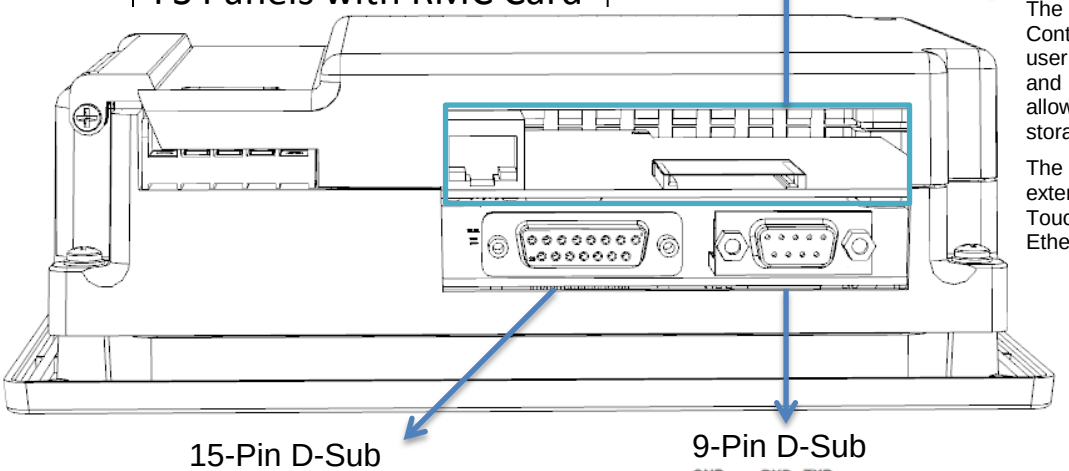
SE/CE/FS Touchpanels

FS Panels with RMC Card



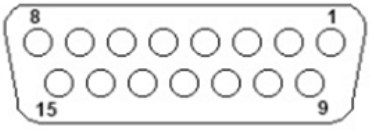
RMC Card

The Remote Monitoring and Control (RMC) Card allows the user to remotely monitor, control and program their devices. It also allows for data acquisition and storage.

The RMC card plugs into the extension connector of the EZ Touchpanels and comes with an Ethernet Port.

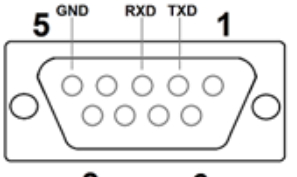
Note: *On FS Panels, Ethernet is available via a protocol-specific adder card for either PC or PLC communications depending on application needs.*

15-Pin D-Sub



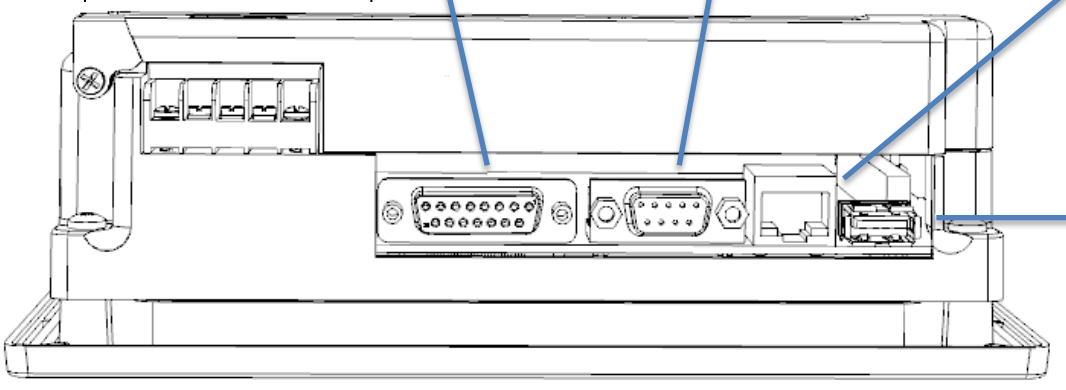
This serial connector is used for PLC communications and can be used for RS232, RS422 and RS485 communications.

9-Pin D-Sub



The serial connector used for programming or RS232 communications.

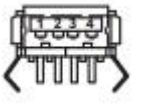
SE / CE Panels



Ethernet (SE/CE)

Ethernet port used for monitoring, programming, PC and PLC communications, It can also be used for internet access and email alerts.

USB Port (SE/CE)



USB port for programming and for Data Logging / Storage capabilities.

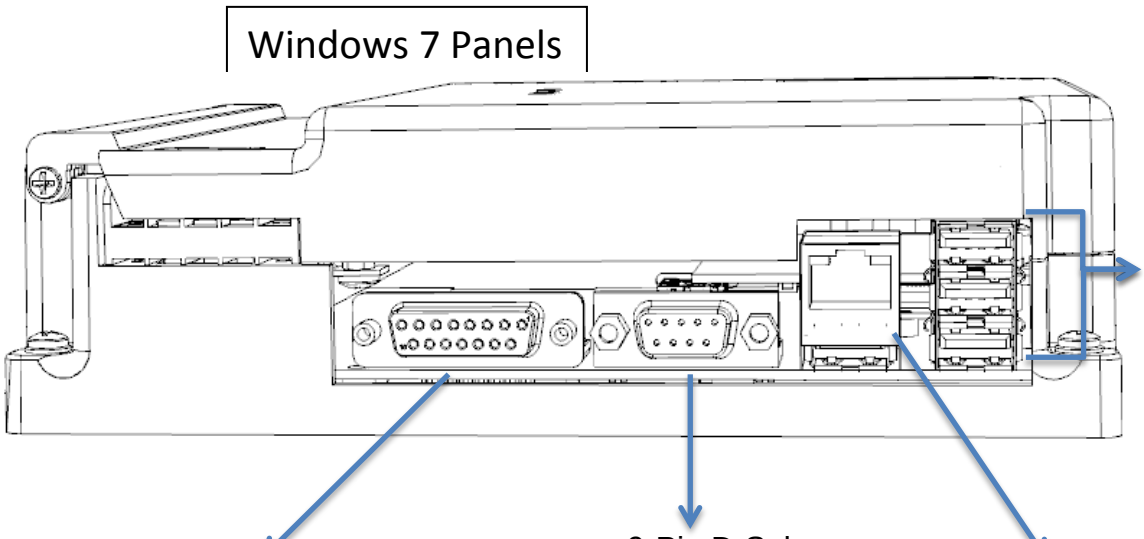
Windows CE

Option Cards (CE/FS)

Panels ending in -CE or -FS possess an Option Card connector for additional connectivity (Data Highway Plus, Modbus Plus, Devicenet, Profibus, CC-Link.) Plug option cards into the 62-pin connector.

In addition, CE Panels allow for compact flash storage. Simply open back cover to insert it in the top right corner.

Windows 7 Panels

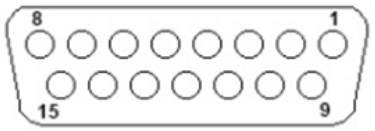


USB Port

EZ Automation panels loaded with Windows 7 Embedded come equipped with four (4) USB ports. These 3 ports are configured as standard Universal Serial Bus (USB) Port A.

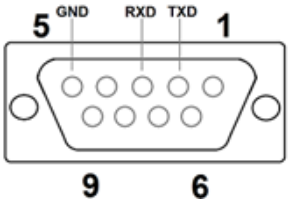
Note: *The USB Port beneath the Ethernet port is configured as a Port B device with a Port A connector. This port can only be used for programming directly from a PC.*

15-Pin D-Sub



This serial connector is used for PLC communications and can be used for RS232, RS422 and RS485 communications.

9-Pin D-Sub



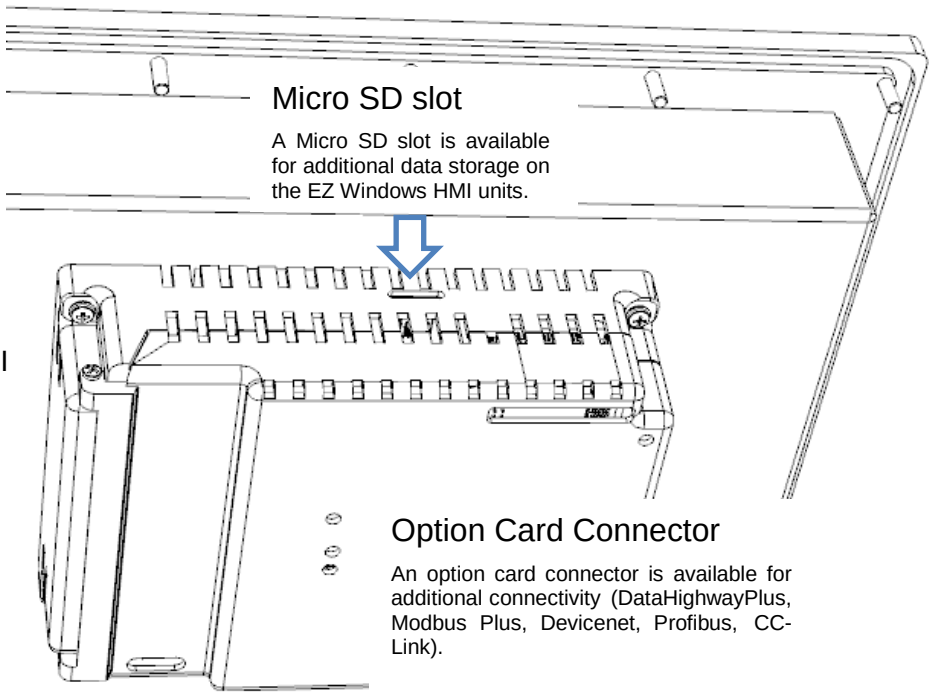
The serial connector used for programming or RS232 communications.

Ethernet Port

Ethernet port used for monitoring, programming, PC and PLC communications, It can also be used for internet access and email alerts.

EZ Windows HMI

Back View



Micro SD slot

A Micro SD slot is available for additional data storage on the EZ Windows HMI units.

Option Card Connector

An option card connector is available for additional connectivity (DataHighwayPlus, Modbus Plus, Devicenet, Profibus, CC-Link).

Programming and Communications

Programming

EZ Panels can be programmed in multiple ways: serial connection, Ethernet connection, USB Flash Drive, USB cable, or using a Compact Flash card (depending on the model). EZAutomation's programming software (EZ-PANELEDIT) automatically lists the different programming methods available based on the model type. In addition, with our patented OEM Packager, a user can upload a new program using an .exe executable file, rather than having to use the full programming software. See examples of programming options below:

- RS232 programming cable (EZ-PGMCBL)
- Connect an EZAutomation SE series, CE panel, or FS panel equipped with an RMC (Remote Monitoring and Control) card, to a PC via an Ethernet hub or switch, and CAT5 Ethernet cables.
- Use an Ethernet crossover cable between a PC Ethernet port and an EZAutomation SE series, CE panel, or FS panel equipped with an RMC (Remote Monitoring and Control) card.
- Connect a USB Programming Cable from a USB port type A on the PC to the USB type A programming port on the Windows HMI touch panel. The USB connection is for direct connection only and does not support USB hubs.

Use the table (shown right) to compare communication capabilities between models.

EZ Touchpanel Comparison				
	EZ Touch	EZ SE Series	EZ Windows CE	EZ Windows HMI
Serial 9-pin port	✓	✓	✓	✓
Serial 15-pin PLC port	✓	✓	✓	✓
Ethernet		✓	✓	✓
U.S.B		✓	✓	✓
Compact Flash	✓		✓	
RAM adder	✓			
Network Option Cards	✓		✓	✓

System Requirements

The following are the system requirements for the EZ Programming Software (EZ-PANELEDIT).
-Supported Operating System: Windows XP, Vista and 7
-PC Resolution: SVGA or better recommended

15 Pin Connector

Depending on the communication protocol, the 15-Pin D-Sub connector can be used for RS232, RS422 and RS485 communications. The port supports the following PLC communication protocols:

- Allen-Bradley DF1 Half and Full Duplex (PLC-5, SLC 500, MicroLogix 1000, 1200 and 1500)
- DH485/AIC/AIC+ for MicroLogix 1000, 1200, 1500, SLC500, 5/01, /02, /03
- Aromat Mewtocol COM
- AutomationDirect DirectLOGIC PLCs
- Animatics Smart Motor
- Applied Motion SCL
- All Motion EZ Stepper
- Baldor
- Bristol Babcock BSAP Protocol (Native Addressing)
- Control Techniques - Unidrive 2-wire, 4-wire (binary)
- Control Technology Corp. (CTC) - CTC2600, 2700 and 5100 (CTC Binary)
- EZPLC
- GE Fanuc SNPX (90/30, 90/70)
- Idec Computer Link
- Omron Host Link (C200 and C500)
- Parker-Hanifin
- Mitsubishi FX Series
- Modicon MODBUS RTU
- Siemens S7 MPI Adapter series PLCs
- Square D Symax - 300 Series CPU, 400 Series CPU (Symax)
- Texas Instruments - TI5x5 Series, TI505, TI545-1102, TI545-1104
- Yaskawa Memobus Native Addressing

(See table below for more information)

USB Port

On **SE/CE Models**, users can use a USB Flash Drive with a preloaded file for programming. In addition, this port can be used for Data Logging and Storage capabilities directly to a Flash Drive, which is both hot-swappable and accessible remotely.

On **Windows 7 Panels**, the 3 Port A USBs can be used to connect various USB HID (Human Input Device) devices to the panel, such as: Scanners, Printers, Cameras, Weigh scales, keyboards, etc. These 3 ports can also support a HUB connection for additional connections.

The fourth USB port is configured as a Port B device with a Port A connector. This allows the Windows HMI to be programmed via USB using a standard A-to-A USB cable.

Ethernet Port

All models ending in -SE (**SE Series**), or -E (**Windows CE** or **Windows 7 Embedded**) are capable of both PC and PLC communications simultaneously through the Ethernet Port.

Supported connections:
- EZ Ethernet
- DirectLogic Ethernet
- Modbus TCP/IP
- Allen Bradley Ethernet I/P
- Allen Bradley DF1 Ethernet over TCP
- GE SRTP Ethernet
- Siemens Ethernet ISO over TCP

Compatibility and Protocols

Protocol Compatibility			
PLC Family	**Model**		**Protocols**
AVG / EZAutomation			EZPLC
			EZ Ethernet
Allen-Bradley	MicroLogix 1000/1100/1200/1400/1500, SLC 500, 5/01/02/03, PLC5		DH485/AIC/AIC+
	MicroLogix 1000, 1100, 1200 and 1500		DF1 Half Duplex; DF1 Full Duplex
	SLC 500, 5-/03/04/05		
	ControlLogix™, CompactLogix™		
	PLC-5		DF1 Full Duplex
	ControlLogix, CompactLogix		DF1 Half Duplex; DF1 Full Duplex
	ControlLogix, CompactLogix		Ethernet/IP Server
	ControlLogix, CompactLogix, FlexLogix - Tag Based		EtherNet/IP Client
	MicroLogix 1100 & SLC 5/05, both via native Ethernet port		
	MicroLogix 1000, 1100, 1200, 1400,1500 & SLC 5-03/04/05, all via ENI Adapter		
	Micrologix & SLC 500 PLCs		DF1 over Ethernet
	PLC5, SLC 5/04		Datahighway Plus (DH+)
	PLC5, SLC 5/04		Remote I/O
ABB	SattCon, 800xA		COMLI Driver
All Motion	EZ Stepper / Servo / I/O Control		EZ Stepper
Animatics	Smart Motor		Smart Motor
Applied Motion	Drives, Motors, Steppers		SCL series
Aromat			Mewtocol
BACnet			BACnet / IP Protocol
Baldor	Microflex, Flex, Flex+		Host Comms
Bristol Babcock	Control Wave		BSAP Native (Serial)
Control Techniques	VTC Series		Unidrive 2-wire, 4-wire (binary)
Control Technology Corp (CTC)	CTC 2600, CTC 2700 and CTC 5100		CTC Binary
GE	90/30, 90/70, Micro 90, VersaMax Micro		Fanuc SNPX
	GE STRP		Ethernet
IDEC	MicroSmart Series		Computer Link
Keyence			CV 5000
Mitsubishi	FX Series		Computer Link
	Q02, Q02H, Q06H, Q12H, Q25H		Q CPU
	Q, QnA Serial		QnA Serial
	Q, Qna Ethernet		QnA Ethernet
	A Series PLCs		
	Mitsubishi CC link		
	Melsec FX		
Omron	C200 Adapter, C500		Host Link Adapter
	CJ1/CS1 Serial, CJ1/CS1 Ethernet		FINS
Modicon	984 CPU, Quantum 113 CPU, AEG Modicon Micro		Modbus RTU
	Modbus TCP/IP devices		Modbus TCP/IP
			DeviceNet
			Modus RTU
			Modbus Plus (Industrial Network)
			Uni-Telway
Siemens	S7-200 CPU, RS-485 Serial		PPI
	S7-200 CPU, S7-300 CPU: Ethernet		Ethernet ISO over TCP
			ProfiNet
			Profibus
Square D	300 Series CPU, 400 Series CPU		Square D Sy_Max
Texas Instruments	TI 505, TI545-1102, TI545-1104		TI 5x5 Series
Direct LOGIC	DL05/DL06, DL105, DL205, DL305, DL405	Serial	K-Sequence, Direct NET Modbus (Koyo addressing)
		Ethernet w/ H2-ECOM/H2-ECOM100 module	Direct LOGIC Ethernet
Yaskawa	MP2000 Series, Drives		Memobus Native Addressing
			Memobus RTU
Automation Direct	Productivity3000 PACs, Click PLCs, Direct Logic PLCs		Modbus
	Entivity Think & Do		Modbus RTU
			Modbus TCP/IP
	Direct Logic PLCs		DirectNet, ADC K-Sequence, ECOM Ethernet
	Do-More PLC		Do More Serial
			Do More Ethernet

Cable Description	Cable Part Number	Price
EZ Automation		
EZPLC	**EZ-CBL**	$20
Direct Logics (Automation Direct)		
Productivity3000 Automation Direct CLICK, Direct LOGIC PLC RJ-12 port, DL05, DL06, DL105, DL205, D3-350, D4-450 & H2-WinPLC	**EZ-2CBL**	$20
Direct LOGIC (VGA Style) 15-pin port, DL06, D2-250 (250-1), D2-260	**EZ-2CBL-1**	$20
Direct LOGIC PLC RJ-11 port, D3-340	**EZ-3CBL**	$20
Direct LOGIC DL405 PLC 15-pin D-sub port, DL405	**EZ-4CBL-1**	$20
Direct LOGIC PLC 25-pin D-sub DCU and all DCMs	**EZ-4CBL-2**	$20
Allen Bradley		
Allen-Bradley MicroLogix 1000	**EZ-MLOGIX-CBL**	$25
Allen-Bradley SLC 5-03/04/05 FlexLogix, DF1 port	**EZ-SLC-232-CBL**	$20
Allen-Bradley PLC-5 DF1 port	**EZ-PLC5-232-CBL**	$20
Allen-Bradley SLC 500 DH485 port	**EZ-DH485-CBL**	$22
GE		
GE 90/30, 90/70, Micro 90, 15-pin D-sub port	**EZ-90-30-CBL**	$20
Mitsubishi		
MITSUBISHI FX Series 25-pin port	**EZ-MITSU-CBL**	$20
MITSUBISHI FX Series 8-pin mini-DIN	**EZ-MITSU-CBL-1**	$20
Omron		
OMRON Host Link C200 Adapter, C500 25-pin D-shell	**EZ-OMRON-CBL**	$20
Aromat		
AROMAT Mewtocol 5-pin, mini-DIN male	**EZ-ARCOL-CBL**	$20
Modbus		
Modicon MicroPLC (RJ45 connector)	**EZ-MODRJ-CBL**	$20
Modbus RTU 9-pin D-Sub Port	**EZ-MODRTU-CBL**	$20
Uni-Telway 8-pin mini-DIN connector	**EZ-MODUNI-CBL**	$20
Siemens		
SIEMENS S7200 9-pin D-shell male connector	**EZ-S7200-CBL**	$20
SIEMENS S7 PPI 9-pin D-shell connector	**EZ-S7MPI-CBL**	$20
Texas Instruments		
Texas Instruments TI 505	**EZ-TX505-CBL**	$20
Texas Instruments TI 545-1102 9-pin D-shell	**EZ-TX545-CBL**	$20
Texas Instruments TI 545-1104 9-pin D-shell	**EZ-TX545CBL1**	$20
Square D		
Square D Symax, 9-pin	**EZ-SYMAX-CBL**	$20
Yaskawa		
YASKAWA Memobus Native Addressing / Memobus RTU	**EZ-YASKAWA-CBL**	$20