



The Total Package!

Smart Products... Simple Solutions

Want to experiment with ideas and build new machines using the most up-to-date automation and control products on the market? Ready to upgrade your current system? IDEC HMI and PLC Starter Kits offer a complete package with all the tools you need to design and build machines for applications in any industrial environment, all at one low cost.

Explore the possibilities! With IDEC, anything is possible.

 **IDEC**

Think Automation and Beyond...

Combined HMI and PLC Starter Kits

Complete Control Packages

Whether you want to give IDEC products a try, or you already use them, but want a complete automation system that is quick and easy to put together, our starter kits are a great deal. Each package includes an operator interface with your choice of 4.6" to 12.1" LCD screen. They also include a MicroSmart Pentra PLC (Slim with Embedded Ethernet or All-in-One design), a slim power supply, cables and software. Just buy a package and you're ready to go.

Keep in mind, when you purchase an IDEC Starter Kit, not only do you get the hardware and software; you also get access to free technical support and free software upgrades, saving you time and money. Give IDEC a try today and start pulling in the savings now.



Operator Interface Touchscreen	CPU	Power Supply	Part Number	Reg. Price	PACKAGE PRICE	
	4.6" Monochrome, RS232, HG1F-SB22BF-B	24 I/O, FC5A-C24R2C CPU	60W	KIT-PENTRA-24-HG1F	\$1,437	\$849
	4.6" Monochrome, RS232, HG1F-SB22BF-B	12 I/O, FC5A-D12S1E, Ethernet CPU	60W	KIT-PENTRA-12-HG1F	\$1,467	\$899
	5.7" Monochrome, 24V DC, Ethernet, HG2G-5TN22TF-B	24 I/O, FC5A-C24R2C CPU	60W	KIT-PENTRA-24-HG2G-5TN	\$1,738	\$1,049
	5.7" Monochrome, 24V DC, Ethernet, HG2G-5TN22TF-B	12 I/O, FC5A-D12S1E, Ethernet CPU	60W	KIT-PENTRA-12-HG2G-5TN	\$1,828	\$1,149
	5.7" 256 Color TFT, Ethernet, HG2G-5TT22TF-B	24 I/O, FC5A-C24R2C CPU	60W	KIT-PENTRA-24-HG2G-5TT	\$1,838	\$1,099
	5.7" 256 Color TFT, Ethernet, HG2G-5TT22TF-B	12 I/O, FC5A-D12S1E, Ethernet CPU	60W	KIT-PENTRA-12-HG2G-5TT	\$1,928	\$1,199
	5.7" 65K Color TFT, HG2G-5FT22TF-B	16 I/O, FC5A-D16RS1 CPU	60W	KIT-PENTRA-16-HG2G-HP	\$1,850	\$1,249
	5.7" 65K Color TFT, HG2G-5FT22TF-B	24 I/O, FC5A-C24R2C CPU	60W	KIT-PENTRA-24-HG2G-HP	\$1,995	\$1,249
	5.7" 65K Color TFT, HG2G-5FT22TF-B	12 I/O, FC5A-D12S1E, Ethernet CPU	60W	KIT-PENTRA-12-HG2G-HP	\$1,945	\$1,299
	5.7" 65K Color TFT, HG2G-5FT22TF-B	12 I/O, FC5A-D12S1E, Ethernet CPU	60W	KIT-PENTRA-12-HG2G-HP	\$1,945	\$1,299
	8.4" 65K Color TFT, Video In, Audio In/Out, HG3G-8JT22MF-B	16 I/O, FC5A-D16RS CPU	60W	KIT-PENTRA-16-HG3G-8HP	\$2,150	\$1,499
	8.4" 65K Color TFT, Video In, Audio In/Out, HG3G-8JT22MF-B	12 I/O, FC5A-D12S1E, Ethernet CPU	60W	KIT-PENTRA-12-HG3G-8HP	\$2,245	\$1,549
	10.4" 65K Color TFT, Video In, Audio In/Out, HG3G-AJT22MF-B	16 I/O, FC5A-D16RS1 CPU	60W	KIT-PENTRA-16-HG3G-AHP	\$2,550	\$1,799
	10.4" 65K Color TFT, Video In, Audio In/Out, HG3G-AJT22MF-B	12 I/O, FC5A-D12S1E, Ethernet CPU	60W	KIT-PENTRA-12-HG3G-AHP	\$2,645	\$1,849
	12.1" 65K Color TFT, Video In, Audio In/Out, HG4G-CJT22MF-B	16 I/O, FC5A-D16RS1 CPU	60W	KIT-PENTRA-16-HG4G-HP	\$2,850	\$2,049
	12.1" 65K Color TFT, Video In, Audio In/Out, HG4G-CJT22MF-B	12 I/O, FC5A-D12S1E, Ethernet CPU	60W	KIT-PENTRA-12-HG4G-HP	\$2,945	\$2,099

*OI Touchscreens have black bezels. All packages come with Automation Organizer software suite and communication cables.

HMI Starter Kits

High-Performance Series

- 5.7", 8.4", 10.4" and 12.1" OI Touchscreens
- 65,536 Color TFT LCD
- Mounts Portrait or Landscape
- Video and Audio Interface (8.4" to 12.1" Touchscreen only)
- Remote Access, Monitor and Control
- Super Bright: Up to 800cd/m²
- Support of MicroSmart Expansion Discrete I/O modules
- Serial, Ethernet, and USB ports

The High-Performance series brings performance to a whole new level with advanced features and capabilities. These OI touchscreens can be used to remotely access, monitor and control from anywhere using your PC, tablet or Smart Phone. In addition, the 8.4" to 12.1" models come with built-in video input and audio in/out. This can be used for video monitoring or recording machine conditions on the plant floor, playing movie files to give detailed instructions and tutorials, or to show an operation manual.

HG1F 4.6" and HG2G-5T 5.7" Series

Choose from the 4.6" HG1F Touchscreen monochrome, the 5.7" HG2G-5T monochrome or the 5.7" HG2G-5T color. All IDEC HMIs can function as stand-alone devices or communicate with IDEC PLCs, as well as all other major brand PLCs.



	Operator Interface Touchscreen	Power Supply	Software and Cable	Part Number	Reg. Price	PACKAGE PRICE
Basic Series	 4.6" Monochrome, RS232, HG1F-SB22BF-B	30W	✓	SMARTTOUCH-1F	\$549	\$399
	 5.7" Monochrome, USB mini-B Ethernet Port 12-24V DC, HG2G-5TN22TF-B	30W	✓	SMARTTOUCH-2G-5TN	\$1098	\$650
HG2G-5T Series	 5.7" 65K Color TFT LCD, 12-24V DC, HG2G-5TT22TF-B	30W	✓	SMARTTOUCH-2G-5TT	\$1198	\$750
	 8.4" 65K Color TFT , Video In, Audio In/Out, HG3G-8JT22MF-B	60W	✓	SMARTTOUCH-3G8HP	\$1594	\$1099
High-Performance Series	 10.4" 65K Color TFT, Video In, Audio In/Out, HG3G-AJT22MF-B	60W	✓	SMARTTOUCH-3GAHP	\$1994	\$1499
	 12.1" 65K Color TFT, Video In, Audio In/Out, HG4G-CJT22MF-B	60W	✓	SMARTTOUCH-4GHP	\$2394	\$1699

*All packages come with Automation Organizer software suite and a communication cable.

MicroSmart Pentra and SmartRelay PLC Starter Kits

MicroSmart Pentra

- Embedded Ethernet CPU
- Modbus TCP, RTU and ASCII
- 1MB User Web Page
- Email/Text Message Alerts
- USB Programming Port
- Integrated 100kHz High-speed I/O
- Up to 7 Communication Ports
- Max. 512 I/Os

MicroSmart Pentra is the fastest micro-PLC on the market. It incorporates all the latest features, a fast processing speed, up to 512 I/Os, built-in Modbus Master/Slave, 32-bit data processing and floating point math in a compact housing. Plus, the MicroSmart Pentra with embedded Ethernet offers everything from Modbus TCP and email/text messaging functionality, to web server functions and an interactive user web page with dynamic data.



FC5A



Class I Div 2
Hazardous
Locations

	CPU	Power Supply	Software and Cable	Part Number	Reg. Price	PACKAGE PRICE
	16 I/O, FC5A-D16RS1 CPU	30W	√	MM-PENTRA-16	\$648	\$399
	24 I/O, FC5A-C24R2 CPU	–	√	MM-PENTRA-24	\$793	\$399
	12 I/O, FC5A-D12S1E Ethernet CPU	30W	√	MM-PENTRA-12	\$944	\$499

*All packages come with Automation Organizer software suite and a communication cable.

SmartRelay

- Liquid Level Controls
- Valves and Pumps Control
- Solar Traffic Lights
- Relay/Timer replacement

Proving reliable time after time, these intelligent logic modules are the ideal controller for simple automation tasks. A new sixth-generation of SmartRelays offer functions to give you even more flexibility and convenience. Advances include maximum of 60 I/O, built-in Ethernet, micro SD interface, extended memory, a brighter display with higher LCD contrast, improved analog and high-speed inputs, an external text display, and upgraded programming software.



FL1F



Class I Div 2
Hazardous
Locations

	CPU	LCD Screen	Software	Part Number	Reg. Price	PACKAGE PRICE
	12 I/O, 24VAC/DC, FL1F-B12RCA CPU	–	√	KIT-SMARTRELAY-BAF	\$312	\$179
	12 I/O, 100-240VAC/DC, FL1F-B12RCC CPU	–	√	KIT-SMARTRELAY-BCF	\$229	\$179
	12 I/O, 100-240VAC/DC, FL1F-B12RCE CPU	–	√	KIT-SMARTRELAY-BEF	\$372	\$179
	12 I/O, 24VAC/DC FL1F-H12RCA CPU	√	√	KIT-SMARTRELAY-HAF	\$347	\$199
	12 I/O, 100-240VAC/DC, FL1F-H12RCC CPU	√	√	KIT-SMARTRELAY-HCF	\$264	\$199
	12 I/O, 12/24VDC, FL1F-H12RCE CPU	√	√	KIT-SMARTRELAY-HEF	\$402	\$199
	12 I/O, 24VDC, FL1F-H12SCD CPU	√	√	KIT-SMARTRELAY-HDF	\$327	\$199

*All packages come with WindLGC software. 12/24VDC and 24VDC starter kits come with 30W power supply and simulator switch.

SmartAXIS Starter Kits

FT1A Touch

The 3.8-inch SmartAXIS Touch is an all-in-one touchscreen interface and logic controller packed in a compact body big on features. Perfect for small systems that require a graphical user interface along with versatile I/O controls at a truly affordable price.

- 3.8" HMI+PLC
- 12 or 14 I/O Models
- Embedded RJ45 Ethernet Port
- Modbus TCP or RTU
- Two built-in analog inputs
- Two built-in analog outputs (14 I/O)
- Optional Analog Cartridges (14 I/O)
- PID Controls (14 I/O)
- USB Maintenance Port
- Seamless interface with other PLCs
- -20 to 55 degree C operating temp.
- IP66f, NEMA 4X (indoor), 13



FT1A 14 I/O Back

FT1A 14 I/O Front



Class I Div 2
Hazardous
Locations

HMI + PLC	Power Supply	Software and Cable	Part Number	Reg. Price	PACKAGE PRICE
 HMI + PLC 3.8" TFT Color, 14 I/O PLC, sink output, black bezel, FT1A-C14KA-B	30W	✓	KIT-TOUCH-CKB	\$1,050	\$625
HMI + PLC 3.8" TFT Color, 14 I/O PLC, source output, black bezel, FT1A-C14SA-B	30W	✓	KIT-TOUCH-CSB	\$1,050	\$625
HMI + PLC 3.8" TFT Color, 12 I/O PLC, relay output, black bezel, FT1A-C12RA-B	30W	✓	KIT-TOUCH-CB	\$850	\$415

*All packages come with Automation Organizer software suite, power supply and a communication cable. Replace the B in the part number with W: white bezel, S: silver bezel.

FT1A Controllers

SmartAXIS controllers provide users with unique features and advanced functions for applications that require limited I/O. 12, 24, 40 and 48 I/O models are available.



Class I Div 2
Hazardous
Locations

CPU	Power Supply	Software and Cable	Part Number	Reg. Price	PACKAGE PRICE
 SmartAXIS 12 I/O, FT1A-H12RC	-	✓	KIT-SMART-12-HAC	\$533	\$199
SmartAXIS 12 I/O, FT1A-H12RA	30W	✓	KIT-SMART-12-HDC	\$612	\$219
 SmartAXIS 24 I/O, FT1A-H24RC	-	✓	KIT-SMART-24-HAC	\$723	\$359
SmartAXIS 24 I/O, FT1A-H24RA	30W	✓	KIT-SMART-24-HDC	\$802	\$359
 SmartAXIS 40 I/O, FT1A-H40RKA	30W	✓	KIT-SMART-40-HDC-RK	\$846	\$399
SmartAXIS 40 I/O, FT1A-H40RSA	30W	✓	KIT-SMART-40-HDC-RS	\$846	\$399
 SmartAXIS 48 I/O, FT1A-H48KC	-	✓	KIT-SMART-48-HAC-K	\$828	\$469
SmartAXIS 48 I/O, FT1A-H48KA	30W	✓	KIT-SMART-48-HDC-K	\$907	\$469

*All packages come with Automation Organizer software suite and a communication cable. Additional models without LCD are also available.

Intensive Hands-on PLC and HMI Training



Looking to improve your knowledge of PLCs and HMIs? IDEC's training course combines hands-on instruction and real-world examples. Some of the covered topics include:

- Start/stop and latching circuits
- Timers and counters
- Modbus/TCP communications
- Email/Text and web page setup
- PID configuration
- Pushbuttons, pilot lights
- Data displays and data inputs
- Graphics and animation
- Alarms and passwords
- Remote control and monitor

The training course covers programming for SmartAXIS and MicroSmart Pentra PLCs, SmartAXIS Touch (HMI+PLC) and HG series HMIs and includes Q&A sessions with our experts to discuss your specific application.

Choose from five kits featuring introductory-level products all the way up to our most advanced HMIs and PLCs. For detailed information, our current schedule and to sign up for a class, visit <http://training.IDEC.com>.



HMI Training Kit



SmartAXIS Training Kit

800.262.4332

www.IDEC.com/usa

IDEC *Think Automation and beyond...*

Product Information

OI Touchscreens:
www.IDEC.com/oi

IDEC Pentra:
www.IDEC.com/pentra

FT1A SmartAXIS:
www.IDEC.com/smartaxis

SmartRelay:
www.IDEC.com/smartrelay

Software:
www.IDEC.com/software

Starter Kits:
www.IDEC.com/starterkit

Product Support

Technical support:
support@IDEC.com

PLC and HMI Training:
<http://training.IDEC.com>

Find your local IDEC
Representative or Distributor:
www.IDEC.com/usa/locator

Phone:
800.262.IDEC

FREE
Software Upgrades
and Support