C-more Operator Panels Overview

Getting started

Installing the software and configuring the **C-more** panel is simple. You will need the following to successfully connect, configure and send a project to the panel:

- **C-more** HMI - 6in, 7in wide, 8in, 10in, 10in wide, 12in, 15in or EA9-RHMI
- **C-more** Programming Software, p/n EA9-PGMSW
- **C-more** programming cable, USB or Ethernet
- 12-24 VDC switching power supply or the optional **C-more** AC Power Adapter, p/n EA-AC
- Personal Computer - to run **C-more** programming software
- PLC communications cable (serial or Ethernet) to connect the **C-more** HMI to your controller

Part Number	Description	Price
EA9-T6CL-R	**C-more** EA9 series touch screen HMI, 6in color TFT LCD, analog resistive, 320 x 240 pixel, QVGA, LED backlight, (1) serial, (2) USB ports and (1) memory card slot.	$799.00
EA9-T6CL	**C-more** EA9 series touch screen HMI, 6in color TFT LCD, analog resistive, 320 x 240 pixel, QVGA, LED backlight, (3) serial, (1) Ethernet, (2) USB ports, (1) memory card slot and (1) audio line out.	$1,003.00
EA9-T7CL-R	**C-more** EA9 series touch screen HMI, 7in color TFT LCD, analog resistive, widescreen, 800 x 480 pixel, WVGA, LED backlight, (1) serial, (1) Ethernet, (2) USB ports and (1) memory card slot.	$688.00
EA9-T7CL	**C-more** EA9 series touch screen HMI, 7in color TFT LCD, analog resistive, widescreen, 800 x 480 pixel, WVGA, LED backlight, (3) serial, (1) Ethernet, (2) USB ports, (1) memory card slot and (1) audio line out.	Retired
EA9-T8CL	**C-more** EA9 series touch screen HMI, 8in color TFT LCD, analog resistive, 800 x 600 pixel, SVGA, LED backlight, (3) serial, (1) Ethernet, (2) USB ports, (1) memory card slot and (1) audio line out.	$1,524.00
EA9-T10CL	**C-more** EA9 series touch screen HMI, 10in color TFT LCD, analog resistive, 800 x 600 pixel, SVGA, LED backlight, (3) serial, (1) Ethernet, (2) USB ports, (1) memory card slot and (1) audio line out.	$1,718.00
EA9-T10WCL	**C-more** EA9 series touch screen HMI, 10in color TFT LCD, analog resistive, widescreen, 1024 x 600 pixel, WSVGA, LED backlight, (3) serial, (1) Ethernet, (2) USB ports, (1) memory card slot and (1) audio line out.	$1,096.00
EA9-T12CL	**C-more** EA9 series touch screen HMI, 12in color TFT LCD, analog resistive, 800 x 600 pixel, SVGA, LED backlight, (3) serial, (1) Ethernet, (2) USB ports, (2) memory card slots, (1) HDMI video out and (1) audio line out.	$1,479.00
EA9-T15CL-R	**C-more** EA9 series touch screen HMI, 15in color TFT LCD, analog resistive, 1024 x 768 pixel, XGA, LED backlight, (1) serial, (1) Ethernet, (2) USB ports and (2) memory card slots.	$1,959.00
EA9-T15CL	**C-more** EA9 series touch screen HMI, 15in color TFT LCD, analog resistive, 1024 x 768 pixel, XGA, LED backlight, (3) serial, (1) Ethernet, (2) USB ports, (2) memory card slots, (1) HDMI video out and (1) audio line out.	$2,684.00
EA9-RHMI	**C-more** EA9 series headless HMI, (2) serial, (1) Ethernet and (2) USB ports, (1) HDMI audio/video out and (1) memory card slot.	$560.00
EA9-PGMSW	**C-more** Windows programming software, USB or free download. For use with **C-more** EA9 series touch panels. Requires USB or Ethernet connection to touch panel.	$13.00 on USB, or FREE download
USB-CBL-AB3	AutomationDirect programming cable, USB A to USB B, 3ft cable length. For use with **C-more** HMIs, Do-more and Productivity series CPUs and most USB devices.	$12.00
USB-CBL-AB6	AutomationDirect programming cable, USB A to USB B, 6ft cable length. For use with **C-more** HMIs, Do-more and Productivity series CPUs and most USB devices.	$16.00
USB-CBL-AB10	AutomationDirect programming cable, USB A to USB B, 10ft cable length. For use with **C-more** HMIs, Do-more and Productivity series CPUs and most USB devices.	$36.50
USB-CBL-AB15	AutomationDirect programming cable, USB A to USB B, 15ft cable length. For use with **C-more** HMIs, Do-more and Productivity series CPUs and most USB devices.	$42.50

C-more Selection Guide & Specifications

Specification / Model	6" TFT color w/ base features	6" TFT color w/ full features	7" TFT color w/ base features	7" TFT color w/ full features
Part Number	EA9-T6CL-R	EA9-T6CL	EA9-T7CL-R	EA9-T7CL
Price	$799.00	$1,003.00	$688.00	Retired
Display Actual Size and Type	5.7" TFT color		7.0" TFT color	
Display Viewing Area	4.54" x 3.40" [115.2 mm x 86.4 mm]		6.00" x 3.60" [152.4 mm x 91.4 mm]	
Weight	1.56 lb [710g]	1.59 lb [720g]	1.46 lb [660g]	1.48 lb [670g]
Screen Pixel	320 x 240 (QVGA)		800 x 480 (WVGA)	
Display Brightness	280 nits (typ)		350 nits (typ)	
LCD Panel Dot Pitch	0.18 mm x 0.18 mm		0.190 mm x 0.190 mm	
Color Scale	65,536 colors			
Backlight Average Lifetime*	50,000 hours @ 25°C			
Touch Panel Type**	Four-wire analog resistive, single touch			
Project Memory	26MB		43MB	
Number of Screens	Up to 999 screens – limited by project memory			
Realtime Clock	Realtime clock built into panel, backed up for 30 days at 25°C			
Calendar – Month / Day / Year	Yes - monthly deviation 60sec (Reference)			
Serial Port 1	15-pin D-sub female – RS232C, RS-422/485			
Serial Port 2	N/A	3-wire terminal block – RS-485	N/A	3-wire terminal block – RS-485
Serial Port 3	N/A	RJ-12 modular jack – RS-232C	N/A	RJ-12 modular jack – RS-232C
USB Port – Type B	USB 2.0 High speed (480 Mbps) Type B – Download/Program – Max. cable length 15-feet			
USB Port – Type A	USB 2.0 High speed (480 Mbps) Type A – for USB device options – Max. cable length 15-feet – Bus Power – Less than 200mA at 5VDC			
Ethernet Port	N/A	10/100 Base-T, auto MDI/MDI-X		
Ethernet Port - Expansion Module	N/A	EA-ECOM	N/A	EA-ECOM
Audio Line Out	N/A	3.5 mm mini jack – requires amplifier and speaker(s)	N/A	3.5 mm mini jack – requires amplifier and speaker(s)
Mic In (Future)	N/A	3.5 mm mini jack	N/A	3.5 mm mini jack
SD Card Slot	1 slot supports max 2GB (SD,) max 32GB (SDHC)			
HDMI Video Out	N/A			
HDMI Supported Resolution	N/A			
Supply Power	10.2-26.4 VDC Class 2 or SELV (Safety Extra-Low Voltage) Circuit or Limited Energy Circuit (LEC), or use the AC/DC Power Adapter, EA-AC, to power the touch panel from a 100-240 VAC, 50/60 Hz power source. Reverse Polarity Protected			
Power Consumption	16.0 W 1.30 A @ 12VDC 0.66 A @ 24VDC			
Internal Fuse (non-replaceable)	4.0 A			
Altitude	Up to 2000m (6562ft)			
Operating Temperature	0 to 50°C (32 to 122°F) Maximum surrounding air temperature rating: 50°C (122°F) IEC 60068-2-14 (Test Nb, Thermal Shock)			
Storage Temperature	–20 to +60°C (–4 to +140°F) IEC 60068-2-1 (Test Ab, Cold) IEC 60068-2-2 (Test Bb, Dry Heat) IEC 60068-2-14 (Test Na, Thermal Shock)			
Humidity	5-95% RH (non-condensing)			
Environment	For use in Pollution Degree 2 environment, no corrosive gases permitted			
Noise Immunity	(EN61131-2), EN61000-4-2 (ESD), EN61000-4-3 (RFI), EN61000-4-4 (FTB), EN61000-4-5 (Serge), EN61000-4-6 (Conducted) EN61000-4-8 (Power frequency magnetic field immunity) (Local Test) RFI, (145MHz, 440Mhz 10W @ 10cm), Impulse 1000V @ 1μs pulse			
Withstand Voltage	1000VAC, 1min. (FG to Power supply)			
Insulation Resistance	> 10M ohm @ 500VDC (FG to Power supply)			
Vibration	IEC60068-2-6 (Test Fc)			
Shock	IEC60068-2-27 (Test Ea)			
Emission	EN55011 Class A (Radiated RF emission)			
Enclosure	NEMA 250 type 4/4X indoor use only UL50 type 4X indoor use only IP-65 indoor use only (When mounted correctly)		NEMA 250 type 4/4X indoor use only UL50 type 4X indoor use only IP-65 (not tested by UL) (When mounted correctly)	
Agency Approvals	UL508, E157382, Class 1, Div 2, Groups A, B, C CE (EN61131-2), RoHS (2011/65/EU) CUL Canadian C22.2		UL61010, E157382 CE (EN61131-2), RoHS (2011/65/EU) CUL Canadian C22.2	

NOTES: *The backlight average lifetime is defined as the average usage time it takes before the brightness becomes 50% of the initial brightness. The lifetime of the backlight depends on the ambient temperature. The lifetime will decrease under low or high temperature usage.

**The touchscreen is designed to respond to a single touch. If it is touched at multiple points at the same time, an unexpected object may be activated.

C-more Selection Guide & Specifications

Specification / Model	8" TFT color w/ full features	10" TFT color w/ full features	10" TFT color Widescreen w/ full features
Part Number	EA9-T8CL	EA9-T10CL	EA9-T10WCL
Price	$1,524.00	$1,718.00	$1,096.00
Display Actual Size and Type	8.4" TFT color	10.4" TFT color	10.1" TFT color
Display Viewing Area	6.71" x 5.03" [170.4 mm x127.8mm]	8.31" x 6.24" [211.2 mm x 158.4 mm]	8.77" x 4.93" [222.7 mm x 125.3 mm]
Weight	2.93 lb [1330g]	4.19 lb [1900g]	2.43 lb [1100g]
Screen Pixel	800 x 600 (SVGA)		1024 x 600 (WSVGA)
Display Brightness	310 nits (typ)	280 nits (typ)	240 nits (typ)
LCD Panel Dot Pitch	0.213 mm x 0.213 mm	0.264 mm x 0.264 mm	0.218 mm x 0.209 mm
Color Scale	65,536 colors		
Backlight Average Lifetime*	50,000 hours @ 25°C		
Touch Panel Type**	Four-wire analog resistive, single touch		
Project Memory	43MB		
Number of Screens	Up to 999 screens – limited by project memory		
Realtime Clock	Realtime clock built into panel, backed up for 30 days at 25°C		
Calendar – Month / Day / Year	Yes - monthly deviation 60sec (Reference)		
Serial Port 1	15-pin D-sub female – RS232C, RS-422/485		
Serial Port 2	3-wire terminal block – RS-485		
Serial Port 3	RJ-12 modular jack – RS-232C		
USB Port – Type B	USB 2.0 High speed (480 Mbps) Type B – Download/Program – Max. cable length 15-feet		
USB Port – Type A	USB 2.0 High speed (480 Mbps) Type A – for USB device options – Max. cable length 15-feet – Bus Power – Less than 200mA at 5VDC		
Ethernet Port	10/100 Base-T, auto MDI/MDI-X		
Ethernet Port - Expansion Module	EA-ECOM		
Audio Line Out	3.5 mm mini jack – requires amplifier and speaker(s)		
Mic In (Future)	3.5 mm mini jack		
SD Card Slot	1 slot supports max 2GB (SD,) max 32GB (SDHC)		
HDMI Video Out	N/A		
Supply Power	10.2-26.4 VDC Class 2, Use Class2 and SELV (Safety Extra-Low Voltage) Circuit and Limited Energy Circuit (LEC), or use the AC/DC Power Adapter, EA-AC, to power the touch panel from a 100-240 VAC, 50/60 Hz power source. Reverse Polarity Protected		
Power Consumption	18.0 W 1.50 A @ 12VDC 0.75 A @ 24VDC		17.0W 1.42A @ 12 VDC 0.71A @ 24 VDC
Internal Fuse (non-replaceable)	6.3 A		
Altitude	Up to 2000m (6562ft)		
Operating Temperature	0 to 50°C (32 to 122°F) Maximum surrounding air temperature rating: 50°C (122°F) IEC 60068-2-14 (Test Nb, Thermal Shock)		
Storage Temperature	–20 to +60°C (–4 to +140°F) IEC 60068-2-1 (Test Ab, Cold) IEC 60068-2-2 (Test Bb, Dry Heat) IEC 60068-2-14 (Test Na, Thermal Shock)		
Humidity	5-95% RH (non-condensing)		
Environment	For use in Pollution Degree 2 environment, no corrosive gases permitted		
Noise Immunity	(EN61131-2), EN61000-4-2 (ESD), EN61000-4-3 (RFI), EN61000-4-4 (FTB), EN61000-4-5 (Serge), EN61000-4-6 (Conducted) EN61000-4-8 (Power f0requency magnetic field immunity) (Local Test) RFI, (145MHz, 440Mhz 10W @ 10cm), Impulse 1000V @ 1µs pulse		
Withstand Voltage	1000VAC, 1min. (FG to Power supply)		
Insulation Resistance	> 10M ohm @ 500VDC (FG to Power supply)		
Vibration	IEC60068-2-6 (Test Fc)		
Shock	IEC60068-2-27 (Test Ea)		
Emission	EN55011 Class A (Radiated RF emission)		
Enclosure	NEMA 250 type 4/4X indoor use only UL50 type 4X indoor use only IP-65 indoor use only (When mounted correctly)		
Agency Approvals	UL508, E157382 CE (EN61131-2), RoHS (2011/65/EU) CUL Canadian C22.2		

NOTES: *The backlight average lifetime is defined as the average usage time it takes before the brightness becomes 50% of the initial brightness. The lifetime of the backlight depends on the ambient temperature. The lifetime will decrease under low or high temperature usage.
**The touchscreen is designed to respond to a single touch. If it is touched at multiple points at the same time, an unexpected object may be activated.
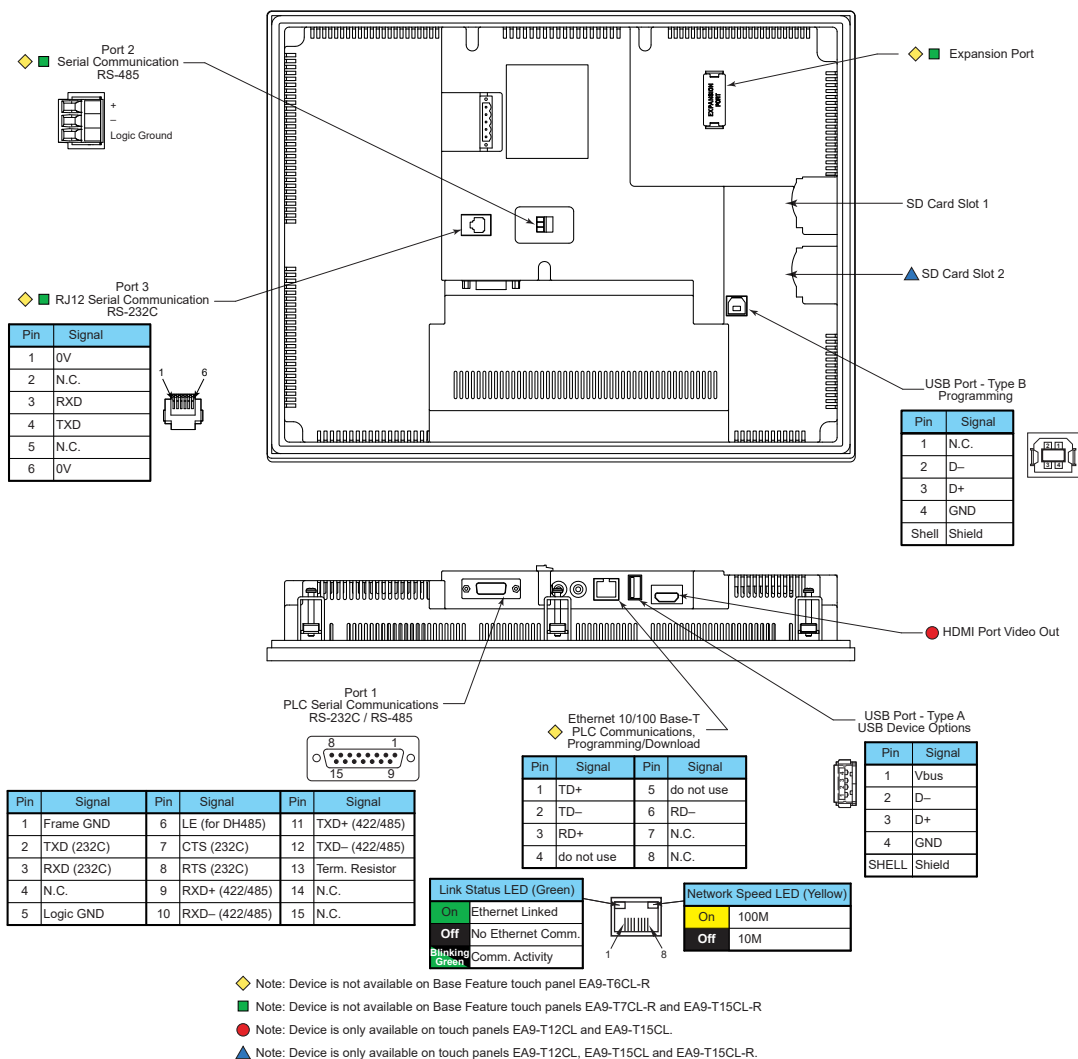
C-more Selection Guide & Specifications

Model / Specification	12" TFT color w/ full features	15" TFT color w/ base features	15" TFT color w/ full features
Part Number	EA9-T12CL	EA9-T15CL-R	EA9-T15CL
Price	$1,479.00	$1,959.00	$2,684.00
Display Actual Size and Type	12.1" TFT color	15.0" TFT color	
Display Viewing Area	9.69" x 7.26" [246.0 mm x 184.5 mm]	11.97" x 8.98" [304.1 mm x 228.0 mm]	
Weight	4.89 lb [2200g]	6.46 lb (2930g)	6.50 lb [2950g]
Screen Pixel	800 x 600 (SVGA)	1024 x 768 (XGA)	
Display Brightness	280 nits (typ)		
LCD Panel Dot Pitch	0.3075 mm x 0.3075 mm	0.297 mm x 0.297 mm	
Color Scale	65,536 colors		
Backlight Average Lifetime*	50,000 hours @ 25°C		
Touch Panel Type**	Four-wire analog resistive, single touch		
Project Memory	43MB		
Number of Screens	Up to 999 screens – limited by project memory		
Realtime Clock	Realtime clock built into panel, backed up for 30 days at 25°C		
Calendar – Month / Day / Year	Yes - monthly deviation 60sec (Reference)		
Serial Port 1	15-pin D-sub female – RS232C, RS-422/485		
Serial Port 2	3-wire terminal block – RS-485	N/A	3-wire terminal block – RS-485
Serial Port 3	RJ-12 modular jack – RS-232C	N/A	RJ-12 modular jack – RS-232C
USB Port – Type B	USB 2.0 High speed (480 Mbps) Type B – Download/Program – Max. cable length 15-feet		
USB Port – Type A	USB 2.0 High speed (480 Mbps) Type A – for USB device options – Max. cable length 15-feet – Bus Power – Less than 200mA at 5VDC		
Ethernet Port	10/100 Base-T, auto MDI/MDI-X		
Ethernet Port - Expansion Module	EA-ECOM	N/A	EA-ECOM
Audio Line Out	3.5 mm mini jack – requires amplifier and speaker(s)	N/A	3.5 mm mini jack – requires amplifier and speaker(s)
Mic In (Future)	3.5 mm mini jack	N/A	3.5 mm mini jack
SD Card Slot	2 slots support max 2GB (SD), max 32GB (SDHC)		
HDMI Video Out	HDMI Type A Port	N/A	HDMI Type A Port
HDMI Supported Resolution	800 x 600 (SVGA)	N/A	1024 x 768 (XGA)
Supply Power	10.2-26.4 VDC Class 2, Use Class2 and SELV (Safety Extra-Low Voltage) Circuit and Limited Energy Circuit (LEC), or use the AC/DC Power Adapter, EA-AC, to power the touch panel from a 100-240 VAC, 50/60 Hz power source. Reverse Polarity Protected		
Power Consumption	21.0 W 1.75 A @ 12VDC 0.88 A @ 24VDC	29.0 W 2.40 A @ 12VDC 1.20 A @ 24VDC	
Internal Fuse (non-replaceable)	6.3 A		
Altitude	Up to 2000m (6562ft)		
Operating Temperature	0 to 50°C (32 to 122°F) Maximum surrounding air temperature rating: 50°C (122°F) IEC 60068-2-14 (Test Nb, Thermal Shock)		
Storage Temperature	–20 to +60°C (–4 to +140°F) IEC 60068-2-1 (Test Ab, Cold) IEC 60068-2-2 (Test Bb, Dry Heat) IEC 60068-2-14 (Test Na, Thermal Shock)		
Humidity	5-95% RH (non-condensing)		
Environment	For use in Pollution Degree 2 environment, no corrosive gases permitted		
Noise Immunity	(EN61131-2), EN61000-4-2 (ESD), EN61000-4-3 (RFI), EN61000-4-4 (FTB), EN61000-4-5 (Serge), EN61000-4-6 (Conducted) EN61000-4-8 (Power frequency magnetic field immunity) (Local Test) RFI, (145MHz, 440Mhz 10W @ 10cm), Impulse 1000V @ 1μs pulse		
Withstand Voltage	1000VAC, 1min. (FG to Power supply)		
Insulation Resistance	> 10M ohm @ 500VDC (FG to Power supply)		
Vibration	IEC60068-2-6 (Test Fc)		
Shock	IEC60068-2-27 (Test Ea)		
Emission	EN55011 Class A (Radiated RF emission)		
Enclosure	NEMA 250 type 4/4X indoor use only UL50 type 4X indoor use only IP-65 indoor use only (When mounted correctly)		
Agency Approvals	UL508, E157382 CE (EN61131-2), RoHS (2011/65/EU) CUL Canadian C22.2		

NOTES: *The backlight average lifetime is defined as the average usage time it takes before the brightness becomes 50% of the initial brightness. The lifetime of the backlight depends on the ambient temperature. The lifetime will decrease under low or high temperature usage.
**The touchscreen is designed to respond to a single touch. If it is touched at multiple points at the same time, an unexpected object may be activated.

C-more Selection Guide & Specifications

Specification	EA9 Headless HMI
Part Number	EA9-RHMI
Price	$560.00
Display	No Display
Weight	0.59 lb [269g]
Project Memory	82MB
Number of Screens	Up to 999 screens – limited by project memory
Realtime Clock	Realtime clock built into panel, backed up for 30 days at 25°C
Calendar – Month / Day / Year	Yes - monthly deviation 60sec (Reference)
Serial Port 1	15-pin D-sub female – RS232C, RS-422/485
Serial Port 2	3-wire terminal block – RS-485
USB Port – Type B	USB 2.0 High speed (480 Mbps) Type B - Download/Program Max cable length - 15 ft.
USB Port – Type A	USB 2.0 High speed (480 Mbps) Type A - for USB device options Max cable length - 15ft Bus Power – Less than 500mA at 5VDC
Supported Touch Screen	ELO™ Single Touch Resistive/SAW, EETI eGalax Single Touch Resistive and pCap Compatible with AutomationDirect Atlas Monitors. See the EA-RHMI user manual for more compatible touchscreen monitors
Ethernet Port	10/100 Base-T, auto MDI/MDI-X
Ethernet Port - Expansion Module	EA-ECOM
Audio Line Out	Audio supported through HDMI connection
Mic In (Future)	N/A
SD Card Slot	1 slot support max 2GB (SD), max 32GB (SDHC)
HDMI Video Out	HDMI Type A Port
HDMI Supported Resolutions	640 x 480 (VGA) 60Hz 720 x 480 (SD) 60Hz 1024 x 768 (XGA) 60Hz 1280 x 720 (HD) 60Hz With automatic negotiation function for HDMI displays
Supply Power	10.2-26.4 VDC Class 2, Use Class2 and SELV (Safety Extra-Low Voltage) Circuit and Limited Energy Circuit (LEC), Reverse Polarity Protected
Power Consumption	12.0 W 1.00 A @ 12VDC 0.50 A @ 24VDC
Internal Fuse (non-replaceable)	4.0 A
Altitude	Up to 2000m (6562ft)
Operating Temperature	0 to 50°C (32 to 122 °F); Maximum surrounding air temperature rating: 50°C (122°F) IEC 60068-2-14 (Test Nb, Thermal Shock)
Storage Temperature	–20 to 60°C (–4 to 140°F) IEC 60068-2-1 (Test Ab, Cold) IEC 60068-2-2 (Test Bb, Dry Heat) IEC 60068-2-14 (Test Na, Thermal Shock)
Humidity	5-95% RH (non-condensing)
Environment	For use in Pollution Degree 2 environment, no corrosive gases permitted
Noise Immunity	(EN61131-2) EN61000-4-2 (ESD): 4kV (Contact Discharge) 2kV/4kV/8kV (Air Discharge) EN61000-4-3 (RFI): 10V/m (80MHz-1GHz), 3V/m (1.4GHz-2.0GHz) 1V/m (2.0GHz-2.7GHz) EN61000-4-4 (FTB): 2kV ,positive/negative, 5kHz(DC Power Port) EN61000-4-5 (Serge): 0.5kV line to line 0.5kV line to earth EN61000-4-6 (Conducted): 10V, 0.15MHz - 80MHz EN61000-4-8 (Power frequency magnetic field immunity): 30A/m (Local test) RFI, (145MHz, 440MHz 10W @10cm) Impulse 1000V @ 1µs pulse
Withstand Voltage	1000VAC, 1min. (FG to Power supply)
Insulation Resistance	> 10M ohm @ 500VDC (FG to Power supply)
Vibration	IEC60068-2-6 (Test Fc) 5-9Hz: 3.5mm amplitude, 9-150Hz 1.0G 10 sweep cycles per axis on each of 3 mutually perpendicular axes
Shock	IEC60068-2-27 (Test Ea) 15G peak, 11ms duration, 3 shocks in each direction per axis, on 3 mutually perpendicular axes
Emission	EN55011 Class A (Radiated RF emission)
Agency Approvals	UL61010, E157382 CE (EN61131-2), RoHS (2011/65/EU) CUL Canadian C22.2

C-more Communication Ports

Port 2
Serial Communication
RS-485

+
−
Logic Ground

Expansion Port

SD Card Slot 1

SD Card Slot 2

Port 3
RJ12 Serial Communication
RS-232C

Pin	Signal
1	0V
2	N.C.
3	RXD
4	TXD
5	N.C.
6	0V

USB Port - Type B
Programming

Pin	Signal
1	N.C.
2	D–
3	D+
4	GND
Shell	Shield

HDMI Port Video Out

Port 1
PLC Serial Communications
RS-232C / RS-485

Ethernet 10/100 Base-T
PLC Communications,
Programming/Download

USB Port - Type A
USB Device Options

Pin	Signal	Pin	Signal	Pin	Signal
1	Frame GND	6	LE (for DH485)	11	TXD+ (422/485)
2	TXD (232C)	7	CTS (232C)	12	TXD– (422/485)
3	RXD (232C)	8	RTS (232C)	13	Term. Resistor
4	N.C.	9	RXD+ (422/485)	14	N.C.
5	Logic GND	10	RXD– (422/485)	15	N.C.

Pin	Signal	Pin	Signal
1	TD+	5	do not use
2	TD–	6	RD–
3	RD+	7	N.C.
4	do not use	8	N.C.

Pin	Signal
1	Vbus
2	D–
3	D+
4	GND
SHELL	Shield

Link Status LED (Green)	
On	Ethernet Linked
Off	No Ethernet Comm.
Blinking Green	Comm. Activity

Network Speed LED (Yellow)	
On	100M
Off	10M

◇ Note: Device is not available on Base Feature touch panel EA9-T6CL-R.

■ Note: Device is not available on Base Feature touch panels EA9-T7CL-R and EA9-T15CL-R.

● Note: Device is only available on touch panels EA9-T12CL and EA9-T15CL.

▲ Note: Device is only available on touch panels EA9-T12CL, EA9-T15CL and EA9-T15CL-R.

Ethernet Port

The Ethernet port has several uses:

- Download program to panel
- Communicate to PLCs/PCs
- Send e-mail
- Access FTP server
- Act as a Webserver (Secure HTTPs)
- Remote Internet access

The Ethernet port has an RJ-45 8-wire modular connector with green and yellow LEDs.

- The yellow LED indicates network speed – off for a 10 Mbps connection and illuminated for a 100 Mbps connection.
- The green LED indicates link status and illuminates when a link is established.

Note: EA6-T6CL-R does not include an Ethernet port, and does not have these capabilities.

Expansion Port

The expansion port supports the EA-ECOM module to provide a second Ethernet Port for all full featured models.

USB Port B

Program *C-more* via the USB programming port. It's fast and easy, with no baud rate settings, parity, or stop bits to worry about. We stock standard USB cables for your convenience. USB Port B can be used to upload or download projects to and from a PC.

USB Port A

The Universal Serial Bus (USB) Port A is a standard feature on all models and can be used to connect various USB HID (Human Input Device) devices to the panel, such as the following:

- USB flash drives (USB-FLASH)
- USB keyboards
- USB barcode scanners
- USB card scanners

C-more can log data to the USB flash drive as well as load projects to the panel from the pen drive. You can also back up project files and panel firmware.

Sound Interface (Audio Line Out)

When attached to an amplifier and speaker(s), *C-more* can play warning sounds or pre-recorded messages such as: "conveyor is jammed". *C-more* supports WAV type files. The output is stereo.

Serial Port

Port 1 - Connect to your serial controller network via Port 1. Port 1 is a 15-pin port that supports RS-232 or RS-422/485.
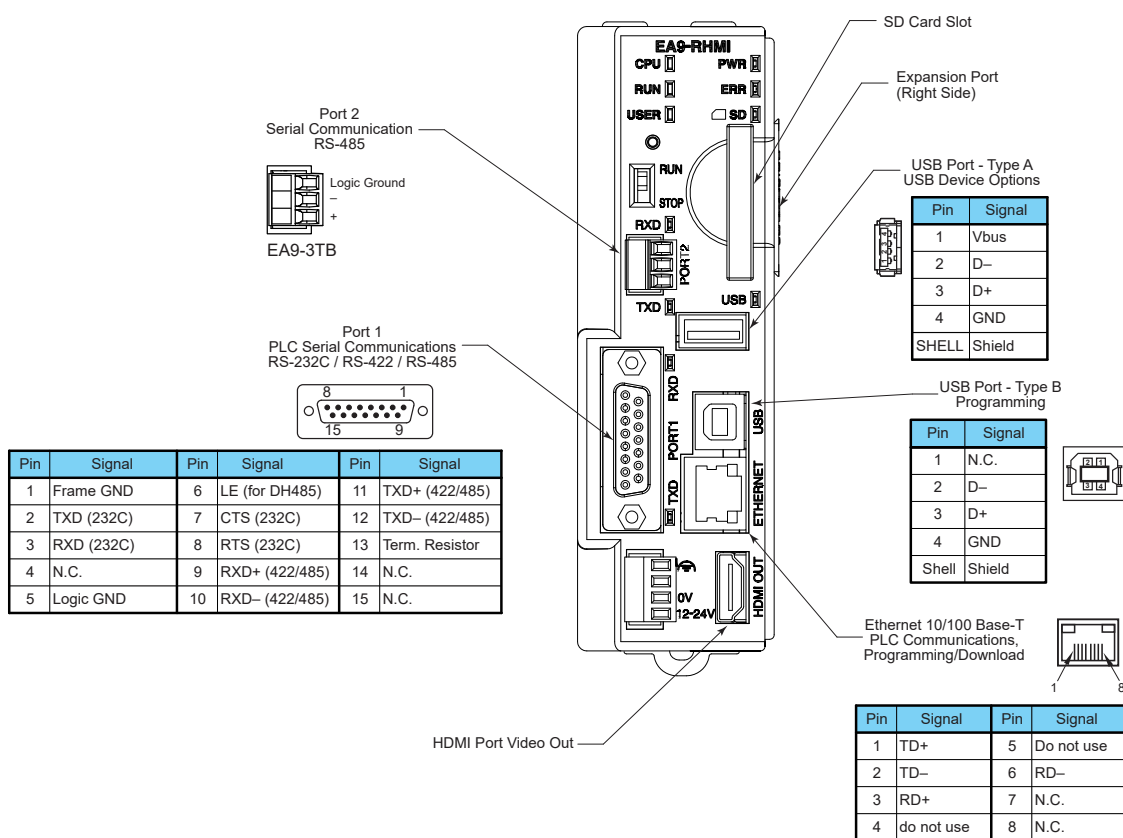
Port 2 - Connect your RS-485 network via Port 2. Port 2 is provided with a 3-wire removable terminal block.

Port 3 - Connect to your RS-232C device via Port 3. Port 3 is an RJ12 connection.

HDMI Video Out

EA9-T12CL and EA9-T15CL include an HDMI Type A port to provide video output to a projector or remote monitor.

C-more EA9-RHMI Communication Ports

Port 2
Serial Communication
RS-485

EA9-3TB
Logic Ground
−
+

Port 1
PLC Serial Communications
RS-232C / RS-422 / RS-485

Pin	Signal	Pin	Signal	Pin	Signal
1	Frame GND	6	LE (for DH485)	11	TXD+ (422/485)
2	TXD (232C)	7	CTS (232C)	12	TXD− (422/485)
3	RXD (232C)	8	RTS (232C)	13	Term. Resistor
4	N.C.	9	RXD+ (422/485)	14	N.C.
5	Logic GND	10	RXD− (422/485)	15	N.C.

SD Card Slot
Expansion Port (Right Side)

USB Port - Type A
USB Device Options

Pin	Signal
1	Vbus
2	D−
3	D+
4	GND
SHELL	Shield

USB Port - Type B
Programming

Pin	Signal
1	N.C.
2	D−
3	D+
4	GND
Shell	Shield

Ethernet 10/100 Base-T
PLC Communications,
Programming/Download

HDMI Port Video Out

Pin	Signal	Pin	Signal
1	TD+	5	Do not use
2	TD−	6	RD−
3	RD+	7	N.C.
4	do not use	8	N.C.

Ethernet Port

The Ethernet port has several uses:
- Download program to panel
- Communicate to PLCs/PCs
- Send e-mail
- Access FTP server
- Act as a Webserver (Secure HTTPs)
- Remote Internet access

The Ethernet port has an RJ-45 8-wire modular connector with green and yellow LEDs.

- The yellow LED indicates network speed – off for a 10 Mbps connection and illuminated for a 100 Mbps connection.
- The green LED indicates link status and illuminates when a link is established.

Expansion Port

The expansion port supports the EA-ECOM module to provide a second Ethernet Port.

USB Port B

Program *C-more* via the USB programming port. It's fast and easy, with no baud rate settings, parity, or stop bits to worry about. We stock standard USB cables for your convenience. USB Port B can be used to upload or download projects to and from a PC.

USB Port A*

The Universal Serial Bus (USB) Port A can be used to connect various USB HID (Human Input Device) devices to the panel, such as the following:

- USB touchscreen (ELO™ Single Touch Resistive/SAW, EETI eGalax Single Touch Resistive and pCap touchscreens)
- USB mouse
- USB keyboard
- USB flash drives (USB-FLASH)
- USB barcode scanner
- USB card scanner

C-more can log data to the USB flash drive as well as load projects to the panel from the pen drive. You can also back up project files and panel firmware.

* 500mA maximum current available. Powered USB hub may be required for some devices

Serial Port

Port 1 - Connect to your serial controller network via Port 1. Port 1 is a 15-pin port that supports RS-232 or RS-422/485.

Port 2 - Connect your RS-485 network via Port 2. Port 2 is provided with a 3-wire removable terminal block.

HDMI Out Port

EA9-RHMI includes an HDMI Type A port to provide video / audio output to a projector or remote monitor. Supported resolutions are…

- 640 x 480 (VGA) 60Hz
- 720 x 480 (SD) 60Hz
- 1024 x 768 (XGA) 60Hz
- 1280 x 720 (HD) 60Hz

C-more Communication Protocols & Cables

Compatibility Table

PLC Family	Model		Protocols
Allen-Bradley	MicroLogix 1000, 1100, 1200, 1400, 1500, SLC 5-/01/02/03		DH485/AIC/AIC+
	MicroLogix 1000, 1100, 1200, 1400 and 1500 SLC 5-/03/04/05		DF1 Half Duplex; DF1 Full Duplex
	ControlLogix™, CompactLogix™, FlexLogix™		
	PLC-5		DF1 Full Duplex
	ControlLogix, CompactLogix, FlexLogix - Tag Based		DF1 Half Duplex; DF1 Full Duplex
	ControlLogix, CompactLogix, FlexLogix - Generic I/O Messaging		EtherNet/IP Server
	ControlLogix, CompactLogix, FlexLogix - Tag Based		EtherNet/IP Client
	Micrologix 1100, 1400 & SLC5/05, all via native Ethernet port		
	MicroLogix 1000, 1100, 1200, 1400,1500 & SLC 5-03/04/05, all via ENI Adapter		
	Micro 800 series		Modbus RTU
			Modbus TCP
	Micro 800 series - Tag Based		DF1 Full Duplex
			EtherNet/IP Client
Modbus RTU	Modbus RTU devices		Modbus RTU
Modbus TCP/IP	Modbus TCP/IP devices		Modbus TCP/IP
GE	90/30, 90/70, Micro 90, VersaMax Micro		SNPX
	90/30, Rx3i		SRTP Ethernet
Mitsubishi	FX Series		FX Direct
	Q02, Q02H, Q06H, Q12H, Q25H		Q CPU
	Q, QnA Serial		QnA Serial
	Q, QnA Ethernet		QnA Ethernet
Omron	C200 Adapter, C500		Host Link
	CJ1/CS1 Serial, CJ1/CS1 Ethernet		FINS
Modicon	984 CPU, Quantum 113 CPU, AEG Modicon Micro Series 110 CPU: 311-xx, 411-xx, 512-xx, 612-xx		Modbus RTU
Siemens	S7-200 CPU, RS-485 Serial		PPI
	S7-200 CPU, S7-300 CPU, S7-400, S7-1200 CPU, S7-1500; Ethernet		Ethernet ISO over TCP
Productivity Series	all		Productivity Serial
			Productivity Ethernet
Do-more	all		Do-more Serial
			Do-more Ethernet
CLICK	all		Modbus (CLICK addressing)
			Modbus TCP (CLICK addressing)
Direct LOGIC	DL05/DL06	all	K-Sequence
			DirectNET
			Modbus (Koyo addressing)
		H0-ECOM/H0-ECOM100	Direct LOGIC Ethernet
	DL105	all	K-Sequence
	DL205	D2-230	K-Sequence
		D2-240	K-Sequence
			DirectNET
		D2-250/D2-250-1/D2-260/D2-262	K-Sequence
			DirectNET
			Modbus (Koyo addressing)
		D2-240/D2-250-1/D2-260 using D2-DCM	DirectNET
			Modbus (Koyo addressing)
		H2-ECOM/H2-ECOM100	Direct LOGIC Ethernet
	DL305	D3-330/330P (Requires the use of a Data Communications Unit)	DirectNET
		D3-340	DirectNET
		D3-350	K-Sequence
			DirectNET
			Modbus (Koyo addressing)
		D3-350 using D3-DCM	DirectNET
			Modbus (Koyo addressing)
	DL405	D4-430	K-Sequence
			DirectNET
		D4-440	K-Sequence
			DirectNET
		D4-450/D4-454	K-Sequence
			DirectNET
			Modbus (Koyo addressing)
		All with D4-DCM	DirectNET
			Modbus (Koyo addressing)
		H4-ECOM/H4-ECOM100	Direct LOGIC Ethernet
	H2-WinPLC (Think & Do) Live V5.2 or later and Studio any version		Think & Do Modbus RTU (serial port)
	H2-WinPLC (Think & Do) Live V5.5.1 or later and Studio V7.2.1 or later		Think & Do Modbus TCP/IP (Ethernet port)

Cable Description	Cable Part Number	Price
AutomationDirect communication cable, 15-pin male D-sub to 6-pin RJ12, shielded, 9.8ft/3m cable length. For use with *C-more* or *C-more* Micro panel and AutomationDirect PLCs with RJ12 ports.	*EA-2CBL*	$37.00
AutomationDirect communication cable, 15-pin male D-sub to 15-pin D-sub HD15 male, shielded, 3m/9.8ft cable length. For use with *C-more* or *C-more* Micro panel and a DL06, D2-250(-1), D2-260 or D2-262 (bottom port) CPU.	*EA-2CBL-1*	$38.00
AutomationDirect communication cable, 15-pin male D-sub to 4-pin RJ11, shielded, 3m/9.8ft cable length. For use with *C-more* or *C-more* Micro panel and a D3-340 CPU top or bottom port.	*EA-3CBL*	Retired
AutomationDirect communication cable, 15-pin male D-sub to 15-pin male D-sub, shielded, 3m/9.8ft cable length. For use with *C-more* or *C-more* Micro panel and a DL405 (top port) CPU.	*EA-4CBL-1*	$37.00
AutomationDirect communication cable, 15-pin male D-sub to 25-pin male D-sub, shielded, 3m/9.8ft cable length. For use with *C-more* or *C-more* Micro panel and a D2-DCM, D3-232-DCU, D3-350 (bottom port) or DL405 (bottom port) CPU.	*EA-4CBL-2*	$38.50
AutomationDirect communication cable, 15-pin male D-sub to 8-pin male mini DIN, shielded, 3m/9.8ft cable length. For use with *C-more* or *C-more* Micro panel and an Allen-Bradley Micrologix CPU.	*EA-MLOGIX-CBL*	$57.00
AutomationDirect communication cable, 15-pin male D-sub to 9-pin female D-sub, shielded, 3m/9.8ft cable length. For use with *C-more* or *C-more* Micro panel and an Allen-Bradley SLC 5/03, 5/04 or 5/05 CPU with DF-1 port.	*EA-SLC-232-CBL*	$37.00
AutomationDirect communication cable, 15-pin male D-sub to 25-pin male D-sub, 3m/9.8ft cable length. For use with *C-more* or *C-more* Micro panel and an Allen-Bradley PLC-5 CPU with a DF1 port.	*EA-PLC5-232-CBL*	Retired
AutomationDirect communication cable, 15-pin male D-sub to 6-pin RJ45, shielded, 3m/9.8ft cable length. For use with *C-more* or *C-more* Micro panel and an Allen-Bradley SLC 5/01, 5/02 or 5/03 CPU with a DH485 port cable.	*EA-DH485-CBL*	$36.50
AutomationDirect communication cable, 15-pin male D-sub to 15-pin male D-sub, shielded, 3m/9.8ft cable length. For use with *C-more* or *C-more* Micro and GE Fanuc Series 90/30 or 90/70 serial port.	*EA-90-30-CBL*	$37.00
AutomationDirect communication cable, 15-pin male D-sub to 25-pin male D-sub, 3m/9.8ft cable length. For use with *C-more* or *C-more* Micro panel and a Mitsubishi FX Series CPU.	*EA-MITSU-CBL*	$31.00
AutomationDirect communication cable, 15-pin male D-sub to 8-pin male mini DIN, shielded, 3m/9.8ft cable length. For use with *C-more* or *C-more* Micro panel and a Mitsubishi FX Series CPU.	*EA-MITSU-CBL-1*	$37.00
AutomationDirect communication cable, 15-pin male D-sub to 25-pin male D-sub, shielded, 3m/9.8ft cable length. For use with *C-more* or *C-more* Micro panel and an Omron C200 or C500 CPU.	*EA-OMRON-CBL*	$37.00

Example Cables:

EA-2CBL

EA-2CBL-1