming knowledge in "C" can use a Script function to combine conditional statements, mathematical operations and other functions to create simple and complex processes, reducing the programming required in the PLC. A Syntax Check function is also available providing easy program troubleshooting.

Switches, Pilot Lamps, and Meters

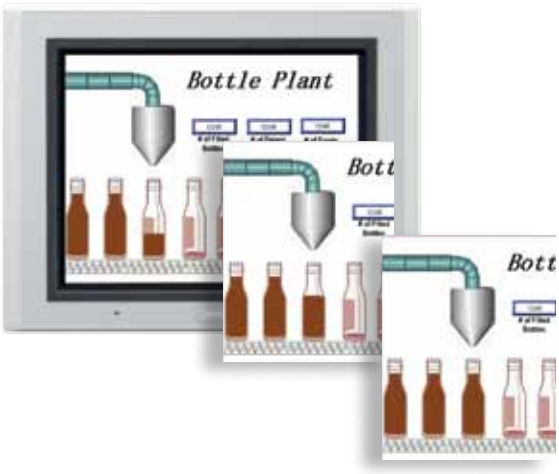
Hundreds of colorful pushbuttons, switches and meter images can give your display a realistic appearance mimicking a real panel. Pushbuttons and switches are used to set a bit, move data, switch screens or print screen images, while pilot lamps or multi-state lamps read and display statuses from single or multiple bits on the PLC or device.

Bar Graphs and Trend Charts

Use the Bar graphs and numerical displays to show range or flow for analog values from your PLC or device, or create Trend Charts to closely monitor critical data points. Display historical data (based on a fixed time period or event) with the option to show date & time on the x-axis or store it (in csv format) on the memory card or internal memory for easy viewing and data manipulation on your PC.

Recipe

A Recipe function allows you to conveniently set operational parameters, which can be individually defined for different processes. There are 1,024 available channels, which can store up to 8,192 parameters per channel. Plus you can easily upload or download parameters to and from your PLC.



Animation

Want to give your screen a "WOW" factor? It's simple to display animation by using the Picture Display function and configuration is a breeze. Simply import a series of images when using the Picture Display Function. Those images will then be displayed depending on the device value or constant time period.

Part Numbers / Specifications

Touchscreen Part Numbers

	5.7"	8.4"	10.4"	12.1"
				
Light gray	HG2G-5FT22TF-W	HG3G-8JT22MF-W	HG3G-AJT22MF-W	–
Black	HG2G-5FT22TF-B	HG3G-8JT22MF-B	HG3G-AJT22MF-B	HG4G-CJT22MF-B
Silver	HG2G-5FT22TF-S	–	–	–

Display Specifications

	5.7"	8.4"	10.4"	12.1"
Model	HG2G-5FT22TF	HG3G-8JT22MF	HG3G-AJT22MF	HG4G-CJT22MF
Display Type	Color TFT LCD	Color TFT LCD	Color TFT LCD	Color TFT LCD
Color Depth	65,536	65,536	65,536	65,536
Portrait or Landscape Mounting	√	√	√	√
User Memory	12MB	12MB	12MB	12MB
Display Resolution	640W × 480H pixels	800W × 600H pixels	800W × 600H pixels	800W × 600H pixels
Backlight	LED	LED	LED	LED
Backlight Life *1	50,000 hours	60,000 hours min.	60,000 hours min.	60,000 hours min.
Brightness *2	800cd/m^2	600cd/m^2	700cd/m^2	550cd/m^2
Brightness Adjustment	48 scales	48 scales	48 scales	48 scales
SD Card Slot	√	√	√	√
MicroSmart Digital I/O Cards Supported	2	4	4	4
Ehternet Port	1 RJ-45	1 RJ-45	1 RJ-45	1 RJ-45
USB Port	1 Type A & 1 mini-B	1 Type A & 1 mini-B	1 Type A & 1 mini-B	1 Type A & 1 mini-B
Serial Ports	2 (RS-232, RS-485, RS-422 configurable)	2 (RS-232, RS-485, RS-422 configurable)	2 (RS-232, RS-485, RS-422 configurable)	2 (RS-232, RS-485, RS-422 configurable)
Video In	–	Composite Video RCA connector (NTSC or PAL)	Composite Video RCA connector (NTSC or PAL)	Composite Video RCA connector (NTSC or PAL)
Audio In/Out	–	3.5mm audio mini-jack (Stereo)	3.5mm audio mini-jack (Stereo)	3.5mm audio mini-jack (Stereo)
Remote Monitor & Control	√	√	√	√

*1 The backlight life refers to the time until the surface brightness reduces by half after continuous use at 25°C.
*2 Brightness of the LCD only.

General Specifications

	5.7"	8.4"	10.4"	12.1"
Model	HG2G-5FT22TF	HG3G-8JT22MF	HG3G-AJT22MF	HG4G-CJT22MF
Rated Power Voltage	24V DC	24V DC		24V DC
Power Voltage Range	20.4 to 28.8V DC	20.4 to 28.8V DC		20.4 to 28.8V DC
Power Consumption	19W maximum 10W maximum when not using USB interface (USB2) or expansion module interface (EXT)	25W maximum 15W maximum when not using USB interface (USB2) or expansion module interface (EXT)		27W maximum 18W maximum when not using USB interface (USB2) or expansion module interface (EXT)
Allowable Momentary Power Interruption	10ms maximum	10ms maximum		10ms maximum
Inrush Current	30A maximum	30A maximum		30A maximum
Dielectric Strength	1,000V AC, 10 mA, 1 minute between power and FG terminals	1,000V AC, 10 mA, 1 minute between power and FG terminals		1,000V AC, 10 mA, 1 minute between power and FG terminals
Insulation Resistance	10MΩ minimum between power and FG terminals (500V DC megger)	10MΩ minimum between power and FG terminals (500V DC megger)		10MΩ minimum between power and FG terminals (500V DC megger)
Operating Temperature	0 to +50°C (no freezing)	0 to +50°C (no freezing)		0 to +50°C (no freezing)
Operating Humidity	10 to 90% RH (no condensation)	10 to 90% RH (no condensation)		10 to 90% RH (no condensation)
Storage Temperature	–20 to +60°C (no freezing)	–20 to 60°C (no freezing)		–20 to +60°C (no freezing)
Storage Humidity	10 to 90% RH (no condensation)	10 to 90% RH (no condensation)		10 to 90% RH (no condensation)
Pollution Degree	2	2		2
Vibration Resistance	5 to 8.4Hz amplitude 3.5mm, 8.4 to 150Hz, acceleration 9.8m/s^2 10 cycles (100 minutes) on each of three mutually perpendicular axes	5 to 8.4Hz amplitude 3.5mm, 8.4 to 150Hz, acceleration 9.8m/s^2 10 cycles (100 minutes) on each of three mutually perpendicular axes		5 to 8.4Hz amplitude 3.5mm, 8.4 to 150Hz, acceleration 9.8m/s^2 10 cycles (100 minutes) on each of three mutually perpendicular axes
Shock Resistance	147m/s^2, 11ms 5 shocks on each of three mutually perpendicular axes	147m/s^2, 11ms 5 shocks on each of three mutually perpendicular axes		147m/s^2, 11ms 5 shocks on each of three mutually perpendicular axes
Noise Immunity	Fast transient/burst test, Power terminals: ±1kV, Communication line: ±0.5 kV (IEC/EN61131-2: 2007)	Fast transient/burst test, Power terminals: ±2kV, Communication line: ±1kV (IEC 61131-2: 2007)		Fast transient/burst test, Power terminals: ±2kV, Communication line: ±1kV (IEC/EN61131-2: 2007)
Electrostatic Discharge	ESD-3 (RH-1), Level 3 (Contact ±6kV, air ±8kV) (IEC/EN61131-2: 2007)	ESD-3 (RH-1), Contact ±6kV, air ±8kV (IEC 61131-2: 2007)		ESD-3 (RH-1), Level 3 (Contact ±6kV, air ±8kV) (IEC/EN61131-2: 2007)
Corrosion Immunity	Free from corrosive gases	Free from corrosive gases		Free from corrosive gases
Degree of Protection *1	IP66 (IEC 60529) (front part when mounted) (Type 4X, 13 Pending)	IP66 (IEC 60529) (front part when mounted) TYPE 4X, (Type 13)		IP66 (IEC 60529) (front part when mounted) (Type 4X, 13)
Switching Element	Analog resistive membrane	Analog resistive membrane		Analog resistive membrane
Operating Force	3N maximum	0.55 to 2.3N	0.55 to 2.3N	3N maximum
Mechanical Life	1,000,000 operations	1,000,000 operations		1,000,000 operations
Sound Acknowledgement	Electronic buzzer	Electronic buzzer or speaker output		Electronic buzzer or speaker output
Dimensions	167.2W × 134.7H × 54.4D mm	231W × 176H × 54.4D mm	270W × 212H × 52.7D mm	314W × 240H × 54.1D mm
Weight (approx.)	0.65kg	1.25kg	1.65kg	2.1kg
Approvals	Safety Standards: UL508, CSA C22.2 No.142, ANSI/ISA-12.12.01-2007 Ship Classification Standards: ABS, LR, NK	Safety Standards: UL508, CSA C22.2 No.142, CSA C22.2 No.213, ANSI/ISA-12.12.01-2007 Ship Classification Standards: ABS, LR, NK		Safety Standards: UL508, CSA C22.2 No.142, ANSI/ISA-12.12.01-2007 Ship Classification Standards: ABS, LR, NK

Do not use the touchscreen in an environment subject to strong ultraviolet rays, otherwise the LCD quality will deteriorate.
*1 Protection degree of the front surface after mounting. Operation not guaranteed in certain environments.

Part Numbers

Accessories

	Part Number	Description	Applicable Model		
			5.7"	8.4"/10.4"	12.1"
Programming Software	SW1A-W1C	Automation Organizer	√	√	√
USB Maintenance Cable	HG9Z-XCM2A	USB Programming Cable USB-miniB (2m)	√	√	√
Mounting Clip	SLD-K02	Replacement clips (min. 10 pcs) (4 pcs are supplied with HMI)	√	-	-
	HG9Z-4K2	Replacement clips (min. 10 pcs) (4 pcs are supplied with HMI)	-	√	√
Host Communication Plug	HG9Z-XT09V	Replacement terminal block plug. (1 is supplied with HMI)	√	-	-
	HG9Z-XT09	Replacement terminal block plug. (1 is supplied with HMI)	-	√	√
Replacement Battery	HG9Z-XR1	Lithium battery CR2032 (one battery is supplied with HMI)	√	√	√
USB Cable Lock Pin	HG9Z-XU1	Used to lock USB cable (for USB2).	√	√	√
USB panel-mount extension cable	HG9Z-XCE11	For USB-A port (1m)	√	√	√
	HG9Z-XCE21	For USB-mini B port (1m)	√	√	√
Memory Card	HG9Z-XMS2	SD Memory Card (2GB)	√	√	√
Protective Cover	HG9Z-2E2	Use with 5.7" HMI. Covers entire front of HMI. (min. 3 pcs)	√	-	-
Protective Sheet *1	HG9Z-2D5	Use with 5.7" HMI. Sheet lays over LCD area. (min. 5 pcs)	√	-	-
	HG9Z-3D8	Use with 8.4" HMI. Sheet lays over LCD area. (min. 2 pcs)	-	√	-
	HG9Z-3DA2	Use with 10.4" HMI. Sheet lays over LCD area. (min. 2 pcs)	-	√	-
	HG9Z-4DC	Use with 12.1" HMI. Sheet lays over LCD area. (min. 2 pcs)	-	-	√
Expansion Module Clamp *2	HG9Z-XJ3	Short type for installing expansion I/O modules (Total width 17.6 to 41.1mm)	√	√	√
	HG9Z-XJ4	Long type for installing expansion I/O modules (Total width 47 to 68.8mm)	√	√	√
	HG9Z-XJ5	Extra-Long type for installing expansion I/O modules (Total width 70.1 to 93.9mm)	√	√	√
L-shaped Terminal Block Connector for I/O Module	HG9Z-PMT10L	For 10-pole MicroSmart I/O Module (min. 2 pcs)	√	√	√
	HG9Z-PMT11L	For 11-pole MicroSmart I/O Module (min. 2 pcs)	√	√	√
Panel Mount Adaptor	HG9Z-2A1	Adaptor for mounting HG2G to the panel cut-out of HG2F.	√	-	-
	HG9Z-2A2	Adaptor for mounting HG2G to 156 x 123.5mm panel cut-out (other manufacturer).	√	-	-

*1 The protective sheet is UV resistant, however, resistance against direct sunlight in outdoor usage is not guaranteed.
*2 Use the expansion module clamp when using expansion modules.
Order the module clamp by referring to the width of the module shown in the dimensions of each module.
Note: When connecting more than 3 expansion modules to the HG3G/4G, note the limits shown below (for more information see module manual).
-Current flow rate at 5V: 130mA max. Total width: 92.3mm max.
-Current flow rate at 24V: 150mA max.

Communication Cables

Manufacturer	Series	Applicable CPU	Comm. Type	Communication Module	Part Numbers Comm. Cable between PLC and OI Touchscreen	
					Terminal Block Type (COM 2)	9-Pin Dsub (COM 1)
IDEC	MicroSmart/Pentra MicroSmart (FC4A/ FC5A)	FC4A, FC5A	RS232	Built-in Port	HG9Z-AC102	HG9Z-AC501
				FC4A-PC1/HPC1	HG9Z-AC102	HG9Z-AC501
				FC5A-SIF2	HG9Z-AC312	N/A
			RS485	FC4A-PC2/HPC2	HG9Z-AC172	N/A
				FC4A-PC3/HPC3	Use Shielded Pair	HG9Z-AC502
				FC5A-SIF4	Use Shielded Pair	HG9Z-AC502
	OpenNet	FC3A	RS232	Built-in Port	HG9Z-AC162	HG9Z-AC501
			RS485	Built-in Port	Use Shielded Pair	HG9Z-AC502
Allen Bradley	SLC 500	SLC-5/03, SLC-5/04, SLC-5/05	RS232	Built-in Port	HG9Z-AC112	HG9Z-AC504
			DH485	Built-in Port	HG9Z-GWDF1DH485-5	N/A
	MicroLogix	1000, 1200, 1500	RS232	Built-in Port	HG9Z-AC122	HG9Z-AC511
		1500	RS232	Built-in Port (9 Pin Dsub)	HG9Z-AC132	HG9Z-AC505
		1100, 1400	RS232	Built-in Port	HG9Z-AC152	HG9Z-AC518
	ControlLogix	5550, 5555	RS232	Built-in Port	HG9Z-AC142	HG9Z-AC503
	CompactLogix	1768, 1769	RS232	Built-in Port	HG9Z-AC142	HG9Z-AC503
	FlexLogix	1794-L33, 1794-L34	RS232	Built-in Port	HG9Z-AC142	HG9Z-AC503
Automation Direct (Koyo)	Direct Logic 205	D2-240	RS232	Built-in Port	N/A	HG9Z-AC508
	Direct Logic 405	D4-440	RS232	D4-DCM	N/A	HG9Z-AC506
			RS422	Built-in Port	N/A	HG9Z-AC507
Siemens	S7-300	CPU 313-2PtP	RS485	Built-in Port	N/A	HG9Z-AC510
GE Fanuc	Series 90-30	CPU 331, 341, 350, 351, 352, 360, 363, 364, 374	RS232	IC693CMM311	HG9Z-AC272	N/A
			RS485		HG9Z-AC282	N/A

N/A : Cable not available. For complete listing of supported PLC manufacturers, wiring diagrams, and communication settings, please refer to the OI Touchscreen Communication Manual (in PDF only) found within the WindO/I-NV2 software or on the IDEC website.

Revolutionary FT1A SmartAXIS Touch

OI Touchscreen & PLC all-in-one

Actual Size

- 3.8" (3.7" monochrome) HMI with embedded 12 I/O PLC
- Available in Monochrome or 65K TFT color
- 740 cd/m^2 monochrome, 400 cd/m^2 color
- 8 inputs, 4 relay outputs
- Embedded 2pt 0-10V analog input
- 10 Amp Relay contacts
- Embedded Ethernet port
- USB Mini-B Programming Port
- Vertical or horizontal orientation
- USB Type A port for data logging and recipe functions
- RS232C/RS485 interface
- IP66f (water and oiltight)

IDEC *Think Automation and beyond...*