

AUTOMATIONDIRECT.com

C-more[®] micro Operator Interface



Up-to-date price list:
www.automationdirect.com/pricelist

FREE Technical Support:
www.automationdirect.com/support

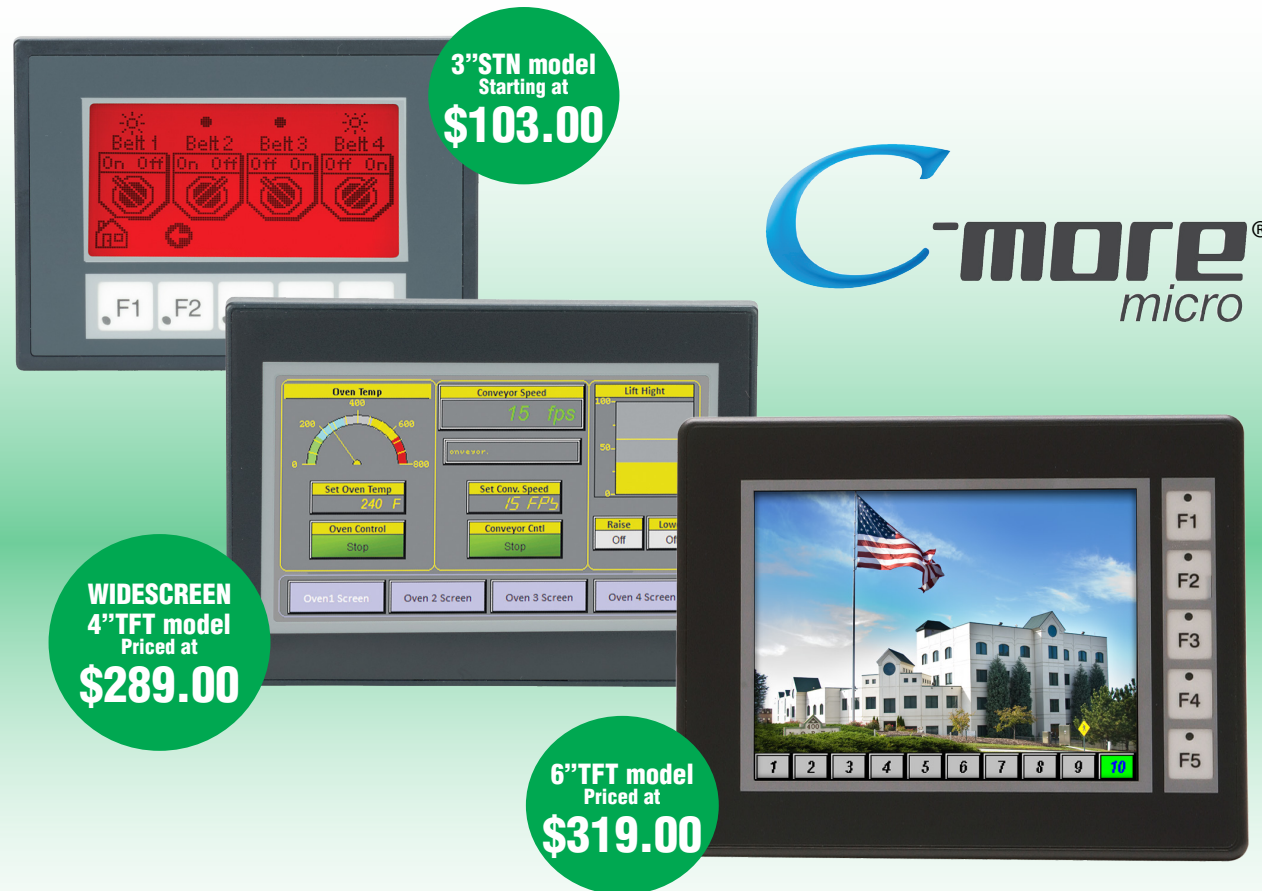
FREE Videos:
www.automationdirect.com/videos

FREE Documentation:
www.automationdirect.com/documentation

FREE CAD drawings:
www.automationdirect.com/cad



Micro panels...MEGA value!



3"STN model
Starting at
\$103.00

WIDESCREEN
4" TFT model
Priced at
\$289.00

6" TFT model
Priced at
\$319.00

C-more
micro

Do more for LESS with C-more Micro Panels!

C-more Micro panels are one of the most popular and reliable, value-packed operator interfaces in the industrial market today. No matter the budget or system size, we have a C-more Micro operator panel for the job. And all of our panels come with FREE programming software that includes a project simulator and many other time saving features. You'll always get the biggest bang for your buck with C-more Micro.

The 3-inch STN monochrome versions offer twelve selectable background colors that allow you to use color to convey meaning.

The 4-inch and 6-inch TFT full color versions offer up to 32,767 colors for more vibrant and colorful project screens.

Micro touch panel and non-touch panel versions available

- The 3-inch cost-conscious panels display standard or high contrast STN monochrome graphics with 12 selectable background colors
- 32K color TFT displays are available in 4-inch and 6-inch models
- Ethernet communication built in on 3 and 4-inch EA3 models, optional Ethernet communications module (EA-ECOM) available for 6-inch EA3 models
- FREE programming software with simulator
- Full 2-year product warranty



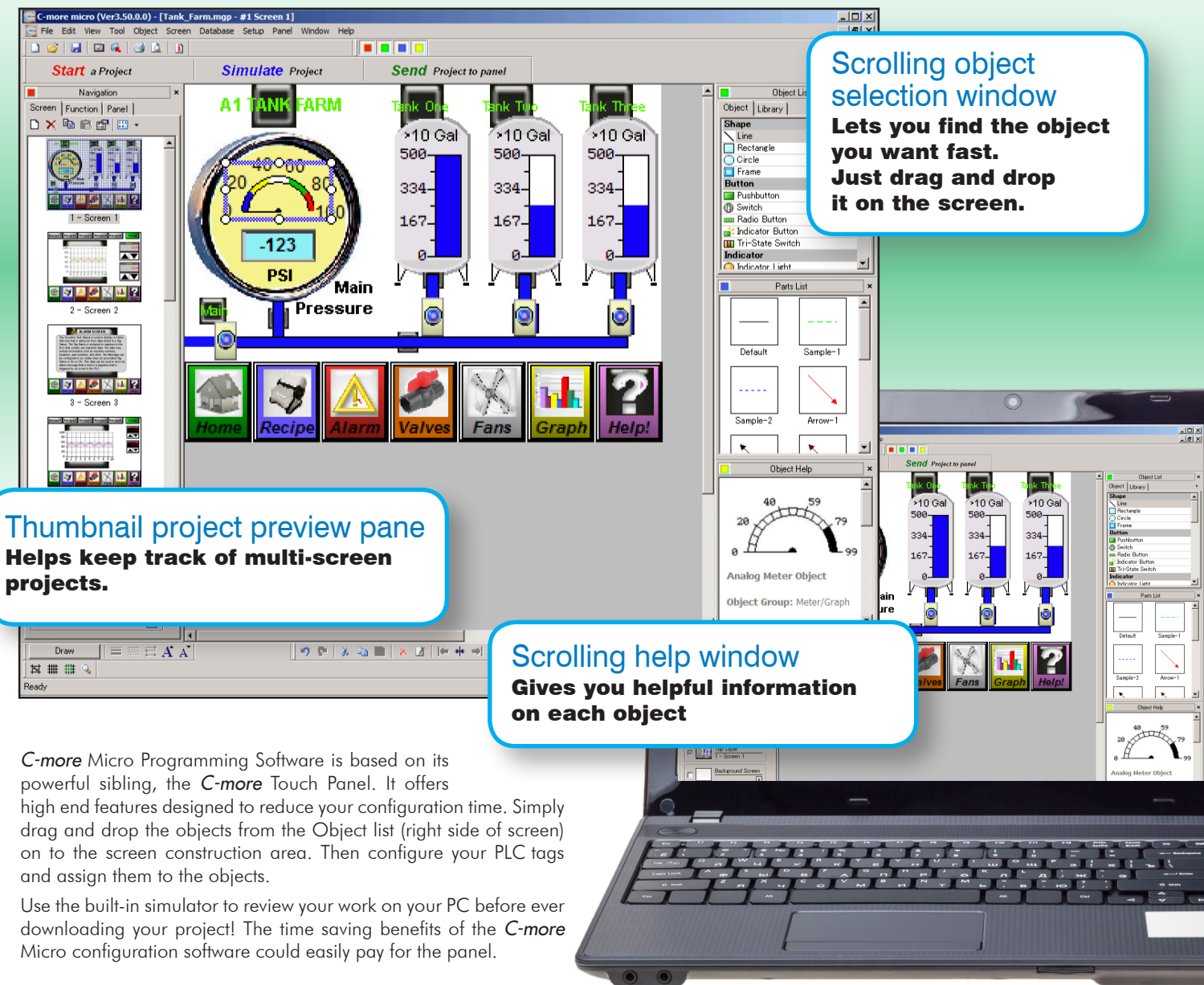
FREE Configuration Software with Simulator

Built-in project simulator

- Runs your project on your PC
- Test all of your screens before downloading
- Time savings pays for the panel!

Built-in user object/screen libraries

Save time by re-using your custom objects and screens.



Scrolling object selection window
Lets you find the object you want fast.
Just drag and drop it on the screen.

Thumbnail project preview pane
Helps keep track of multi-screen projects.

Scrolling help window
Gives you helpful information on each object

C-more Micro Programming Software is based on its powerful sibling, the C-more Touch Panel. It offers high end features designed to reduce your configuration time. Simply drag and drop the objects from the Object list (right side of screen) on to the screen construction area. Then configure your PLC tags and assign them to the objects.

Use the built-in simulator to review your work on your PC before ever downloading your project! The time saving benefits of the C-more Micro configuration software could easily pay for the panel.

Check out www.C-moreMicro.com for a demo.

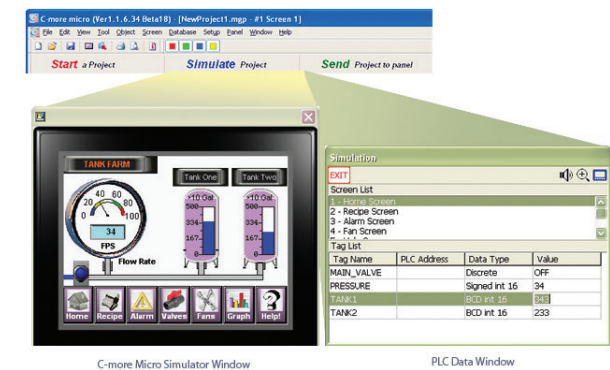
Learn more! Go to:
C-moreMicro.automationdirect.com
for detailed specifications, a virtual tour of the product, programming examples, newest communication drivers...

C-more Micro Productivity Tools

Built-in Project Simulator

The simulator is a real productivity booster that saves hours of trial-and-error programming and testing, with no need for a panel or controller.

The simulator pops up on your PC screen, along with the simulated controller Data Window. Use your mouse to activate objects on the simulated project screens while monitoring the simulated controller values in the data window.



Build and Save Custom Objects

Store your objects in the library for fast and easy re-use.

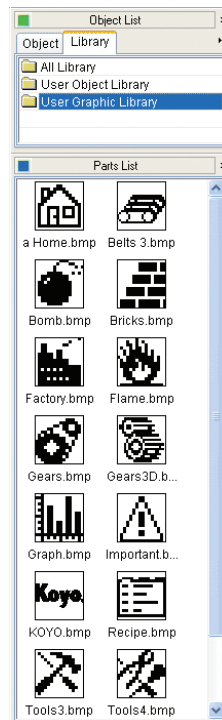
Once you've built a custom object, just right-click on it and select "Object -> Library"

You're then prompted to give your object a name, and you can choose whether to save the PLC tags with the object.

Drag and drop objects from the library onto the workspace.

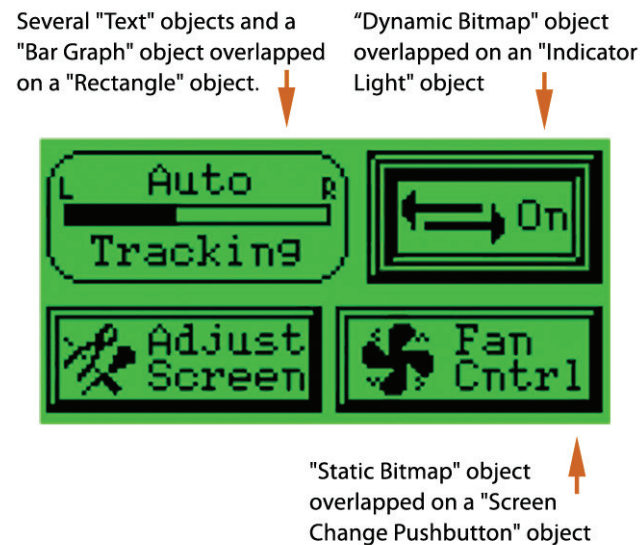
It's easy to re-use an object. Just drag it from the library and drop it on the desired screen. Then double click it if you want to edit the tags or other options.

Download more objects and graphics from our online library at www.c-moremicro.com



Overlapping Objects

Our customers loved overlapping objects on the larger C-more panels, and we knew you would expect the same capabilities with C-more Micro. Here are some examples of overlapping objects:



Lots of memory lets you get creative

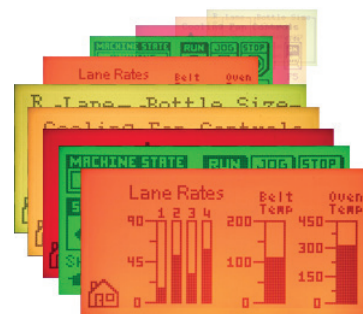
Screens

While many text panels are limited to 256 or fewer messages, C-more Micro allows up to 999 screens for every project. Create all the screens you need to control your machine or process.

Memory

Ample user memory allows tons of objects and graphs on your screens.

- Pictures and icons convey information faster than text
- Use bar graphs and indicator graphics to enhance comprehension



Note: Keep in mind that depending on the complexity of your screens, the limiting factor could be the 999 addressable screens or the panel's memory.

It's easy to track the size of your project:

When you download a project to a C-more Micro panel, the download dialog box shows you the current project size.

- If your project is large you may want to download only the Runtime File and the controller driver file, but not the entire Project File.
- If you download the Project File, you will be able to upload the entire project from the panel at a later date.

Download the Software!

C-more Micro Programming Software can be downloaded at no charge from AutomationDirect.com, or a CD version may be purchased for \$26.50 (EA-MG-PGMSW). A USB port on your PC is required to connect to the C-more Micro panel. ****This software can only be used to program the C-more Micro panels, not the C-more 6" through 15" touch panels.**

C-more Micro Productivity Tools

Alarm Control Setup

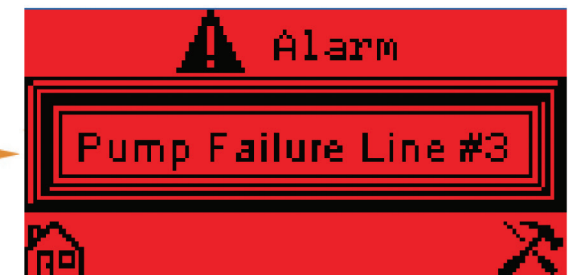
The Alarm Control Setup feature makes configuring alarms fast and easy. Use a controller tag to activate up to 16 alarm conditions with the built-in Alarm Control feature. Choose from:

- Beep
- LED Blink
- Change Backlight Color
- Blink Selectable Colors
- Show a Banner Message

Event		Action				
No.	Alarm Notification	Beep	LED Blink	Backlight	Blink	Banner Message
01	[PUMP1TEMP] = 1	<input checked="" type="checkbox"/> ON	<input checked="" type="checkbox"/> F1	<input checked="" type="checkbox"/> Current	<input checked="" type="checkbox"/> Yellow	<input checked="" type="checkbox"/> Pump One Alarm
02	[PUMP2TEMP] = 1	<input checked="" type="checkbox"/> ON	<input checked="" type="checkbox"/> F1	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Pump Two Alarm
03	[PUMP3TEMP] = 0	<input checked="" type="checkbox"/> ON	<input checked="" type="checkbox"/> F1	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Pump Three Alarm
04	[WASHTANK1_OVR]...	<input checked="" type="checkbox"/> ON	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Washtank One Overflow
05	[WASHTANK2_OVR]...	<input type="checkbox"/> OFF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Washtank Two Overflow
06	[WASHTANK1_LO...]...	<input type="checkbox"/> OFF	<input type="checkbox"/>	<input checked="" type="checkbox"/> Current	<input checked="" type="checkbox"/> Red	<input checked="" type="checkbox"/> Washtank One Low Level
07	[WASHTANK2_LO...]...	<input type="checkbox"/> OFF	<input type="checkbox"/>	<input checked="" type="checkbox"/> Current	<input checked="" type="checkbox"/> Red	<input checked="" type="checkbox"/> Washtank Two Low Level
08	[VALVE1_LOWAIR]...	<input type="checkbox"/> OFF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Valve One Low Air Pressure Level
09	[VALVE2_LOWAIR]...	<input type="checkbox"/> OFF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Valve Two Low Air Pressure
10						
11						
12						
13						
14						
15						
16						

Use the built-in alarm feature above or create a simple Alarm Screen (right) in conjunction with the message database to display HUNDREDS of different alarm messages.

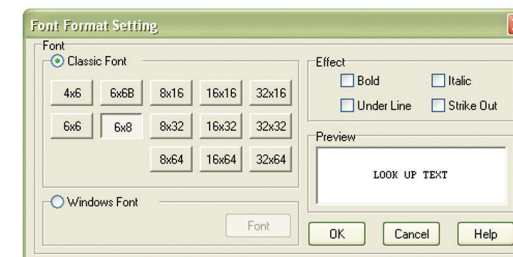
Look-up Text Object



Use any font on your PC

C-more Micro offers 10 built-in fixed-width "Classic" fonts and allows the use of any Windows fonts present on the programming computer.

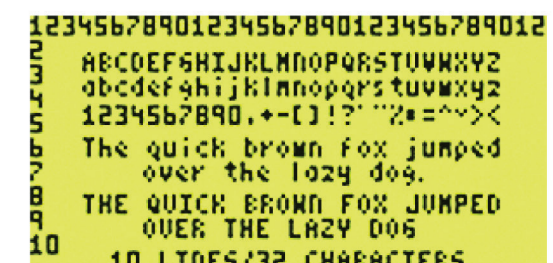
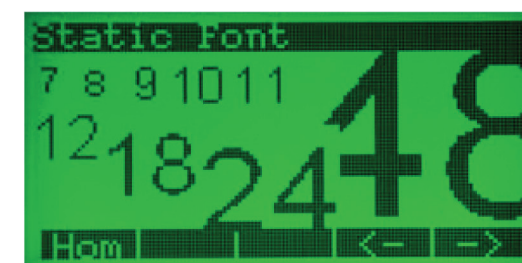
- Fixed-width fonts allow maximum lines and characters
- Windows fonts can be scaled to many sizes

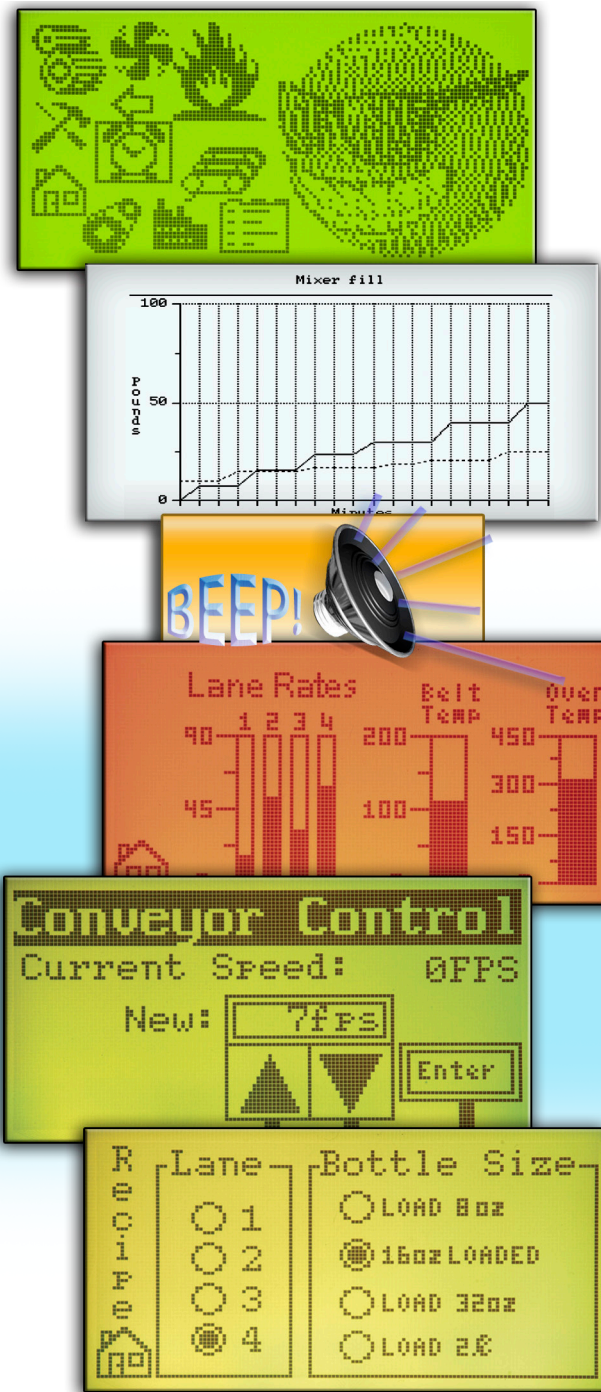


Windows fonts can be sized with their familiar "point" values.



For 3-inch units, the "4x6" fixed font allows a maximum of 32 characters per line and 10 lines for static text. The 6-inch units support up to 53 lines with 60 characters per line in portrait mode, or 40 lines with 80 characters per line in landscape mode.





Bitmap graphics

- Use bitmap images of pushbuttons, switches, indicators, or your company logo
- Use our library of bitmaps
- Create your own library of bitmaps

Real-time graph

- Each pen displays the value of a single PLC memory location. Values are refreshed by either time or a trigger tag.
- One or two pens can be displayed on the STN models
- Up to eight pens can be displayed on the TFT models
- Up to 24 values can be displayed for each pen

Controlled beep

- Beep to indicate an alarm
- Beep for a special message
- Beep to verify when button is pressed

Bar graphs

- Vertical, horizontal, thin, wide, multiple
- Combine with a numeric display for digital readout

Data entry

- Pop-up numeric keypad on the screen
- Increment/Decrement a value by touching arrows
- Add an optional keypad bezel

Recipes

Each recipe button transfers up to 99 values from PLC source registers to PLC destination registers and/or from the recipe table to PLC destination registers.

Change background colors

The screen colors are programmable! Use them to convey meaning - see a red alarm screen from across the room, or use a yellow screen as a caution.

All 3in STN models support various user controlled backlight colors that can be used to get the operators attention.

These colors will vary based on the model:

White, Green, Red, Amber, Lime, Yellow, Pink, Emerald

TFT models allow 32K colors to flash for the background.

Alarm feature

C-more Micro has an Alarm action that can control:

- Backlight color change/flash
 - Function Key LED flash
 - Beep activation
 - Custom alarm banner display
- Up to 16 configurable alarm actions



Support you can rely on!

Our HMI's have been an important part of the automation industry for over 10 years. And whether or not you're purchasing a new EA3 panel or you're an existing EA1 customer, you can count us to offer the support you need long into the future.

What our customers think...

C-more Micro family average review scores from our web store:

[Read Reviews](#) [Write a Review](#)

Averages for C-more Micro-Graphic Panels

Overall Score (4.6)
(99 reviews)

Quality:

Ease of Use:

Value:



"I have used the EA3-T6CL with a D0-06DR PLC for several different projects and have been very pleased with the quality and the ease of use of the software. I will definitely be buying more in the future."

Rob in EASTON, PA



"I have used the 3" C-More Micro in my products for over 4 years without any issues. We build pre packaged automation equipment for the oil and gas industry and our products are located in areas with a wide range of environments. We have over 20 of these HMI's that have stood the test of time and the elements."

Francis in WICHITA, KS



"Great product. I bought it for a simple applications of displaying error messages from the PLC but turned out to be more useful than just that and ended up adding more functionality and replacing physical buttons for in screen ones, passwords, and even numeric inputs to modify timer values were added. Definitely a versatile and great value product."

Juansystem05 in COLUMBUS, NM



EA3 Reduced Models

New EA3 Series starting at \$103.00

EA3-S3ML-RN \$103.00

- Non-touch
- NEMA1 indoor rating -ships without gasket. Optional gasket can be purchased for NEMA4 indoor rating
- One RJ12 serial port for programming and PLC connection
- Supports only AutomationDirect/Modbus PLC protocols
- No expansion/option module support

EA3-S3ML-R \$157.00

- Touch screen
- NEMA4, 4x indoor rating
- One RJ12 serial port for programming and PLC connection
- Supports only AutomationDirect/Modbus PLC protocols
- No expansion/option module support



EA3-S3ML

3-inch STN Monochrome Panel

Ethernet-ready panel for only \$212.00

- Touch screen
- Built-in Ethernet port
- Two built-in serial ports
- Micro-USB programming port
- 5 Function keys with LED indicators
- UL, cUL, CE approvals
- NEMA 4, 4x indoor ratings

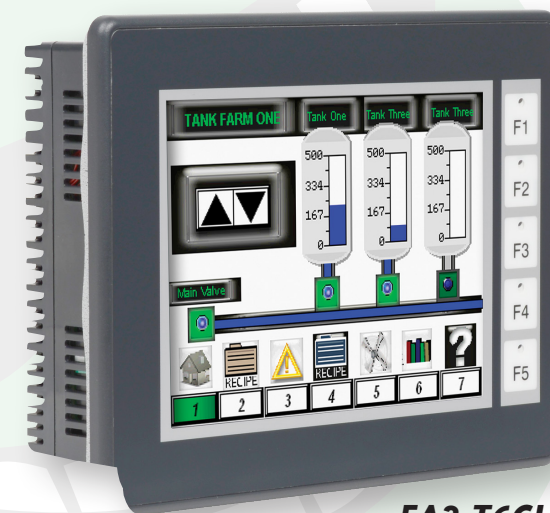


EA3-T4CL

4-inch TFT WIDESCREEN Full Color Panel

Ethernet-ready widescreen panel for only \$289.00

- Touch screen
- Built-in Ethernet port
- Two built-in serial ports
- Micro-USB programming port
- Supports Portrait and Landscape modes
- UL, cUL, CE approvals
- NEMA 4, 4x indoor ratings



EA3-T6CL

6-inch TFT Full Color Panel

Ethernet-capable, priced at \$319.00

- Five user-defined function keys, each key with a user-defined red LED indicator
- UL-rated for use on a flat surface of Type 1, 4X enclosure (for indoor use only)
- Powered from a Class 2, 12-24 VDC power supply or through the USB port when programming
- EA-ECOM module allows Ethernet connection



Add Ethernet to your 6-inch panel for only \$54.00 with the EA-ECOM module

The EA-ECOM module adds one Ethernet RJ45 Port for panel configuration and PLC communications. Simply connect the module to the back of your EA3 C-more Micro and secure it with the supplied screws. The EA-ECOM does not require an external power supply.

- Faster project download speed
- Faster firmware update speed
- Power supplied from expansion port
- Connectivity to existing Ethernet networks

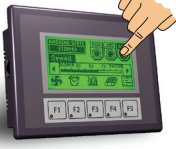






The EA-ECOM adds support for the following Ethernet protocols:

- AutomationDirect ECOM Ethernet
- AutomationDirect CLICK Ethernet
- AutomationDirect Do-More Ethernet
- AutomationDirect Productivity Ethernet
- Modbus TCP
- Allen-Bradley EtherNet/IP Client (MicroLogix 1100/1400)
- Allen-Bradley EtherNet/IP Client (SLC5/05/ENI Adapter)







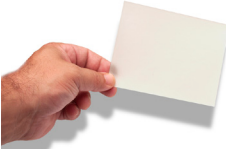
C-more Micro EA3 Series Panels					
	3-inch STN Monochrome Models			4-inch Widescreen TFT Color Models	6-inch TFT Color Models
	EA3-S3ML-RN	EA3-S3ML-R	EA3-S3ML	EA3-T4CL	EA3-T6CL
NEMA Rating	NEMA 250 Type 1 indoor use only. Optional gasket EA-MG-S3ML-GSK can be purchased for NEMA 250 Type 4/4X (indoor use only) rating.			NEMA 250 Type 4/4X (indoor use only)	
Touch Screen	NO			YES	
Display Resolution	128 x 64 pixel			480 x 272 pixel widescreen	320 x 240 pixel
USB Programming Port	NO (Use serial port with EA-MG-PGM-CBL)			(1) USB (Port 1: USB Type Micro-B)	(1) USB (Port 1: USB Type B)
Serial Port	(1) RJ12 Serial			(2) Serial (RJ12 and DSUB15)	
Ethernet Port	NO			(1) 10/100 Mbps Built In	Ethernet Option Module (EA-ECOM)
Protocols	Supports only Automationdirect protocols and Modbus RTU			Supports complete C-more micro protocol list (see specs)	
User Project Memory	1MB	3MB		14MB	6MB
Portrait Mode	NO			YES	
Colors	Monochrome; backlight can be configured per screen and/or per alarm with one of 12 colors. See specs			32,768 colors	

C-more Micro EA1 Series Selection Guide





C-more Micro EA1 Series Panels			
Part Number		Description	Price
EA1-S3ML		C-more Micro EA1 series touch screen HMI, 3in monochrome STN LCD, 128 x 64 pixel, LED backlight, supports (1) serial port.	\$219.00
EA1-S3ML-N	Non-Touch 	C-more Micro EA1 series HMI, 3in monochrome STN LCD, 128 x 64 pixel, LED backlight, supports (1) serial port.	\$172.00
EA1-S3MLW		C-more Micro EA1 series touch screen HMI, 3in monochrome STN LCD, 128 x 64 pixel, high-contrast white LED backlight, supports (1) serial port.	\$219.00
EA1-S3MLW-N	Non-Touch 	C-more Micro EA1 series HMI, 3in monochrome STN LCD, 128 x 64 pixel, high-contrast white LED backlight, supports (1) serial port.	\$174.00
EA1-T4CL		C-more Micro EA1 series touch screen HMI, 4in color TFT LCD, 320 x 240 pixel, QVGA, LED backlight, supports (1) serial and (1) USB port.	\$384.00

Part Number	Panel Software / Firmware Version Required
EA1-S3ML	1.0 or later
EA1-S3ML-N	
EA1-S3MLW	1.5 or later
EA1-S3MLW-N	
EA1-T4CL	3.0 or later

C-more Micro EA1 Series Selection Guide

C-more Micro EA1 Series Panel Accessories			
Part Number		Description	Price
EA-MG-BZ1		Key pad bezel, 8 predefined function keys. For use with C-more Micro EA1 series 3in HMIs.	\$70.00
EA-MG-BZ2		Key pad bezel, 20 predefined function keys. For use with C-more Micro EA1 series 3in HMIs.	\$91.00
EA-MG-P1		AC/DC power adapter, 24 VDC. For use with C-more Micro EA1 series 3in HMIs.	\$34.50
EA-MG-SP1		AC/DC power adapter, 24 VDC. For use with C-more Micro EA1 series 3in HMIs. Integral 15-pin D-Sub RS-232/422/485 port included.	\$58.00
EA-COMCON-3		DSUB port adapter, 15-pin male to 6-pole RS-422/485 terminal block, right angle cable entry. For use with C-more Micro EA1 series 4in and 6in HMIs, C-more Micro EA3 series 3in, 4in, and 6in HMIs, C-more EA9 6in and 7in HMIs.	\$45.50
EA-COMCON-3A		DSUB port adapter, 15-pin male to 6-pole RS-422/485 terminal block, straight cable entry. For use with C-more Micro EA1 series 3in with EA1-MG-SP1, C-more Micro EA3 series 8in and 10in HMIs, C-more EA9 8in, 10in, 12in and 15in HMIs.	\$21.00
EA-MG-COV-CL		Screen protector, clear, 3in. Package of 5. For use with C-more Micro 3in HMIs.	\$38.50
EA-4-COV2		Screen protector, non-glare, 4in. Package of 3. For use with C-more Micro EA1-T4CL 4in HMIs.	\$36.50
EA-6-COV2		Screen protector, non-glare, 6in. Package of 3. For use with C-more and C-more Micro 6in panels.	\$40.50



C-more Micro 3-inch EA1 Series Overview

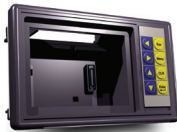




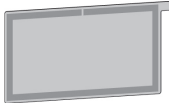
C-more Micro 3-inch EA1 Series			
Part Number		Description	Price
EA1-S3ML	Touch Screen 	C-more Micro EA1 series touch screen HMI, 3in monochrome STN LCD, 128 x 64 pixel, LED backlight, supports (1) serial port.	\$219.00
EA1-S3ML-N	Non-Touch 	C-more Micro EA1 series HMI, 3in monochrome STN LCD, 128 x 64 pixel, LED backlight, supports (1) serial port.	\$172.00
EA1-S3MLW	Touch Screen 	C-more Micro EA1 series touch screen HMI, 3in monochrome STN LCD, 128 x 64 pixel, high-contrast white LED backlight, supports (1) serial port.	\$219.00
EA1-S3MLW-N	Non-Touch 	C-more Micro EA1 series HMI, 3in monochrome STN LCD, 128 x 64 pixel, high-contrast white LED backlight, supports (1) serial port.	\$174.00



NOTE: Software and Firmware Version 1.5 or later is required with models EA1-S3MLW and EA1-S3MLW-N. Available for free download at www.automationdirect.com.

C-more Micro 3-inch EA1 Series

C-more Micro 3-inch EA1 Series Panels Programming Software & Programming Cable			
Part Number		Description	Price
EA-MG-PGMSW		C-more Micro Windows programming software, CD. For use with C-more Micro panels. Requires USB port connection from PC to C-more Micro panel.	\$27.00
EA-MG-PGM-CBL		Programming cable assembly, USB A to 6-pin RJ12, 6ft cable length. For use with C-more Micro panels, CLICK CPUs, Do-more H2 series CPUs, and DirectLOGIC CPUs.	\$46.50

C-more Micro EA1 Series Panel Accessories			
Part Number		Description	Price
EA-MG-BZ1		Keypad bezel, 8 predefined function keys. For use with C-more Micro EA1 series 3in HMIs.	\$70.00
EA-MG-BZ2		Keypad bezel, 20 predefined function keys. For use with C-more Micro EA1 series 3in HMIs.	\$91.00
EA-MG-P1		AC/DC power adapter, 24 VDC. For use with C-more Micro EA1 series 3in HMIs.	\$34.50
EA-MG-SP1		AC/DC power adapter, 24 VDC. For use with C-more Micro EA1 series 3in HMIs. Integral 15-pin D-Sub RS-232/422/485 port included.	\$58.00
EA-COMCON-3A		DSUB port adapter, 15-pin male to 6-pole RS-422/485 terminal block, straight cable entry. For use with C-more Micro EA1 series 3in with EA1-MG-SP1, C-more Micro EA3 series 8in and 10in HMIs, C-more EA9 8in, 10in, 12in and 15in HMIs.	\$21.00
EA-MG-COV-CL		Screen protector, clear, 3in. Package of 5. For use with C-more Micro 3in HMIs.	\$38.50

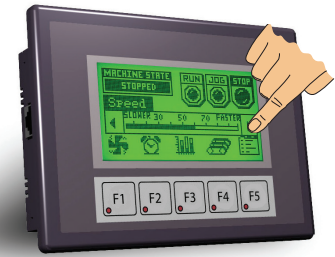


For a list of supported protocols and cabling options refer to the 3-inch C-more Micro Protocols and cabling chart starting on page tCMM-14.

C-more Micro 3-inch EA1 STN Touch Panel

Model EA1-S3ML **C-more** 3-inch Micro touch panel has a 3.1-inch STN LCD monochrome display and five selectable LED-driven backlight colors: Green, Red, Amber, Yellow and Lime. It features a 128 x 64 pixel display, and five user-defined function keys each with a user-defined red LED indicator. The panel can display up to 10 lines by 32 characters of static text and up to 10 lines by 21 characters of dynamic text with embedded variables and phrases mixed with graphics. It is rated UL for use on a flat surface of Type 1, 4X enclosure (for indoor use only). This Micro panel can receive power from the serial communications port of most AutomationDirect PLCs. An EA-MG-SP1 Serial Port with DC Power Adapter option module (RS-232/422/485) is required when using other controllers.

Part No. EA1-S3ML



\$219.00



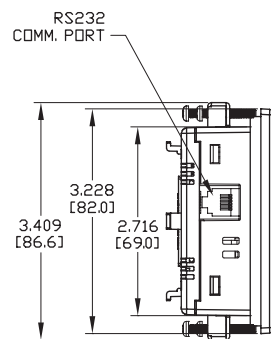
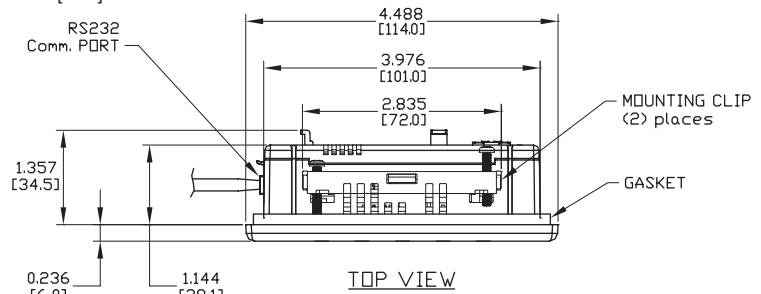
Features

- Touch screen display
- Free downloadable programming software
- 128 x 64 pixel display with up to 10 lines by 32 characters of text and graphics
- Up to 10 lines by 21 characters of dynamic text with embedded variables and phrases mixed with graphics
- 5 programmable function keys can change with every screen. Can increment / decrement values, trigger recipes, view index of screens.
- 5-Color LED backlight for longer lifetime; Green, Red, Amber, Yellow and Lime
- 2 optional snap-on keypad bezels
- 768 KB memory
- Panel is powered from PLC comm port when using select AutomationDirect PLCs. Use optional DC power adapter and serial port modules if needed for other controllers (RS-232/422/485)
- Built in Alarm Control setup that activates beep, backlight flash, customized alarm banner, and LED blinking
- 0 to 50 °C (32 to 122 °F) operating temperature range (IEC 60068-2-14)
- NEMA 4/4X, IP65 compliant when mounted correctly, indoor use only
- UL, cUL & CE agency approvals
- 2-year warranty from date of purchase

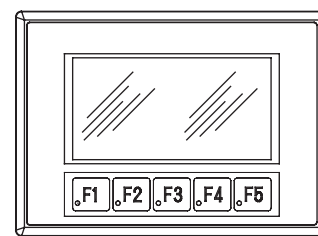
Function	Available
Ethernet	No
USB Programming Port	No
Serial RJ12 Port	Yes
Serial DB15 Port	Optional (EA-MG-SP1)

Dimensions

Units: inches [mm]



C-more Micro-Graphic Panel

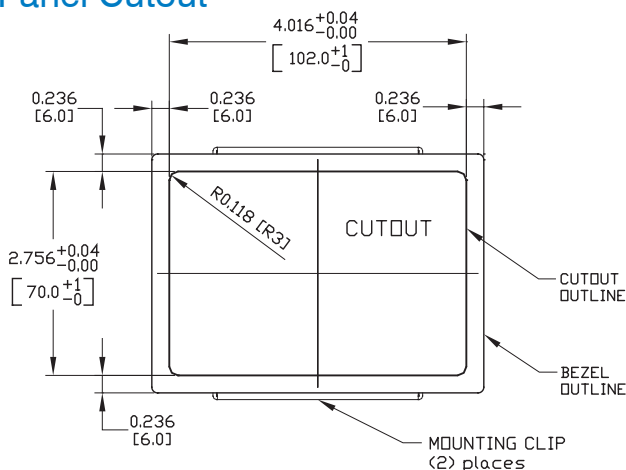


LEFT VIEW

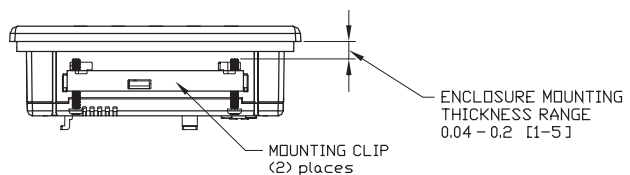
FRONT VIEW

NOTE: Don't forget the optional keypad bezels, DC power adapter and serial port with DC power adapter shown in the Accessories.

Panel Cutout



Panel Thickness



NOTE: The C-more 3-inch Micro cutout dimensions are not equivalent to previous AutomationDirect text panels. The C-more Micro panels will not fit in cutouts for DV-1000, EZText or Optimate panels.

C-more Micro 3-inch EA1 STN Touch Panel

Model EA1-S3MLW **C-more** 3-inch Micro touch panel has a 3.1-inch STN LCD monochrome display and five selectable LED-driven backlight colors: White, Pink1, Pink2, Pink3 and Red. It features a 128 x 64 pixel display, and five user-defined function keys each with a user-defined red LED indicator. The panel can display up to 10 lines by 32 characters of static text and up to 10 lines by 21 characters of dynamic text with embedded variables and phrases mixed with graphics. It is rated UL for use on a flat surface of Type 1, 4X enclosure (for indoor use only). This Micro panel can receive power from the serial communications port of most AutomationDirect PLCs. An EA-MG-SP1 Serial Port with DC Power Adapter option module (RS-232/422/485) is required when using other controllers.

Part No. EA1-S3MLW



\$219.00



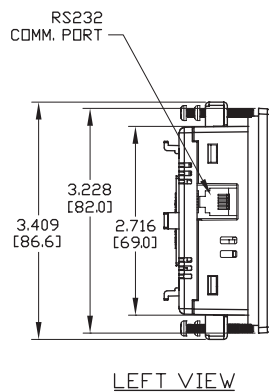
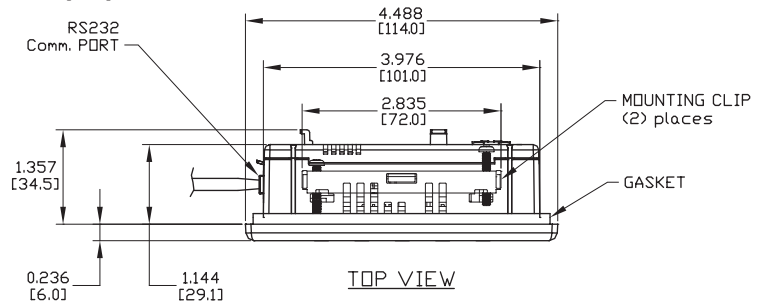
Features

- Touch screen display
- Free downloadable programming software
- 128 x 64 pixel display with up to 10 lines by 32 characters of text and graphics
- Up to 10 lines by 21 characters of dynamic text with embedded variables and phrases mixed with graphics
- 5 programmable function keys can change with every screen. Can increment / decrement values, trigger recipes, view index of screens.
- 5-Color LED backlight for longer lifetime; White, Pink1, Pink2, Pink3 and Red
- 2 optional snap-on keypad bezels
- 768 KB memory
- Panel is powered from PLC comm port when using select AutomationDirect PLCs. Use optional DC power adapter and serial port modules if needed for other controllers (RS-232/422/485)
- Built-in Alarm Control setup that activates beep, backlight flash, customized alarm banner, and LED blinking
- 0 to 50 °C (32 to 122 °F) operating temperature range (IEC 60068-2-14)
- NEMA 4/4X, IP65 compliant when mounted correctly, indoor use only
- UL, cUL & CE agency approvals
- 2-year warranty from date of purchase

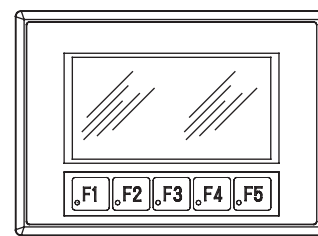
Function	Available
Ethernet	No
USB Programming Port	No
Serial RJ12 Port	Yes
Serial DB15 Port	Optional (EA-MG-SP1)

Dimensions

Units: inches [mm]



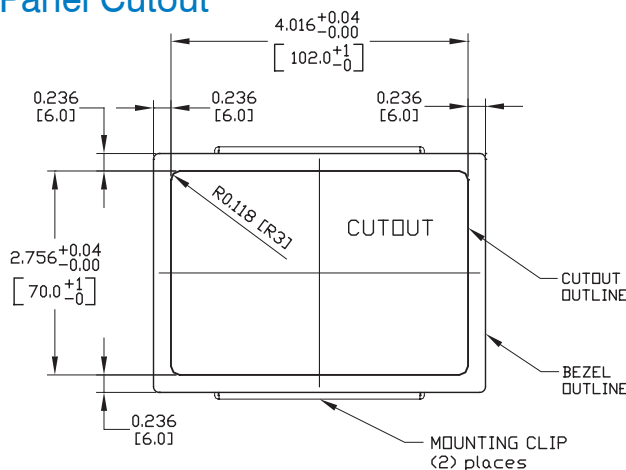
C-more Micro-Graphic Panel



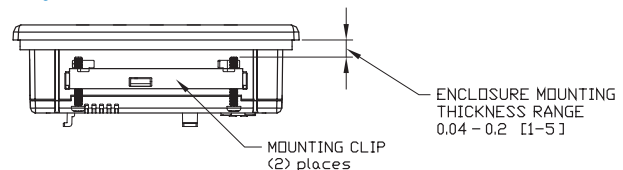
FRONT VIEW

NOTE: Don't forget the optional keypad bezels, DC power adapter and serial port with DC power adapter shown in the Accessories.

Panel Cutout



Panel Thickness



NOTE: The C-more 3-inch Micro cutout dimensions are not equivalent to previous AutomationDirect text panels. The C-more Micro panels will not fit in cutouts for DV-1000, EZText or Optimate panels.

C-more Micro 3-inch EA1 STN Non-Touch

Model EA1-S3ML-N **C-more** 3-inch Micro non-touch panel has a 3.1-inch STN LCD monochrome display and five selectable LED-driven backlight colors: Green, Red, Amber, Yellow and Lime. It features a 128 x 64 pixel display, and five user-defined function keys each with a user-defined red LED indicator. The panel can display up to 10 lines by 32 characters of static text and up to 10 lines by 21 characters of dynamic text with embedded variables and phrases mixed with graphics. It is rated UL for use on a flat surface of Type 1, 4X enclosure (for indoor use only). This Micro panel can receive power from the serial communications port of most AutomationDirect PLCs. An EA-MG-SP1 Serial Port with DC Power Adapter option module (RS-232/422/485) is required when using other controllers.

Part No. EA1-S3ML-N



\$172.00



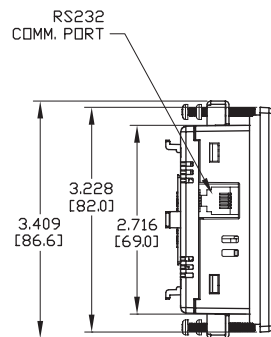
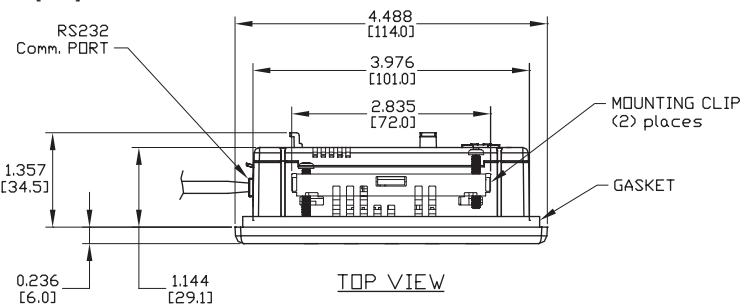
Features

- Free downloadable programming software
- 128 x 64 pixel display with up to 10 lines by 32 characters of text and graphics
- Up to 10 lines by 21 characters of dynamic text with embedded variables and phrases mixed with graphics
- 5 programmable function keys can change with every screen. Can increment / decrement values, trigger recipes, view index of screens.
- 5-Color LED backlight for longer lifetime; Green, Red, Amber, Yellow and Lime
- 2 optional snap-on keypad bezels
- 768 KB memory
- Panel is powered from PLC comm port when using select AutomationDirect PLCs. Use optional DC power adapter and serial port modules if needed for other controllers (RS-232/422/485)
- Built-in Alarm Control setup that activates beep, backlight flash, customized alarm banner, and LED blinking
- 0 to 50 °C (32 to 122 °F) operating temperature range (IEC 60068-2-14)
- NEMA 4/4X, IP65 compliant when mounted correctly, indoor use only
- UL, cUL & CE agency approvals
- 2-year warranty from date of purchase

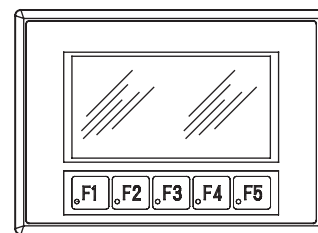
Function	Available
Ethernet	No
USB Programming Port	No
Serial RJ12 Port	Yes
Serial DB15 Port	Optional (EA-MG-SP1)

Dimensions

Units: inches [mm]

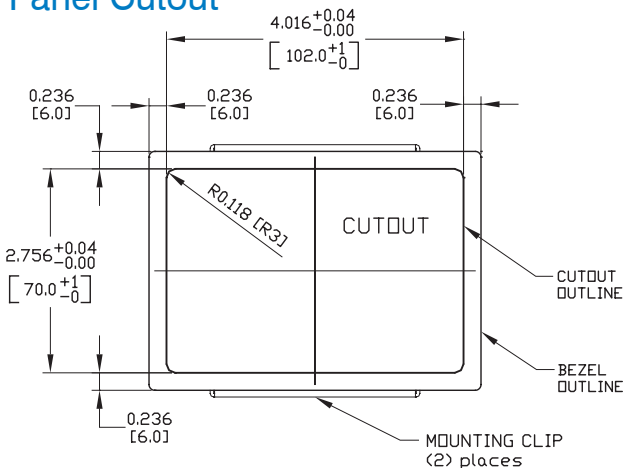


C-more Micro-Graphic Panel

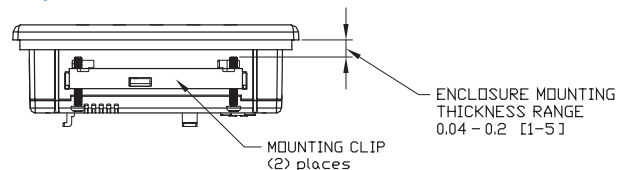


NOTE: Don't forget the optional keypad bezels, DC power adapter and serial port with DC power adapter shown in the Accessories.

Panel Cutout



Panel Thickness



NOTE: The C-more 3-inch Micro cutout dimensions are not equivalent to previous AutomationDirect text panels. The C-more Micro panels will not fit in cutouts for DV-1000, EZText or Optimate panels.

C-more Micro 3-inch EA1 STN Non-Touch

Model EA1-S3ML-N **C-more** 3-inch Micro non-touch panel has a 3.1-inch STN LCD monochrome display and five selectable LED-driven backlight colors including White, Plnk1, Pink2, Pink3 and Red. It features a 128 x 64 pixel display, and five user-defined function keys each with a user-defined red LED indicator. The panel can display up to 10 lines by 32 characters of static text and up to 10 lines by 21 characters of dynamic text with embedded variables and phrases mixed with graphics. It is rated UL for use on a flat surface of Type 1, 4X enclosure (for indoor use only). This Micro panel can receive power from the serial communications port of most AutomationDirect PLCs. An EA-MG-SP1 Serial Port with DC Power Adapter option module (RS-232/422/485) is required when using third-party PLCs.

Part No. EA1-S3MLW-N



\$174.00



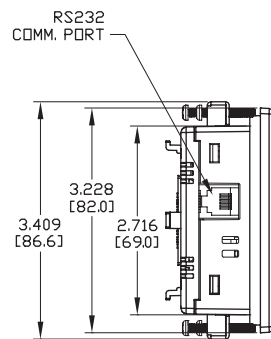
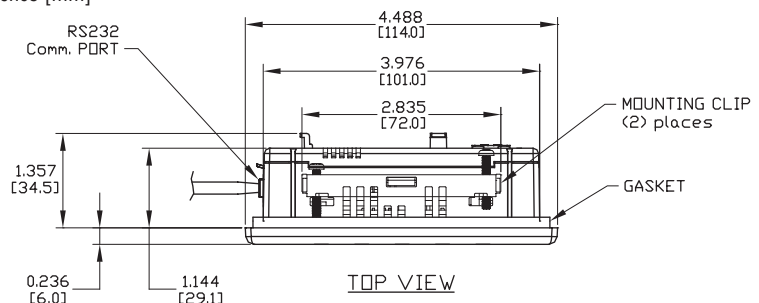
Features

- Free downloadable programming software
- 128 x 64 pixel display with up to 10 lines by 32 characters of text and graphics
- Up to 10 lines by 21 characters of dynamic text with embedded variables and phrases mixed with graphics
- 5 programmable function keys can change with every screen. Can increment / decrement values, trigger recipes, view index of screens.
- 5-Color LED backlight for longer lifetime; White, Pink1, Pink2, Pink3 and Red
- 2 optional snap-on keypad bezels
- 768 KB memory
- Panel is powered from PLC comm port when using select AutomationDirect PLCs. Use optional DC power adapter and serial port modules if needed for other controllers (RS-232/422/485)
- Built-in Alarm Control setup that activates beep, backlight flash, customized alarm banner, and LED blinking
- 0 to 50 °C (32 to 122 °F) operating temperature range (IEC 60068-2-14)
- NEMA 4/4X, IP65 compliant when mounted correctly, indoor use only
- UL, cUL & CE agency approvals
- 2-year warranty from date of purchase

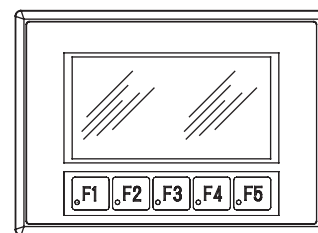
Function	Available
Ethernet	No
USB Programming Port	No
Serial RJ12 Port	Yes
Serial DB15 Port	Optional (EA-MG-SP1)

Dimensions

Units: inches [mm]



C-more Micro-Graphic Panel

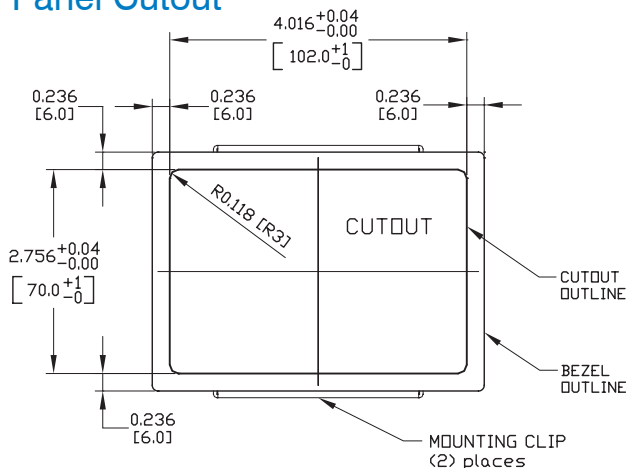


LEFT VIEW

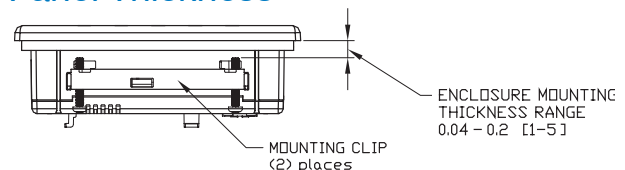
FRONT VIEW

NOTE: Don't forget the optional keypad bezels, DC power adapter and serial port with DC power adapter shown in the Accessories.

Panel Cutout



Panel Thickness



NOTE: The C-more 3-inch Micro cutout dimensions are not equivalent to previous AutomationDirect text panels. The C-more Micro panels will not fit in cutouts for DV-1000, EZText or Optimate panels.

C-more Micro 3-inch EA1 Specifications

Specification	Model	3-inch STN Micro Panel Touch Screen	3-inch STN Micro Panel Non-Touch Screen
Part Number		EA1-S3ML, EA1-S3MLW	EA1-S3ML-N, EA1-S3MLW-N
Description		128 x 64 pixel LCD display, five user defined keypad function buttons, and five user defined LEDs	
Display			
• Type		3.1-inch STN monochrome LCD, graphical characters	
• Resolution		128 (W) x 64 (H) pixel	
• Color		2 colors (normal / inverse)	
• Viewing Area Size		2.789" (W) x 1.385" (H) [70.8 mm x 35.2 mm]	
• Active Area Size		2.670" (W) x 1.259" (H) [67.8 mm x 32.0 mm]	
• Contrast		Adjusted from the panel's built-in configuration setup menu	
• Viewing Angle		3, 9 o'clock axis → 45 degrees 6 o'clock axis → 45 degrees 12 o'clock axis → 30 degrees	
Backlight			
• Type		LED	
• Color		5 user defined colors: EA1-S3ML, EA1-S3ML-N - Red, Green, Amber, Lime, and Yellow EA1-S3MLW, EA1-S3MLW-N - White, Pink1, Pink2, Pink3 and Red	
• User Replaceable		No	
Touch Screen			
• Type		Analog touch panel, single touch*	N/A
• Operation		51 gram force [0.5 N] maximum	N/A
• Life		Minimum of 1,000,000 cycles	N/A
Features			
• User Memory		768 KB	
• Number of Screens		Up to 999 – limited by project memory usage	
• Beep (Internal)		Yes	
• Keypad Function Buttons		Five user defined function key buttons with the ability to customize the label. Minimum of 500,000 cycles	
• Keypad Function Button LEDs		Each function key button includes a red LED that can be user programmed.	
• Serial Communications		Built-in RJ12 serial communications port (RS-232). Optional serial communications port (RS-232, RS-485/422) when using the optional EA-MG-SP1 Serial Port with DC Power Adapter.	
• Expansion Connection		Yes – used with optional Keypad Bezels, EA-MG-BZ1 & BZ2, and EA-MG-P1 DC Power Adapter, and EA-MG-SP1 Serial Port with DC Power Adapter.	
Screen Objects			
• Functional Devices		Pushbutton, Switch, Indicator Button, Indicator Light, Graphic Indicator Light, Numeric Display, Numeric Entry, Inc/Dec Value, Bar Graph, Bitmap Button, Static Bitmap, Dynamic Bitmap, Recipe Button, Static Text, Lookup Text, Dynamic Text, Scroll Text, Screen Change Pushbutton, Screen Selector, Adjust Contrast, Function, Key Configuration Object, Realtime Graph, Line Graph, Analog Meter	
• Static Shapes		Lines, Rectangles, Circles and Frames	
• Displayable Fonts		Fixed fonts: 4x6, 6x6, 6x6B, 6x8, 8x16, 8x32, 8x64, 16x16, 16x32, 16x64, 32x16, 32x32, 32x64, and Windows fonts	
*Note: 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 3-inch Micro panel specifications continued on next page.			



NOTE: Photo includes EA-MG-BZ2

C-more Micro 3-inch EA1 Specifications

Specification	Model	3-inch STN Micro Panel Touch Screen	3-inch STN Micro Panel Non-Touch Screen
Part Number		EA1-S3ML, EA1-S3MLW	EA1-S3ML-N, EA1-S3MLW-N
Electrical			
• Input Voltage Range		5.0 VDC (4.75 – 5.25 VDC)	
• Input Power		Supplied through the panel's RJ12 serial communications port connection when used with any AutomationDirect PLC having an RJ12 communication port. Can also be supplied from an external Class 2, 12-24 VDC power source when using the optional EA-MG-P1 DC Power Adapter, or the optional EA-MG-SP1 Serial Port with DC Power Adapter	
• Power Consumption		1.05W (220mA @ 4.75 VDC)	
• Recommended Fuse		Type AGC fast acting glass fuse, 250 mA, 250 VAC, ADC p/n AGC-25 No fuse required when directly connected to a PLC or PC with recommended cable.	
• Maximum Inrush Current		1 A for 500 µs	
• Acceptable External Power Drop Duration		Maximum 1ms	
Environmental*			
• Operating Temperature		0 to 50 °C (32 to 122 °F) Maximum surrounding air temperature rating: 50 °C	
• Storage Temperature		-20 to +60 °C (-4 to +140 °F)	
• Humidity		5–95% RH (non-condensing)	
• Environmental Air		For use in Pollution Degree 2 Environment	
• Vibration		IEC60068-2-6 (Test Fc), 5-9 Hz: 3.5 mm amplitude, 9-150 Hz: 1.0G, sweeping, at a rate of 1 octave/min. (±10%), 10 sweep cycles per axis on each of 3 mutually perpendicular axes	
• Shock		IEC60068-2-27 (Test Ea), 15 G peak, 11ms duration, three shocks in each direction per axis, on 3 mutually perpendicular axes (total of 18 shocks)	
• Noise Immunity		NEMA ICS3-304 (EN61131-2) RFI, (145MHz, 440Mhz 10W @ 10cm) Impulse 1000V @ 1µS pulse EN61000-4-2 (ESD), EN61000-4-3 (RFI), EN61000-4-4 (FTB), EN61000-4-5 (Surge) N61000-4-6 (Conducted), EN61000-4-8 (Power frequency magnetic field immunity)	
• Enclosure		For use on a flat surface of Type 1, 4X enclosure (Indoor use only)	
• Agency Approvals		CE (EN61131-2), UL508, CUL Canadian C22.2 No. 142-M95, UL File E157382, CSA File 234884	
Physical			
• Dimensions		4.488" (W) x 3.228" (H) x 1.593" (D) [114.0 mm x 82.0 mm x 40.5 mm]	
• Enclosure Mounting Thickness Range		0.04" – 0.2" [1 – 5 mm]	
• Mounting Clip Screw Torque Range		21 – 28 oz-in [0.15 – 0.2 N-m]	
• Depth from bezel rear with options Module		2.295" [58.3 mm]	
• Weight		5.82 oz. (165 g)	



NOTE: The environmental specifications for the panels shown above are also applicable for the *C-more* 3" Micro accessories shown later in this section of the catalog.

Supported Protocols / Drivers	
Serial - Panel port1 or port2*	Serial - Panel port2 only *
AutomationDirect Productivity Series	Allen-Bradley DF1 Full Duplex
AutomationDirect CLICK	Allen-Bradley DF1 Half Duplex
AutomationDirect Do-more / BRX**	Allen-Bradley PLC5 DF1
AutomationDirect K-sequence	Allen-Bradley DH485
AutomationDirect DirectNET	GE SNPX (90/30, 90/70, Micro 90, VersaMax Micro)
AutomationDirect Modbus	Mitsubishi FX
Modicon Modbus RTU	Mitsubishi Q & QnA
Entivity Modbus RTU	Omron Host Link (C200 Adapter, C500)
	Omron FINS Serial (CJ1, CS1)
	Siemens PPI (S7-200 CPU)
	AutomationDirect GS Drives
	AutomationDirect SOLO Temperature Controller



For a list of supported protocols and cabling options refer to the 3-inch *C-more* Micro Protocols and cabling chart starting on page tCMM-14.

Notes: * Serial port 2 requires the use of EA-MG-SP1 adapter for *C-more* Micro 3-inch EA1 series
** BX-P-SER2-RJ12 is required

C-more Micro 3-inch EA1 Series Programming Connections

C-more STN Micro Programming Connection

Using the **C-more** Micro Programming Software for project development, STN **C-more** Micro panels can be connected to a PC (personal computer) by using EA-MG-PGM-CBL, the USB-to-RS-232 cable assembly.

- Connect the USB programming cable (included) from a USB port type A on the PC to the USB type B port on the converter (included). Next connect the serial programming cable from the converter's RJ12 port to the panel's RJ12 serial port. The panel receives power from the USB port of the PC that it is connected to through the USB to RS-232 converter assembly.

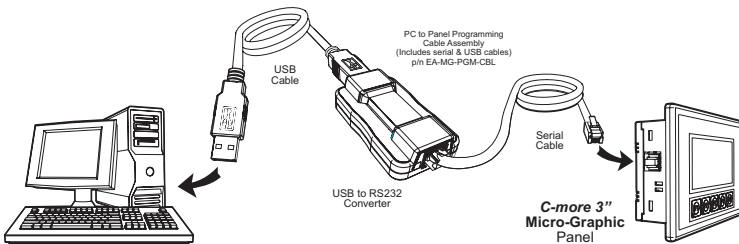
USB to RS-232 Programming Cable Assembly



Part No. EA-MG-PGM-CBL

\$46.50

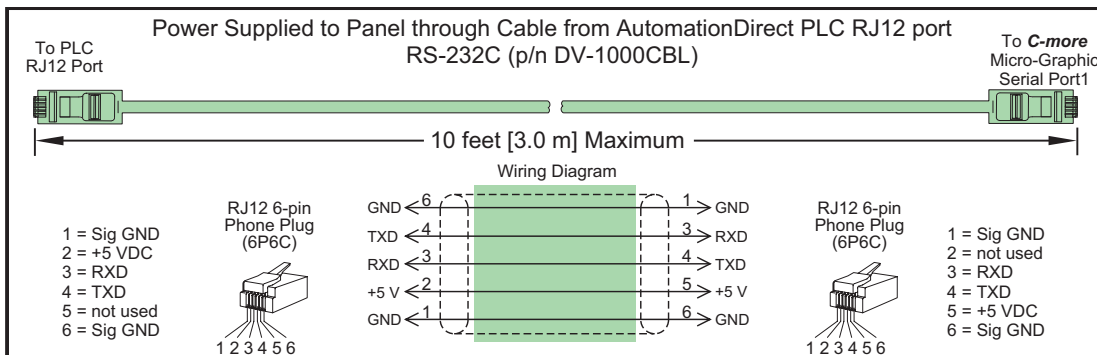
USB Connectivity



NOTE: EA1-T4CL does NOT use the EA-MG-PGM-CBL assembly. EA1-T4CL panel uses a standard USB A-to-B type cable such as USB-CBL-AB6.

USB to RS-232 Converter Specifications	
Part Number	EA-MG-PGM-CBL
Hardware	
USB Interface	USB Specification Rev. 1.1 Connector: USB Type B jack to accept USB Type B cable plug
Serial Interface	RS-232 (EIA-232-E) Connector: RJ12 phone jack 6p to accept RJ12 cable plug
Baud Rate	115.2 kbps Maximum
Input Voltage	5 VDC (Supplied thru serial interface cable.)
Power Consumption	50 mA (Does not include power to panel and/or bezel.)
Accessory Cables (included)	
USB Cable	USB Type A plug to PC on one end, USB Type B plug to converter on other end, 0.30 m [1 foot] length (* Note)
Serial Cable	RJ12 phone plug connectors on both ends, 2.0 m [6.56 feet] length (* Note)
Physical	
Dimensions	2.559" (W) x 1.417" (H) x 0.886" (D) [65.0 mm x 36.0 mm x 22.5 mm]
Weight	1.06 oz. [30 g]
Environmental	See Micro panel specifications at the beginning of this catalog section.

*** Note: Maximum cable length for either the USB or serial cable should not exceed 2.0 m [6.56 feet] in length.**

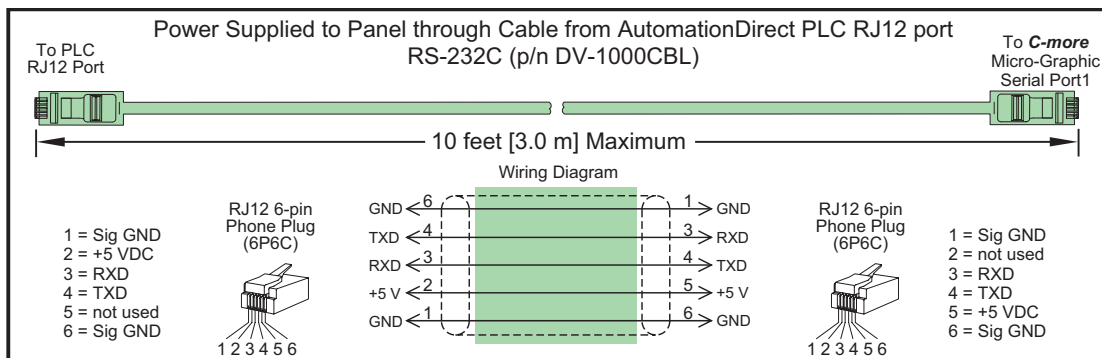


C-more Micro 3-inch EA1 Power Connection Wiring

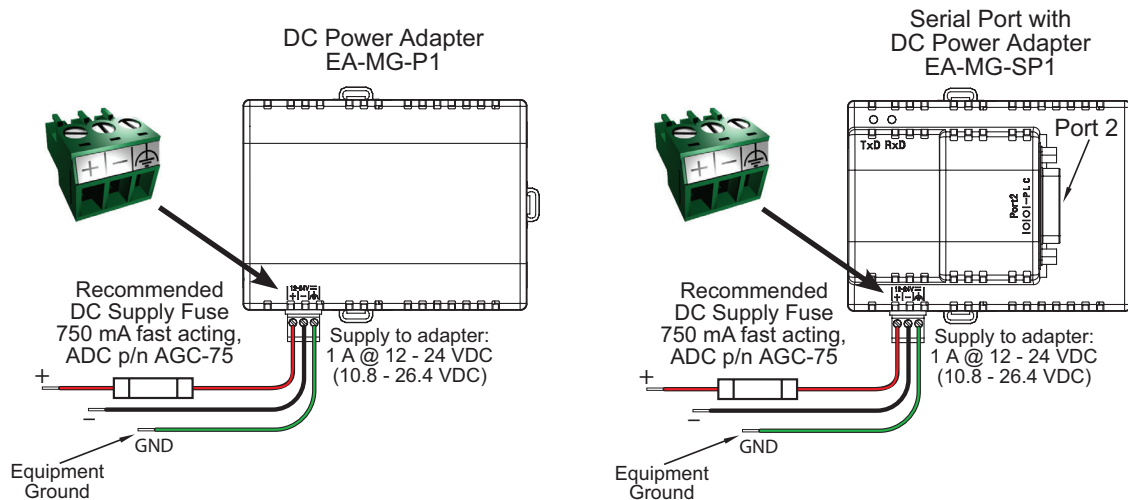
Providing power to the touch panel

- The **C-more** 3-inch Micro panel is powered during programming from the PC through the USB to RS-232 Programming Cable Assembly, EA-MG-PGM-CBL.
- During operation, the **C-more** Micro panel can be powered from most **AutomationDirect** PLC's RJ12 serial communications port by using the DV-1000CBL communications cable.
- Or install either the DC Power Adapter, EA-MG-P1, or the Serial Port with DC Power Adapter, EA-MG-SP1, to the rear of the panel and supply the adapter from a Class 2, 12-24 VDC power source.

3-inch Panel powered from AutomationDirect PLC via communications cable



3-inch panel powered from a DC power adapter – wiring diagram



NOTE: Recommended DC power supply to power either DC Power Adapter, AutomationDirect Part No. PSC-24-015 or PSC-24-030.

NOTE: The maximum communication cable length when a 3-inch panel is powered from an optional DC power adapter is 50 feet.

C-more Micro 3-inch EA1 PLC Connections

Cabling requirements

The following cables can be used when connecting the **C-more** 3-inch Micro panel's built-in RJ12 serial port (Port1) with the Productivity Series, Do-more/BRX*, CLICK, DL05, DL06, DL105, DL205, D3-350 and DL405 CPUs.

- DV-1000CBL — connects to Productivity Series, Do-more/BRX* CLICK, DL05, DL06, DL105, DL205, D3-350 and D4-450 phone jack.
- D4-1000CBL — connects to all DL405 CPU 15-pin ports.

A maximum cable length of 10 feet between the **C-more** Micro panel and the PLC is recommended when powering the panel from the PLC.

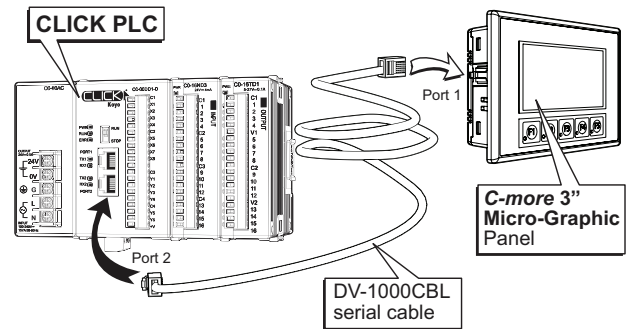
The Serial Port with DC Power Adapter module, EA-MG-SP1, can be used with the **C-more** Micro 3-inch EA1 series if the application requires the use of RS-422 or RS-485. The serial port on the adapter, designated as port 2, can also be wired for RS-232. The use of the adapter permits greater cable length. See the Communication Protocols & Cabling Charts in this catalog section for details on the selection of various controllers, protocols, and connectivity.

Drivers for your Controller

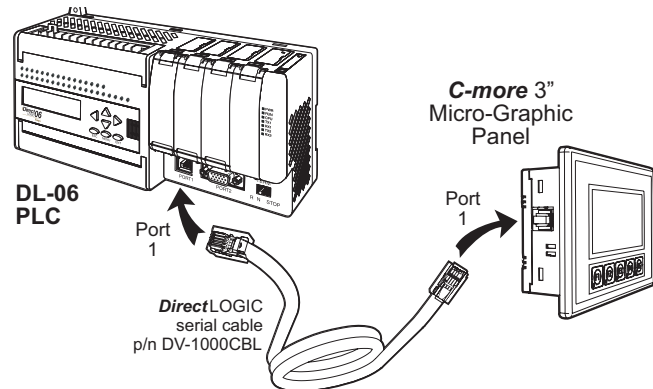
- AutomationDirect Productivity Series
- AutomationDirect Do-more/BRX*
- AutomationDirect CLICK (Modbus)
- **Direct**LOGIC K-sequence, **Direct**LOGIC DirectNET, **Direct**LOGIC Modbus (Koyo Addressing)
- Modbus RTU
- Allen Bradley DF1 Full Duplex, Allen Bradley DF1 Half Duplex, Allen Bradley PLC5 DF1, AB DH485
- Omron Host Link (C200 Adapter, C500)
Omron FINS serial (CJ1, CS1)
- GE SNPX (90/30, 90/70, Micro 90, VersaMax Micro)
- Mitsubishi Melsec FX
- Siemens PPI
- Entivity Modbus RTU
- AutomationDirect GS Drives
- AutomationDirect SOLO Temperature Controllers
- Mitsubishi Q/QnA

* BX-P-SER2-RJ12 is required

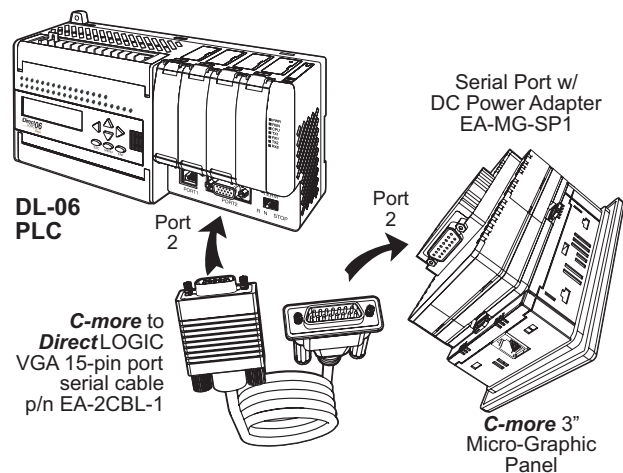
C-more 3-inch Micro Port 1 to CLICK PLC Port 2



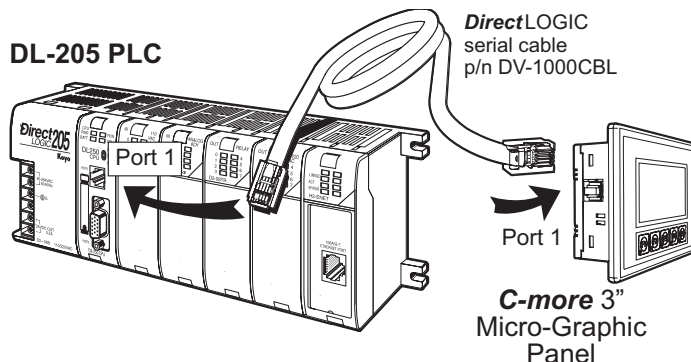
C-more 3-inch Micro Port 1 to DL06 PLC Port 1



C-more 3-inch Micro Port 2 to DL06 PLC Port 2



C-more 3-inch Micro Port 1 to DL205 PLC Port 1



C-more Micro 3-inch EA1 Communication Protocols & Cabling Chart

Controller Compatibility & Connection Chart										
PLC			C-more 3-inch Micro Panel.							
Family	CPU	Port & Type	Panel to PLC Cabling Components Required for Specific Port and Protocol being used.							
			PLC Port Powered Powered with 5 VDC from the connected PLC's comm. port.		DC Power Adapter Powered from an external 24 VDC source using the DC Power Adapter, EA-MG-SP1.		Serial Port with DC Power Adapter Powered from an external 24 VDC source using the Serial Port with DC Power Adapter, EA-MG-SP1.			
			Using panel's RJ12 port 1		Using panel's RJ12 port 1		Using panel's RJ12 port 1		Using adapter's serial Port 2 15-pin D-sub - female	
			Protocol(s) Supported	Components & Network Type	Protocol(s) Supported	Components & Network Type	Protocol(s) Supported	Components & Network Type	Protocol(s) Supported	Components & Network Type
CLICK	all versions	Port 1 RJ12 - 6 pin	Automation Direct Modbus (CLICK)	DV-1000CBL RS-232	Automation Direct Modbus (CLICK)	DV-1000CBL RS-232	Automation Direct Modbus (CLICK)	DV-1000CBL RS-232	Automation Direct Modbus (CLICK)	EA-2CBL RS-232
		Port 2 RJ12 - 6 pin		N/A		N/A		N/A		See Note RS-485
	Analog CPU's	Terminal block - 3-pin								
Productivity Series	all versions	RS-232 RJ12 - 6 pin	Automation Direct Productivity Serial	DV-1000CBL RS-232	Automation Direct Productivity Serial	DV-1000CBL RS-232	Automation Direct Productivity Serial	DV-1000CBL RS-232	Automation Direct Productivity Serial	DV-1000CBL RS-232
		RS-485 Port Term block 3-pin		N/A		N/A		N/A		See Note RS-485
Do-more	all versions	Port 2 RJ12 - 6 pin	Automation Direct Do-more Serial	DV-1000CBL RS-232	Automation Direct Do-more Serial	DV-1000CBL RS-232	Automation Direct Do-more Serial	DV-1000CBL RS-232	Automation Direct Do-more Serial	DV-1000CBL RS-232
BRX	all versions	RS-232 POM module BX-P-SER2-RJ12	Automation Direct Do-more Serial	DV-1000CBL RS-232	Automation Direct Do-more Serial	DV-1000CBL RS-232	Automation Direct Do-more Serial	DV-1000CBL RS-232	Automation Direct Do-more Serial	DV-1000CBL RS-232
		RS-485 Port Term block 3-pin		N/A		N/A		N/A		See Note RS-485
DirectLOGIC DL05 (see DO-DCM under DL06)	all versions	Port 1 RJ12 - 6 pin	K-sequence, DirectNET, Modbus RTU	DV-1000CBL RS-232	K-sequence, DirectNET, Modbus RTU	DV-1000CBL RS-232	K-sequence, DirectNET, Modbus RTU	DV-1000CBL RS-232	K-sequence, DirectNET, Modbus RTU	EA-2CBL RS-232
	Port 2 RJ12 - 6 pin									
DirectLOGIC DL06	all versions	Port 1 RJ12 - 6 pin	K-sequence, DirectNET, Modbus RTU	DV-1000CBL RS-232	K-sequence, DirectNET, Modbus RTU	DV-1000CBL RS-232	K-sequence, DirectNET, Modbus RTU	DV-1000CBL RS-232	K-sequence, DirectNET, Modbus RTU	EA-2CBL RS-232
		Port 2 DB15HD (female)		DV-1000CBL + FA-15HD RS-232		DV-1000CBL + FA-15HD RS-232		DV-1000CBL + FA-15HD RS-232		EA-2CBL-1 RS-232
			Modbus RTU				See Note RS-422			
			Modbus RTU				See Note RS-485 Modbus only			
DO-DCM	DO-DCM	Port 1 RJ12 - 6 pin	K-sequence, DirectNET, Modbus RTU	DV-1000CBL RS-232	K-sequence, DirectNET, Modbus RTU	DV-1000CBL RS-232	K-sequence, DirectNET, Modbus RTU	DV-1000CBL RS-232	K-sequence, DirectNET, Modbus RTU	EA-2CBL RS-232
		Port 2 DB15HD (female)		DV-1000CBL + FA-15HD RS-232		DV-1000CBL + FA-15HD RS-232		DV-1000CBL + FA-15HD RS-232		EA-2CBL-1 RS-232
										See Note RS-422
										See Note RS-485 Modbus only
DirectLOGIC DL105	all versions	Port 1 RJ12 - 6 pin	K-sequence	DV-1000CBL RS-232	K-sequence	DV-1000CBL RS-232	K-sequence	DV-1000CBL RS-232	K-sequence	EA-2CBL RS-232

Note: See the C-more Micro Hardware User Manual, Chapter 6: PLC Communications, for wiring diagrams that the user can use to construct their own cables. Available for download at www.automationdirect.com. PLC Compatibility & Connection Chart continued on next page.

C-more Micro 3-inch EA1 Communication Protocols & Cabling Chart (cont'd)

Controller Compatibility & Connection Chart										
PLC			C-more 3-inch Micro Panel.							
Family	CPU	Port & Type	Panel to PLC Cabling Components Required for Specific Port and Protocol being used.							
			PLC Port Powered Powered with 5 VDC from the connected PLC's comm. port.		DC Power Adapter Powered from an external 24 VDC source using the DC Power Adapter, EA-MG-P1.		Serial Port with DC Power Adapter Powered from an external 24 VDC source using the Serial Port with DC Power Adapter, EA-MG-SP1.			
			Using panel's RJ12 port 1		Using panel's RJ12 port 1		Using panel's RJ12 port 1		Using adapter's serial Port 2 15-pin D-sub - female	
			Protocol(s) Supported	Components & Network Type	Protocol(s) Supported	Components & Network Type	Protocol(s) Supported	Components & Network Type	Protocol(s) Supported	Components & Network Type
DirectLOGIC DL205	D2-230	Port 1 RJ12 - 6 pin	K-sequence	DV-1000CBL RS-232	K-sequence	DV-1000CBL RS-232	K-sequence	DV-1000CBL RS-232	K-sequence	EA-2CBL RS-232
	D2-240	Port 1 RJ12 - 6 pin	K-sequence	DV-1000CBL RS-232	K-sequence	DV-1000CBL RS-232	K-sequence	DV-1000CBL RS-232	K-sequence	EA-2CBL RS-232
		Port 2 RJ12 - 6 pin	K-sequence, DirectNET		K-sequence, DirectNET		K-sequence, DirectNET		K-sequence, DirectNET	
	D2-250-1	Port 1 RJ12 - 6 pin	K-sequence, DirectNET, Modbus RTU	DV-1000CBL RS-232	K-sequence, DirectNET, Modbus RTU	DV-1000CBL RS-232	K-sequence, DirectNET, Modbus RTU	DV-1000CBL RS-232	K-sequence, DirectNET, Modbus RTU	EA-2CBL RS-232
		Port 2 DB15HD (female)		DV-1000CBL + FA-15HD RS-232		DV-1000CBL + FA-15HD RS-232		DV-1000CBL + FA-15HD RS-232		EA-2CBL-1 RS-232 See Note RS-422
	D2-260	Port 1 RJ12 - 6 pin	K-sequence, DirectNET, Modbus RTU	DV-1000CBL RS-232	K-sequence, DirectNET, Modbus RTU	DV-1000CBL RS-232	K-sequence, DirectNET, Modbus RTU	DV-1000CBL RS-232	K-sequence, DirectNET, Modbus RTU	EA-2CBL RS-232
		Port 2 DB15HD (female)		DV-1000CBL + FA-15HD RS-232		DV-1000CBL + FA-15HD RS-232		DV-1000CBL + FA-15HD RS-232		K-sequence, DirectNET, Modbus RTU See Note RS-422 Modbus RTU See Note RS-485 Modbus only
	D2-DCM	Port 1 DB 25 pin (female)	K-sequence, DirectNET, Modbus RTU	See Note RS-232	K-sequence, DirectNET, Modbus RTU	See Note RS-232	K-sequence, DirectNET, Modbus RTU	See Note RS-232	DirectNET	EA-4CBL-2 RS-232 See Note RS-422
	WINPLC	Port 1 RJ12 - 6 pin	Modbus RTU	DV-1000CBL RS-232	Modbus RTU	DV-1000CBL RS-232	Modbus RTU	DV-1000CBL RS-232	Modbus RTU	EA-2CBL RS-232
	DirectLOGIC DL305	D3-330 or D3-340	D3-232-DCU DB 25 pin (female)	N/A		DirectNET	See Note RS-232	DirectNET	See Note RS-232	DirectNET
D3-422-DCU DB 25 pin (female)			N/A		N/A		N/A	DirectNET	See Note RS-422	
D3-340		Port 1 RJ11 - 4 pin	N/A		DirectNET	OP-3CBL-1 RS-232	DirectNET	OP-3CBL-1 RS-232	DirectNET	EA-3CBL RS-232
		Port 2 RJ11 - 4 pin	N/A		DirectNET, Modbus RTU		DirectNET, Modbus RTU		DirectNET, Modbus RTU	
D3-350		Port 1 RJ12 - 6 pin	K-sequence, DirectNET	DV-1000CBL RS-232	K-sequence, DirectNET	DV-1000CBL RS-232	K-sequence, DirectNET	DV-1000CBL RS-232	K-sequence, DirectNET	EA-2CBL RS-232
		Port 2 DB 25 pin (female)	N/A		K-sequence, DirectNET, Modbus RTU	See Note RS-232	K-sequence, DirectNET, Modbus RTU	See Note RS-232	K-sequence, DirectNET, Modbus RTU	EA-4CBL-2 RS-232 See Note RS-422
D3-DCM D3-350 only	Port 1 DB 25 pin (female)	K-sequence, DirectNET, Modbus RTU	See Note RS-232	K-sequence, DirectNET, Modbus RTU	See Note RS-232	K-sequence, DirectNET, Modbus RTU	See Note RS-232	DirectNET	EA-4CBL-2 RS-232 See Note RS-422	

Note: See the C-more Micro Hardware User Manual, Chapter 6: PLC Communications, for wiring diagrams that the user can use to construct their own cables. Available for download at www.automationdirect.com. PLC Compatibility & Connection Chart continued on next page.

C-more Micro 3-inch EA1 Communication Protocols & Cabling Chart (cont'd)

Controller Compatibility & Connection Chart										
PLC			C-more 3-inch Micro Panel.							
Family	CPU	Port & Type	Panel to PLC Cabling Components Required for Specific Port and Protocol being used.							
			PLC Port Powered		DC Power Adapter		Serial Port with DC Power Adapter			
			Powered with 5 VDC from the connected PLC's comm. port.		Powered from an external 24 VDC source using the DC Power Adapter, EA-MG-P1.		Powered from an external 24 VDC source using the Serial Port with DC Power Adapter, EA-MG-SP1.			
			Using panel's RJ12 port 1		Using panel's RJ12 port 1		Using panel's RJ12 port 1		Using adapter's serial Port 2 15-pin D-sub - female	
Protocol(s) Supported	Components & Network Type	Protocol(s) Supported	Components & Network Type	Protocol(s) Supported	Components & Network Type	Protocol(s) Supported	Components & Network Type	Protocol(s) Supported	Components & Network Type	
DirectLOGIC DL405	D4-430	Port 0 DB 15 pin (female)	K-sequence	D4-1000CBL or DV-1000CBL & FA-CABKIT RS-232	K-sequence	D4-1000CBL or DV-1000CBL & FA-CABKIT RS-232	K-sequence	D4-1000CBL or DV-1000CBL & FA-CABKIT RS-232	K-sequence	EA-4CBL-1 RS-232
		Port 1 DB 25 pin (female)	N/A		K-sequence, DirectNET	DV-1000CBL & FA-CABKIT RS-232	K-sequence, DirectNET	DV-1000CBL & FA-CABKIT RS-232	K-sequence, DirectNET	EA-4CBL-2 RS-232 See Note RS-422
	D4-440	Port 0 DB 15 pin (female)	K-sequence	D4-1000CBL or DV-1000CBL & FA-CABKIT RS-232	K-sequence	D4-1000CBL or DV-1000CBL & FA-CABKIT RS-232	K-sequence	D4-1000CBL or DV-1000CBL & FA-CABKIT RS-232	K-sequence	EA-4CBL-1 RS-232
		Port 1 DB 25 pin (female)	N/A		K-sequence, DirectNET	DV-1000CBL & FA-CABKIT RS-232	K-sequence, DirectNET	DV-1000CBL & FA-CABKIT RS-232	K-sequence, DirectNET	EA-4CBL-2 RS-232 See Note RS-422
	D4-450 / D4-454	Port 0 DB 15 pin (female)	K-sequence	D4-1000CBL or DV-1000CBL & FA-CABKIT RS-232	K-sequence	D4-1000CBL or DV-1000CBL & FA-CABKIT RS-232	K-sequence	D4-1000CBL or DV-1000CBL & FA-CABKIT RS-232	K-sequence	EA-4CBL-1 RS-232
		Port 1 DB 25 pin (female)	N/A		K-sequence, DirectNET, Modbus RTU	DV-1000CBL & FA-CABKIT RS-232	K-sequence, DirectNET, Modbus RTU	DV-1000CBL & FA-CABKIT RS-232	K-sequence, DirectNET, Modbus RTU	EA-4CBL-2 RS-232 See Note RS-422
		Port 2 RJ12 - 6 pin Port 3 DB 25 pin (female)	K-sequence, DirectNET	DV-1000CBL RS-232	K-sequence, DirectNET	DV-1000CBL RS-232	K-sequence, DirectNET	DV-1000CBL RS-232	K-sequence, DirectNET, Modbus RTU	EA-2CBL RS-232 See Note RS-422
	D4-DCM	Port 1 DB 25 pin (female)	K-sequence, DirectNET, Modbus RTU	See Note RS-232	K-sequence, DirectNET, Modbus RTU	See Note RS-232	K-sequence, DirectNET, Modbus RTU	See Note RS-232	DirectNET	EA-4CBL-2 RS-232 See Note RS-422
	SOLO	N/A	Data +/- terminals	N/A		N/A		N/A		SOLO Temperature Controller
GS Drives	N/A	RS-485 Interface	N/A		N/A		N/A		GS Drives Serial GS Drives TCP/IP (GS-EDRV)	See Note RS-485

Note: See the C-more Micro Hardware User Manual, Chapter 6: PLC Communications, for wiring diagrams that the user can use to construct their own cables. Available for download at www.automationdirect.com. PLC Compatibility & Connection Chart continued on next page.

C-more Micro 3-inch EA1 Communication Protocols & Cabling Chart (cont'd)

Controller Compatibility & Connection Chart										
PLC			C-more 3-inch Micro Panel.							
Family	CPU	Port & Type	Panel to PLC Cabling Components Required for Specific Port and Protocol being used.							
			PLC Port Powered Powered with 5 VDC from the connected PLC's comm. port.		DC Power Adapter Powered from an external 24 VDC source using the DC Power Adapter, EA-MG-P1.		Serial Port with DC Power Adapter Powered from an external 24 VDC source using the Serial Port with DC Power Adapter, EA-MG-SP1.			
			Using panel's RJ12 port 1		Using panel's RJ12 port 1		Using panel's RJ12 port 1		Using adapter's serial Port 2 15-pin D-sub - female	
			Protocol(s) Supported	Components & Network Type	Protocol(s) Supported	Components & Network Type	Protocol(s) Supported	Components & Network Type	Protocol(s) Supported	Components & Network Type
Allen-Bradley MicroLogix	1000, 1100, 1200, 1400, 1500	8-pin mini-din port	N/A	N/A	N/A	DF1 Full Duplex	EA-MLOGIX-CBL RS-232			
		RJ45 8-pin phone plug				DH485/AIC/AIC+	EA-DH485-CBL RS-232			
Allen-Bradley SLC500	5/03, 5/04, 5/05	9-pin D-sub port				DF1 Full Duplex	EA-SLC-232-CBL RS-232			
		5/01, 5/02, 5/03				RJ45 8-pin phone plug	DH485/AIC/AIC+	EA-DH485-CBL RS-232		
Allen-Bradley ControlLogix	all	9-pin D-sub port				DF1 Full Duplex	EA-SLC-232-CBL RS-232			
Allen-Bradley CompactLogix	all	9-pin D-sub port				DF1 Full Duplex	EA-SLC-232-CBL RS-232			
Allen-Bradley FlexLogix	all	9-pin D-sub port				DF1 Full Duplex	EA-SLC-232-CBL RS-232			
Allen-Bradley PLC5	all	25-pin D-sub port				DF1 Full Duplex	EA-PLC5--232-CBL RS-232			
		RJ45 8-pin phone plug				DH485/AIC/AIC+	EA-DH485-CBL RS-232			
GE	90/30 Micro 90, VersaMax Micro	15-pin D-sub port				N/A	N/A	N/A	SNPX	EA-90-30-CBL RS-422
		RJ45 Port 1								See Note RS-232
15-pin D-sub port Port 2	EA-90-30-CBL RS-422									
Mitsubishi	Melsec FX Series	25-pin D-sub port							CPU Direct	EA-MITSU-CBL RS-422
		8-pin mini-din port								EA-MITSU-CBL-1 RS-422
	Q / QnA	9-pin D-sub port								See Note RS-232
		6-pin mini-din port								See Note RS-232
Omron	C200 (Adapter), C500	25-pin D-sub port							Host Link	EA-OMRON-CBL RS-232
		CJ1, CS1, CQM1, CPM1, CPM2, C200							FINS	See Note RS-232
Modicon	984 CPU, Quantum 113 CPU, AEG Modicon Micro Series 110 CPU	varies	Modbus RTU	See Note RS-232						
Siemens	S7-200 CPU	9-pin D-sub port 0 or 1	PPI	See Note RS-485						

Note: See the C-more Micro Hardware User Manual, Chapter 6: PLC Communications, for wiring diagrams that the user can use to construct their own cables. Available for download at www.automationdirect.com. Available cables with descriptions shown on the next page.

C-more Micro 3-inch EA1 Communication Cables and Cable Kits

Cable Description	Cable Part Number	Price
Cables for direct connect to panel's serial Port1 (Panel powered from PLC's serial port.)		
Communication cable, 6-pin RJ12 to 6-pin RJ12, 2m/6.6ft cable length. For use with DV-1000 or C-more Micro panels and AutomationDirect PLCs with an RJ12 port.	DV-1000CBL	\$20.50
Communication cable, 6-pin RJ12 to 15-pin male D-sub, shielded, 2m/6.6ft cable length. For use with DV-1000 or C-more Micro panels and any DL405 CPU.	D4-1000CBL	\$18.50
DirectLOGIC DL06 connector, 15-pin D-sub HD15 male to RJ12 female. For use with DL06 CPUs and DL205 D2-250, D2-250-1, D2-260 and D2-262 CPUs.	FA-15HD	\$13.50
<i>DirectLOGIC</i> universal cable kit, for use with all DirectLOGIC PLCs with RS-232 ports.	FA-CABKIT	\$49.00
Communication cable, 6-pin RJ12 to 6-pin RJ11, 2m/6.6ft cable length. For use with any OP400 series OptiMate unit and a D3-340 CPU.	OP-3CBL-1	\$6.00
Cables used with serial Port2		
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	\$21.50
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	\$22.00
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	\$21.50
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	\$21.50
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	\$22.50
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	\$33.00
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	\$21.50
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	\$21.50
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	\$21.00
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	\$21.50
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	\$21.50
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	\$21.50
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	\$21.50



DV-1000CBL



D4-1000CBL



OP-3CBL-1



FA-15HD



FA-CABKIT



EA-2CBL-1



EA-2CBL



EA-4CBL-1



EA-3CBL



EA-MLOGIX-CBL



EA-4CBL-2



EA-PLC5-232-CBL



EA-SLC-232-CBL



EA-DH485-CBL



EA-90-30-CBL



EA-MITSU-CBL



EA-MITSU-CBL-1



EA-OMRON-CBL

C-more Micro 3-inch EA1 Panel Accessories

8-button Keypad Bezel

The 8-button keypad bezel can be used with both the touch and non-touch **C-more** Micro 3-inch EA1 series panels. The keypad includes four directional arrow cursor buttons, and one each of an ESCAPE, MENU, CLEAR and ENTER button. The keypad is intended to be used with the numeric entry object (Style 3) to allow changing

of a value, and can also be used to navigate & select objects when using the non-touch panel version. The keypad bezel is designed for easy drop-in of a **C-more** Micro 3-inch EA1 series panel. No panel configuration required.

Part No. EA-MG-BZ1



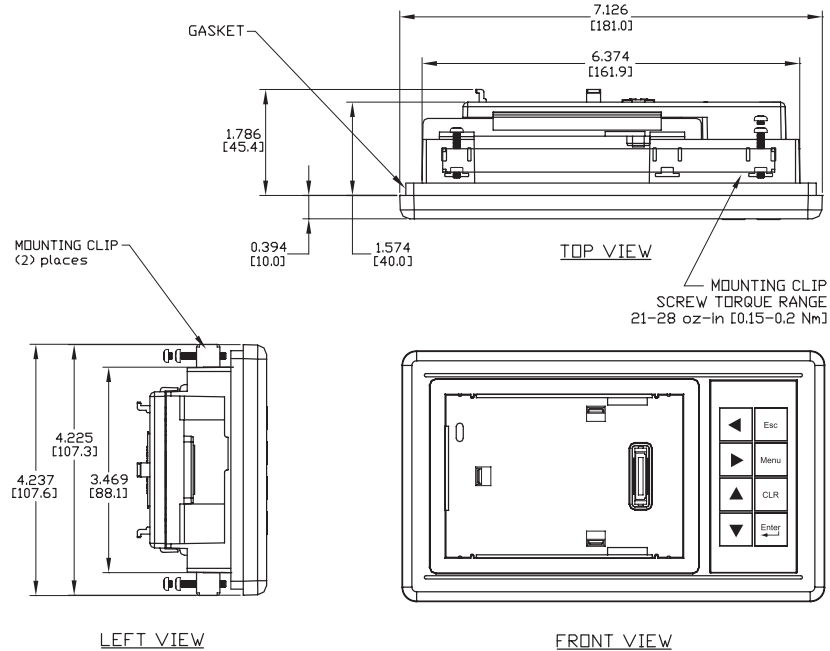
\$70.00

Four directional cursor buttons, and ESC, MENU, CLEAR and ENTER buttons.

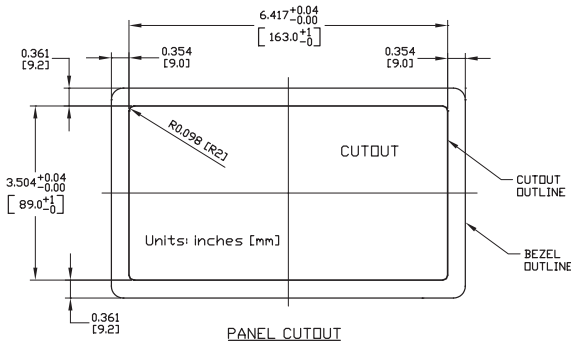


Dimensions

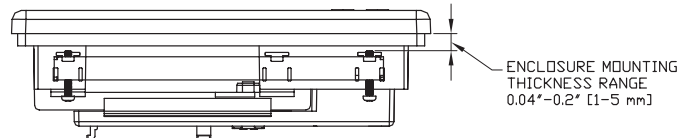
Units: inches [mm]



Panel Cutout



Panel Thickness



8-Button Keypad Bezel Specifications

Part Number	EA-MG-BZ1
General	
• C-more Micro Panels Supported	EA1-S3ML, EA1-S3MLW, EA1-S3ML-N, EA1-S3MLW-N
• Connection	Connects with expansion connector on the rear of a C-more 3-inch Micro panel. An expansion connector is also located on the rear of the keypad bezel to allow the EA-MG-P1 DC Power Adapter, or the EA-MG-SP1 Serial Port with DC Power Adapter to be attached.
• Power Consumption	None
• Keypad Button Life	Minimum of 500,000 cycles
• Enclosure Mounting	(2) mounting clips, EA-MG-BZ1-BRK, included. Note: The C-more 3-inch Micro panel is installed into the keypad bezel using the EA-MG-S3ML-BRK mounting clips that are supplied with the panel.
Physical	
• Weight	7.05 oz. [200 g]
• Environmental	See environmental specifications at the beginning of this catalog section.

C-more Micro 3-inch EA1 Panel Accessories

20-Button Keypad Bezel

The 20-button keypad bezel can be used with both the touch and non-touch **C-more** Micro 3-inch EA1 series panels. The keypad includes four directional arrow cursor buttons, a full numeric keypad, and one each of an ESCAPE, MENU, CLEAR and ENTER button. The keypad is intended to be used with the numeric entry object (Style 3) to allow changing of a value, and

can also be used to navigate & select objects when using the non-touch panel version. The numeric buttons can be used to enter a new value. The keypad bezel is designed for easy drop-in of a **C-more** Micro 3-inch EA1 series panel. No panel configuration required.

Part No. EA-MG-BZ2

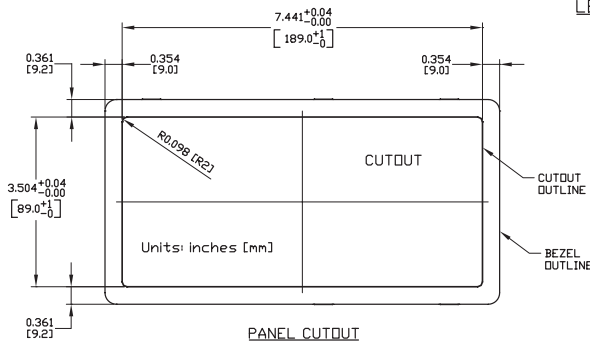


\$91.00

Four directional cursor buttons, numeric buttons, and ESC, MENU, CLEAR and ENTER buttons.

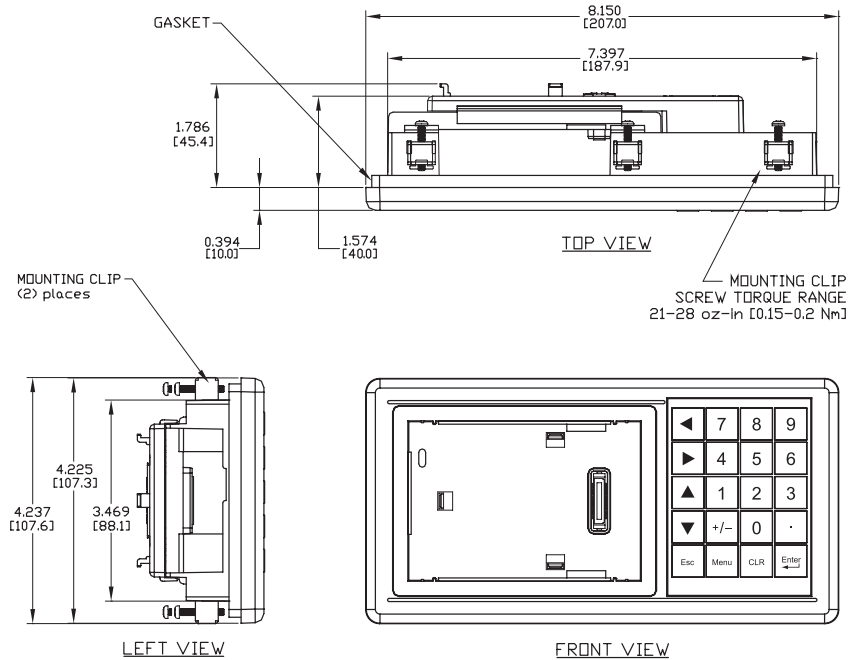


Panel Cutout

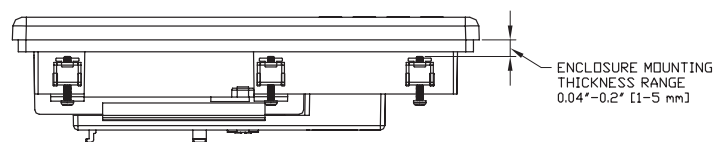


Dimensions

Units: inches [mm]



Panel Thickness



20-Button Keypad Bezel Specifications

Part Number	EA-MG-BZ2
General	
• C-more Micro Panels Supported	EA1-S3ML, EA1-S3MLW, EA1-S3ML-N, EA1-S3MLW-N
• Connection	Connects with expansion connector on the rear of a 3-inch C-more Micro panel. An expansion connector is also located on the rear of the keypad bezel to allow the EA-MG-P1 DC Power Adapter, or the EA-MG-SP1 Serial Port with DC Power Adapter to be attached.
• Power Consumption	None
• Keypad Button Life	Minimum of 500,000 cycles
• Enclosure Mounting	(6) mounting clips, EA-MG-BZ2-BRK, included. Note: The C-more 3-inch Micro panel is installed into the keypad bezel using the EA-MG-S3ML-BRK mounting clips that are supplied with the panel.
Physical	
• Weight	7.40 oz. [210 g]
Environmental	See environmental specifications at the beginning of this catalog section.

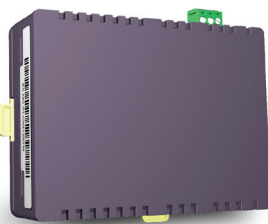
C-more Micro 3-inch EA1 Panel Accessories

DC Power Adapter

The **C-more** Micro 3-inch EA1 series panel is designed to use the 5 VDC power that is available from an RJ12 serial communications port found on some **AutomationDirect** PLC's. However, for other devices that do not supply power through their serial communications port, the EA-MG-P1 DC power adapter or EA-MG-SP1 serial port with DC power adapter must be used.

Both adapters require power from a Class 2, 12-24 VDC source. The EA-MG-P1 DC Power Adapter for **C-more** Micro 3-inch EA1 series is designed to easily snap on to the rear of a **C-more** Micro 3-inch EA1 series panel or the rear of an optional Keypad Bezel being used with a **C-more** Micro 3-inch EA1 series panel.

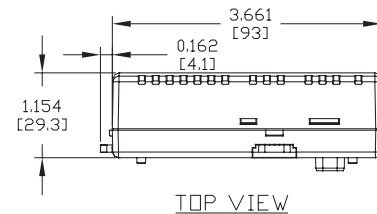
Part No. EA-MG-P1



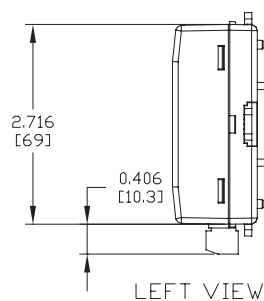
\$34.50

Dimensions

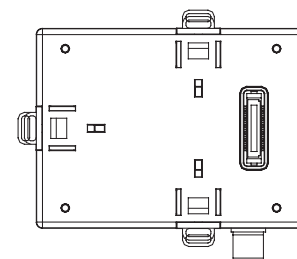
Units: inches [mm]



TOP VIEW

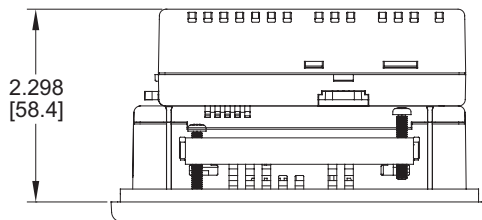


LEFT VIEW

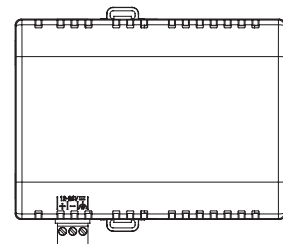


REAR VIEW

Panel overall depth with adapter installed



Units: inches [mm]



FRONT VIEW

DC Power Adapter Specifications

DC Power Adapter Specifications	
Part Number	EA-MG-P1
Electrical	
• Input Voltage	12-24 VDC
• Input Voltage Range	10.8-26.4 VDC
• Power Consumption	100 mA @ 24 VDC
• Maximum Power	2.90 Watts
• Maximum Inrush Current	5 A @ 500 µs with 12 VDC applied, 10 A @ 500 µs with 24 VDC applied
• Recommended Fuse	Type AGC fast acting glass fuse, 750 mA, 250 VAC, ADC #AGC-75
• Connector Type	3-pin screw type terminal block
Physical	
• Weight	2.8 oz. [80 g]
Environmental	See environmental specifications at the beginning of this catalog section.



NOTE: Recommended DC power supply to power either DC Power Adapter, AutomationDirect Part No. PSC-24-015 or PSC-24-030.

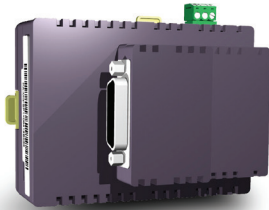
C-more Micro 3-inch EA1 Panel Accessories

Serial Port with DC Power Adapter

The **C-more** Micro 3-inch EA1 series panel is designed to use the 5 VDC power that is available from an RJ12 serial communications port of some **AutomationDirect** PLC's. However, for other devices that do not supply power through their serial communications port, the EA-MG-P1 DC power adapter or EA-MG-SP1 serial port with DC power adapter must be used. The EA-MG SP1, with D-Sub 15-pin RS-232/RS-422/485 serial port, can be used to connect to

a PLC using RS-232 or RS-422/485. The adapter requires power from a Class 2, 12-24 VDC source. This optional Serial Port with DC Power Adapter for **C-more** Micro 3-inch EA1 series is designed to easily snap on to the rear of a **C-more** Micro 3-inch EA1 series panel or the rear of an optional Keypad Bezel being used with a **C-more** Micro 3-inch EA1 series panel.

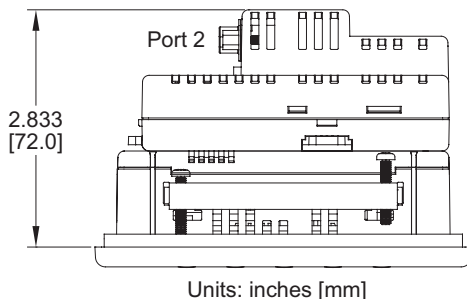
Part No. EA-MG-SP1



Supports:
RS-232,
RS-485,
& RS-422

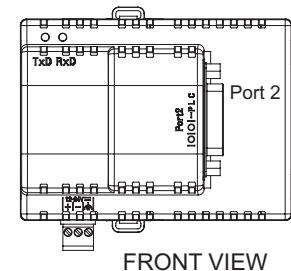
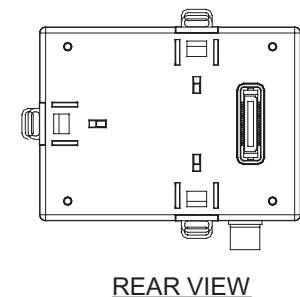
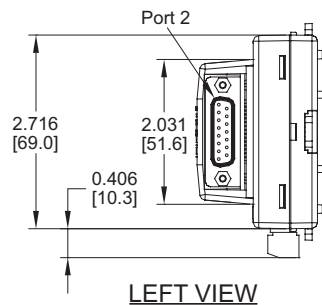
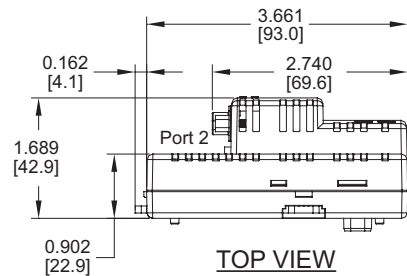
\$58.00

Panel overall depth
with adapter installed



Dimensions

Units: inches [mm]



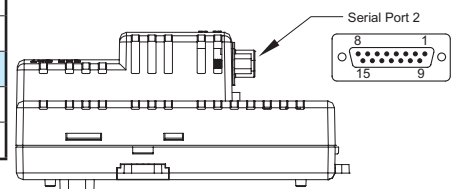
Serial Port w/ DC Power Adapter Specifications	
Part Number	EA-MG-SP1
Serial PLC Interface	
• Interface Standard	RS-232 & RS-485/422
• Adjustable Settings from Software (Dependent on PLC Protocol)	Baud rate: 9600, 19200 or 38400 bits/sec Data bits: 7/8 bits Parity: None, Odd/Even Stop bits: 2/1 bits
• Connector Type	15-pin D-sub connector (female)
Electrical	
• Input Voltage	12-24 VDC
• Input Voltage Range	10.8-26.4 VDC
• Power Consumption	100 mA @ 24 VDC
• Maximum Power	2.90 Watts
• Maximum Inrush Current	5 A @ 500 μs with 12 VDC applied, 10 A @ 500 μs with 24 VDC applied
• Recommended Fuse	Type AGC fast acting glass fuse, 750 mA, 250 VAC, ADC #AGC-75
• Connector Type	3-pin screw type terminal block
Physical	
• Weight	2.8 oz. [80 g]
• Environmental	See environmental specifications at the beginning of this catalog section.



NOTE: Recommended DC power supply to power either DC Power Adapter, AutomationDirect Part No. PSC-24-015 or PSC-24-030.

PLC Serial Communications Port 2

Pin	Signal	Pin	Signal	Pin	Signal
1	Frame GND	6	LE	11	TXD+ (422/485)
2	TXD (232C)	7	CTS (232C)	12	TXD- (422/485)
3	RXD (232C)	8	RTS (232C)	13	Term. Resistor
4	Supplies +5VDC	9	RXD+ (422/485)	14	do not use
5	Logic GND	10	RXD- (422/485)	15	do not use

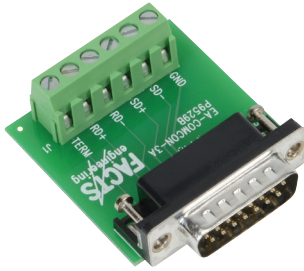


C-more Micro 3-inch EA1 Panel Accessories

D-SUB 15-pin to Terminal Block Adapter

DSUB port adapter, 15-pin male to 6-pole RS-422/485 terminal block, straight cable entry. For use with **C-more** Micro EA1 series 3in with EA1-MG-SP1, **C-more** Micro EA3 series 8in and 10in HMLs, **C-more** EA9 8in, 10in, 12in and 15in HMLs.

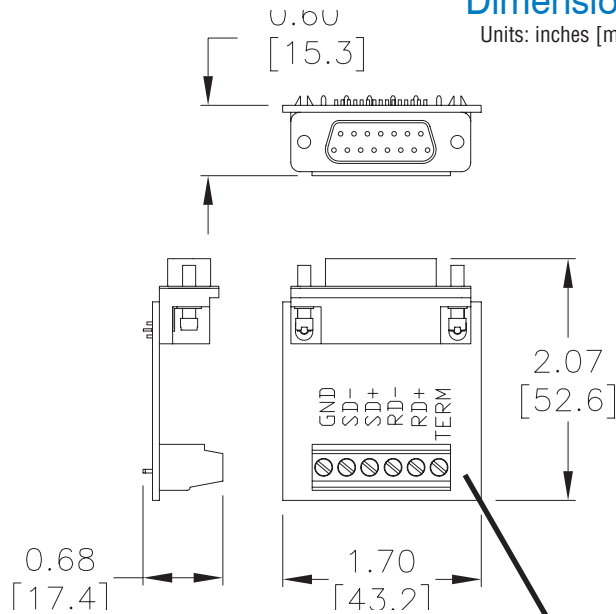
Part No.
EA-COMCON-3A



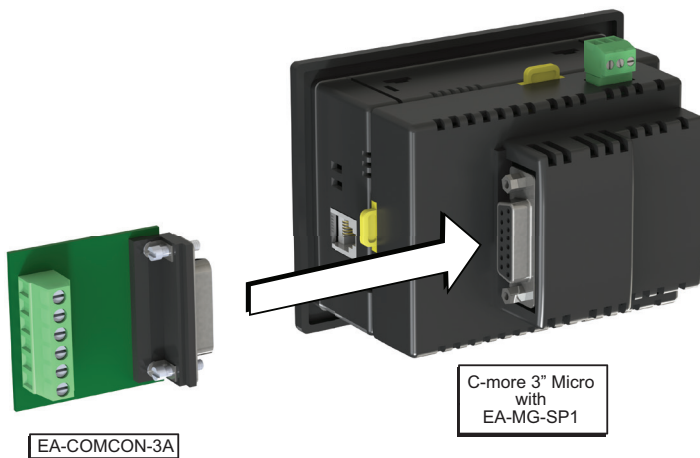
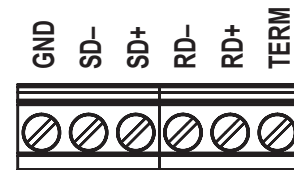
\$21.00

Dimensions

Units: inches [mm]



Terminals



C-more 3" Micro
with
EA-MG-SP1

EA-COMCON-3A

C-more Micro 3-inch EA1 Panel Accessories

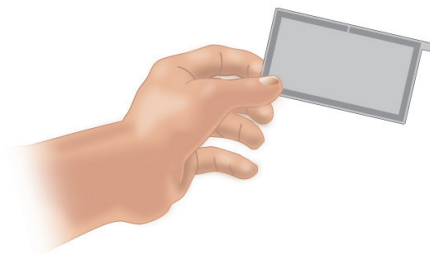
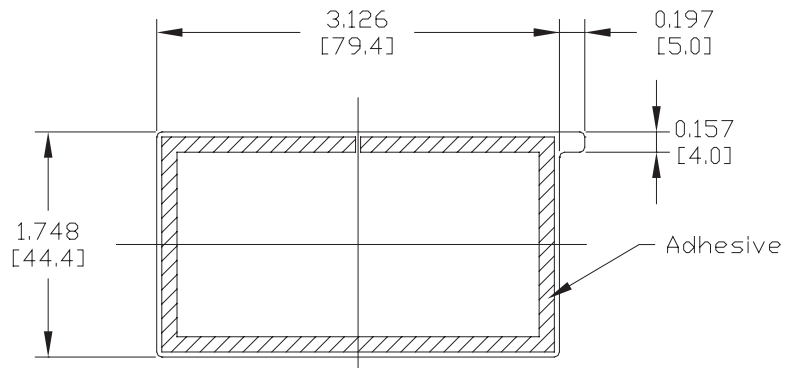
Clear Screen Overlay

Optional clear screen overlay used to protect **C-more** 3-inch Micro displays from minor scratches and wear. Package contains 5 clear screen overlays.

Part No. EA-MG-COV-CL

Dimensions

Units: inches [mm]



\$38.50

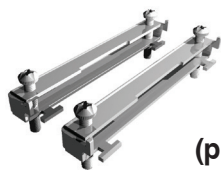
C-more Micro 3-inch EA1 Replacement Parts

The optional replacement parts can be used to replace damaged, worn or lost **C-more** 3-inch Micro panel components.

Replacement parts at a glance:

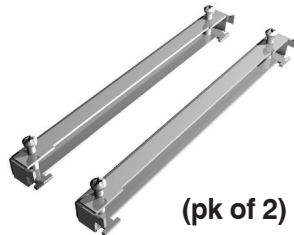
Part Number	Description	Price
EA-MG-S3ML-BRK	Panel mounting brackets, replacement. Package of 2. For use with C-more Micro 3in and EA3-T4CL HMIs.	\$19.00
EA-MG-BZ1-BRK	Panel mounting brackets, replacement. Package of 2. For use with C-more Micro bezel EA-MG-BZ1.	\$19.00
EA-MG-BZ2-BRK	Panel mounting brackets, replacement. Package of 8. For use with C-more Micro 4in and 6in panels, all 6in bezels, and 3in bezel EA-MG-BZ2.	\$20.00
EA-MG-DC-CON	DC 3-terminal power connector, replacement. Package of 5. For use with all C-more Micro 4in, 6in, 8in and 10in panels, and power adapters EA-MG-P1 and EA-MG-SP1.	\$15.50
EA-MG-S3ML-GSK	Panel mounting gasket, replacement. For use with C-more Micro EA1 series 3in HMIs.	\$13.50
EA-MG-BZ1-GSK	Panel mounting gasket, replacement. For use with C-more Micro 3in bezel EA-MG-BZ1.	\$16.50
EA-MG-BZ2-GSK	Panel mounting gasket, replacement. For use with C-more Micro 3in bezel EA-MG-BZ2.	\$16.50
EA-MG-S3ML-FKL	Function key label insert, replacement. Package of 10. For use with C-more Micro 3in panels. (5) blank labels (5) landscape F1-F5 label included.	\$10.00

Panel Mounting Clips
Part No. EA-MG-S3ML-BRK



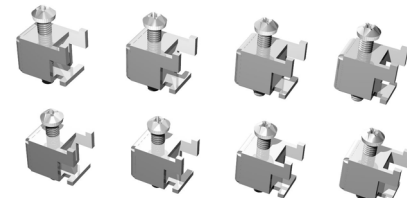
(pk of 2)

Keypad Bezel 1 Mounting Clips
Part No. EA-MG-BZ1-BRK



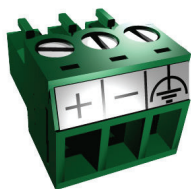
(pk of 2)

Keypad Bezel 2 Mounting Clips
Part No. EA-MG-BZ2-BRK



(pk of 8)

DC Power Connector
Part No. EA-MG-DC-CON



(pk of 5)

3-inch Panel Gasket
Part No. EA-MG-S3ML-GSK



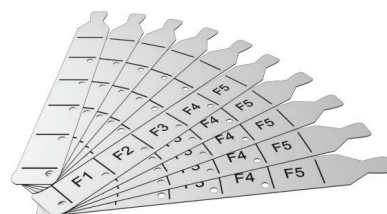
3-inch Keypad Bezel 1 Gasket
Part No. EA-MG-BZ1-GSK



3-inch Keypad Bezel 2 Gasket
Part No. EA-MG-BZ2-GSK




3-inch Panel Function Keys Label Inserts
Part No. EA-MG-S3ML-FKL





(pk of 10 - 5 blank, 5 F1-F5)



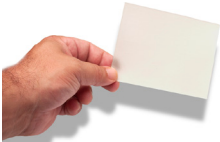
C-more Micro 4-inch EA1 Panel Overview

C-more 4-inch and 6-inch EA1 Micro Panels			
Part Number		Description	Price
EA1-T4CL		C-more Micro EA1 series touch screen HMI, 4in color TFT LCD, 320 x 240 pixel, QVGA, LED back-light, supports (1) serial and (1) USB port.	\$384.00



Note: Software and Firmware Version 3.00 or later is required with model EA1-T4CL. Available for free download at www.automationdirect.com.

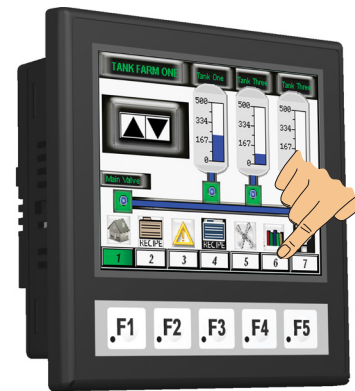
C-more Micro Programming Software			
Part Number		ff3shortDescrip	listPrice
EA-MG-PGMSW		C-more Micro Windows programming software, CD. For use with C-more Micro panels. Requires USB port connection from PC to C-more Micro panel.	\$27.00
USB-CBL-AB3		Programming cable, USB A to USB B, 3ft cable length. For use with C-more HMIs, Do-more and Productivity series CPUs and most USB devices.	\$8.50
USB-CBL-AB6		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.	\$11.00
USB-CBL-AB10		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.	\$25.50
USB-CBL-AB15		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.	\$29.00

C-more 4-inch and 6-inch EA1 Panel Accessories			
Part Number		Description	Price
EA-ADPTR-4		DSUB port adapter, 15-pin male to 15-pin female, right angle cable entry. For use with C-more Micro EA1 series 4in and 6in HMIs, C-more Micro EA3 series 3in, 4in, and 6in HMIs, C-more EA9 6in and 7in HMIs.	\$42.50
EA-COMCON-3		DSUB port adapter, 15-pin male to 6-pole RS-422/485 terminal block, right angle cable entry. For use with C-more Micro EA1 series 4in and 6in HMIs, C-more Micro EA3 series 3in, 4in, and 6in HMIs, C-more EA9 6in and 7in HMIs.	\$45.50
EA-4-COV2		Screen protector, non-glare, 4in. Package of 3. For use with C-more Micro EA1-T4CL 4in HMIs.	\$36.50
EA-6-COV2		Screen protector, non-glare, 6in. Package of 3. For use with C-more and C-more Micro 6in panels.	\$40.50

C-more Micro 4-inch EA1 TFT Touch Panel

Model EA1-T4CL **C-more** 4-inch Micro touch panel has a 4.1-inch TFT LCD 320 x 240 pixel display and a palette of 32K colors for customizing objects, screen backgrounds and displaying bitmap graphics. It features five user-defined function keys, each key with a user-defined red LED indicator. The panel can display up to 40 lines by 80 characters of static text and up to 30 lines by 40 characters of dynamic text with embedded variables and phrases mixed with graphics in landscape orientation. Portrait orientation can display 54 lines by 59 characters of static text and 40 lines by 40 characters of dynamic text. It is rated UL for use on a flat surface of Type 1, 4X enclosure (for indoor use only). The **C-more** 4-inch Micro TFT panels are powered from a Class 2, 12-24 VDC power supply*.

Part No. EA1-T4CL



Function	Available
Ethernet	No
USB Programming Port	Yes
Serial RJ12 Port	No
Serial DB15 Port	Yes



\$384.00

Features

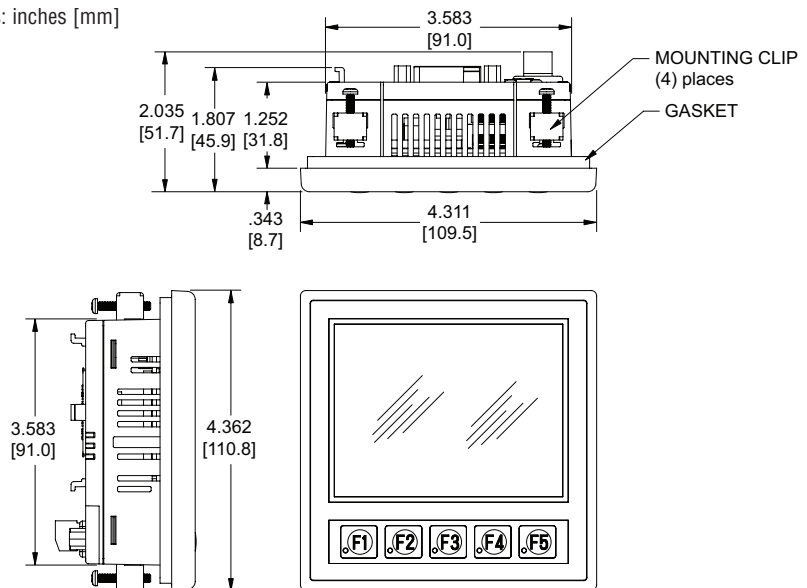
- Standard 1/4 DIN mounting cutout
- Touch screen display
- Free downloadable programming software
- 320 x 240 pixel display with up to 40 lines by 80 characters of text and graphics in landscape mode
- Up to 40 lines by 40 characters of dynamic text with embedded variables and phrases mixed with graphics
- 5 programmable function keys can change with every screen. Can increment / decrement values, trigger recipes, view index of screens.
- 32K colors
- Optional replaceable clear screen overlay
- 3,276 KB memory
- Built-in USB type B programming port
- Built-in 15-pin serial communications port
- Built-in Alarm Control setup that activates beep, backlight flash, customized alarm banner, and red LED blinking
- 0 to 50 °C (32 to 122 °F) operating temperature range (IEC 60068-2-14)
- NEMA 4/4X, IP65 compliant when mounted correctly, indoor use only
- UL, cUL & CE agency approvals
- 2-year warranty from date of purchase



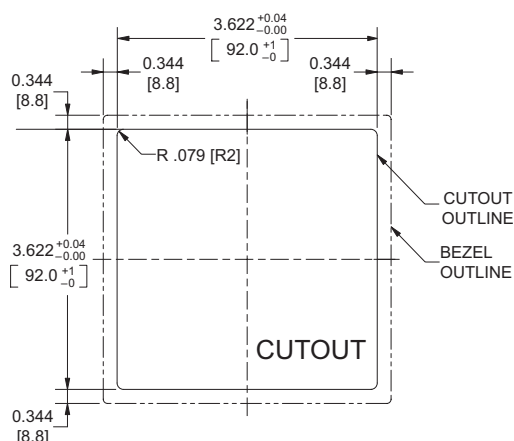
***NOTE: The EA1-T4CL can be powered through Port1 when connected to a PC for programming, the screen brightness is diminished because the panel is running in Low-Power Mode. For full brightness, connect an external Class 2, 12-24 VDC power source to the 4-inch panel's power connection. An external Class 2, 12-24 VDC power source must be used when the panel is installed in its application.**

Dimensions

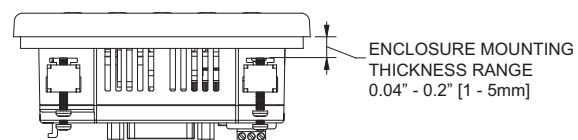
Units: inches [mm]



Panel Cutout - Standard 1/4 DIN



Panel Thickness



NOTE: The C-more 4-inch Micro cutout dimensions are not equivalent to previous AutomationDirect text panels. The C-more 4-inch Micro panels will not fit in cutouts for DV-1000, EZText, Optimate panels or C-more panels.

C-more Micro 4-inch EA1 Specifications

EA1-T4CL Specifications	
Description	320 x 240 pixel LCD display (Landscape Mode), five user defined keypad function buttons, and five user defined LED's
Display	
• Type	4.1" TFT Color LCD, graphical characters
• Resolution	320 (W) x 240 (H) pixel (Landscape Mode) 240 (W) x 320 (H) pixel (Portrait Mode)
• Color	32768 colors
• Display Brightness (Reference)	USB Bus Power (Programming) - 180 nits (typ) High Power Mode - 360 nits (typ)
• Viewing Area Size	3.357" (W) x 2.54" (H) [85.26 mm x 64.62 mm]
• Active Area Size	3.250" (W) x 2.438" (H) [82.56 mm x 61.92 mm]
• Brightness	Adjusted from the panel's built-in configuration setup menu
• Viewing Angle	3, 9 o'clock axis → 35 degrees 6 o'clock axis → 50 degrees 12 o'clock axis → 20 degrees
Backlight	
• Type	LED
• Color	White
• User Replaceable	No
Touch Screen	
• Type	Analog touch panel, single touch*
• Operation	82 gram force [0.8 N] maximum
• Life	Minimum of 1,000,000 cycles
Features	
• User Memory	3276 kBytes
• Number of Screens	Up to 999 – limited by project memory usage
• Beep (Internal)	Yes
• Keypad Function Buttons	Five user defined function key buttons with the ability to customize label with an overlay. Minimum of 500,000 cycles
• Keypad Function Button LEDs	Each function key button includes a red LED that can be user programmed.
• Programming Port	USB Type B
• Serial Communications	15-pin D-sub serial communications port (RS-232, RS-485 / 422)
Screen Objects	
• Functional Devices	Pushbutton, Switch, Indicator Button, Indicator Light, Graphic Indicator Light, Numeric Display, Numeric Entry, Inc/Dec Value, Bar Graph, Bitmap Button, Static Bitmap, Dynamic Bitmap, Recipe Button, Static Text, Lookup Text, Dynamic Text, Screen Change Pushbutton, Screen Selector, Adjust Contrast, Function, Key Configuration Object, Real Time Graphics Line Graph, Analog Meter.
• Static Shapes	Lines, Rectangles, Circles and Frames
• Displayable Fonts	Fixed fonts: 4x6, 6x6, 6x6B, 6x8, 8x16, 8x32, 8x64, 16x16, 16x32, 16x64, 32x16, 32x32, 32x64, and Windows fonts
*Note: 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.	
EA1-T4CL specifications continued on next page.	

C-more Micro 4-inch EA1 Specifications

EA1-T4CL Specifications (cont'd)		
Electrical:		
	USB Bus Power (Programming)	High Power Mode
• Input Voltage Range	5.0 VDC (4.75 – 5.25 VDC)	12/24 VDC (10.2 – 26.4 VDC)
• Input Power	Supplied from a PC USB	Supplied from an external Class 2, 12-24 VDC power source
• Power Consumption	2W	4.5 W
• Recommended Fuse	No fuse required when directly connected to a PC with recommended cable.	Type AGC fast acting glass fuse, 750 mA, 250 VAC, ADC p/n AGC-75
• Maximum Inrush Current	4.5 A for 800 μ s	8 A for 800 μ s - EA1-T4CL
• Acceptable External Power Drop Duration	Maximum 1ms	
Environmental:		
• Operating Temperature	0 to 50 °C (32 to 122 °F) Maximum surrounding air temperature rating: 50 °C	
• Storage Temperature	-20 to +60 °C (-4 to +140 °F)	
• Humidity	5–95% RH (non-condensing)	
• Environmental Air	For use in Pollution Degree 2 environment	
• Vibration	IEC60068-2-6 (Test Fc), 5-9 Hz: 3.5 mm amplitude, 9-150 Hz: 1.0G, sweeping, at a rate of 1 octave/min. (\pm 10%), 10 sweep cycles per axis on each of 3 mutually perpendicular axes	
• Shock	IEC60068-2-27 (Test Ea), 15 G peak, 11ms duration, three shocks in each direction per axis, on 3 mutually perpendicular axes (total of 18 shocks)	
• Noise Immunity	NEMA ICS3-304 (EN61131-2) RFI, (145MHz, 440MHz 10W @ 10cm) Impulse 1000V @ 1 μ S pulse EN61000-4-2 (ESD), EN61000-4-3 (RFI), EN61000-4-4 (FTB), EN61000-4-5 (Surge) EN61000-4-6 (Conducted), EN61000-4-8 (Power frequency magnetic field immunity)	
• Enclosure	For use on a flat surface of Type 1, 4X enclosure (Indoor use only)	
• Agency Approvals	CE (EN61131-2), UL508, CUL Canadian C22.2 No. 142-M95, UL File E157382, CSA 234884	
Physical:		
• Enclosure Mounting Thickness Range	0.04" – 0.2" [1 – 5 mm]	
• Mounting Clip Screw Torque Range	21 – 28 oz-in [0.15 – 0.2 N·m]	
• Weight	14.99 oz. (425 g)	30.69 oz. (870 g)

PLC Drivers	
Serial - port2 only	
AutomationDirect Productivity Series	Allen-Bradley DF1 Half Duplex
AutomationDirect CLICK	Allen-Bradley DF1 Full Duplex
AutomationDirect Do-more / BRX*	Allen-Bradley PLC5 DF1
AutomationDirect K-sequence	Allen-Bradley DH485
AutomationDirect DirectNET	GE SNPX (90/30, 90/70, Micro 90, VersaMax Micro)
AutomationDirect Modbus	Mitsubishi FX
AutomationDirect SOLO	Mitsubishi (Q, QnA)
AutomationDirect GS Drives	Omron Host Link (C200 Adapter, C500)
Modicon Modbus RTU	Omron FINS Serial (CJ1, CS1)
Entity Modbus RTU	Siemens PPI (S7-200 CPU)
* BX-P-SER-RJ12 is required	



NOTE: EA1-T4CL cannot be powered by a PLC and cannot communicate with a PLC through Port1

C-more Micro 4-inch EA1 Power Connection Wiring

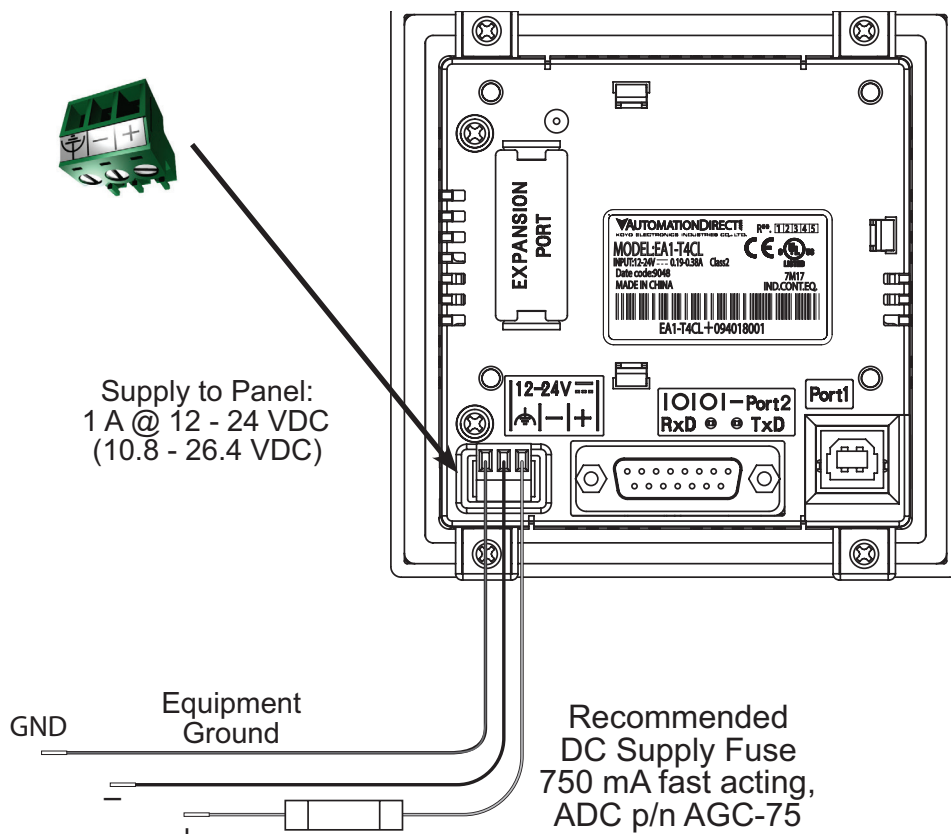
Providing power to the touch panel

- 1.) The panel is powered by a Class 2, 1 Amp @ 12-24 VDC power source in normal operation. Recommended power supplies are AutomationDirect part number PSC-24-015 or PSC-24-030.
- 2.) EA1-T4CL is powered during programming through a USB A-to-B cable such as USB-CBL-AB6. The panel will operate in Low-power mode when powered by the PC and result in a dim screen.*
- 3.) EA1-T4CL cannot be powered from a PLC.



***NOTE: EA1-T4CL can be powered through Port1 when connected to a PC for programming, the screen brightness is diminished because the panel is running in Low-Power Mode. For full brightness, connect an external Class 2, 12-24 VDC power source to the panel's power connection. An external Class 2, 12-24 VDC power source must be used when the panel is installed in its application.**

EA1-T4CL typical wiring diagram



NOTE: Recommended DC power supply to power the EA1-T4CL, AutomationDirect Part No. PSC-24-015 or PSC-24-030.

C-more Micro 4-inch EA1 PLC Connections

Cabling requirements

The **C-more** 4" Micro panels can communicate through the built-in 15-pin serial port (Port2) via RS-232, RS-422 and RS-485 using these cables.

- EA-2CBL — connects to CLICK, Do-more/BRX**, Productivity Series, DL05, DL105, DL205, D3-350 and D4-450 phone jack.
- EA-2CBL-1 — connects to D2-250, D250-1, D2-260, DL06 VGA connector.

The EA1-T4CL can only communicate to a controller through the 15-pin serial Port2. The USB port is for programming only.

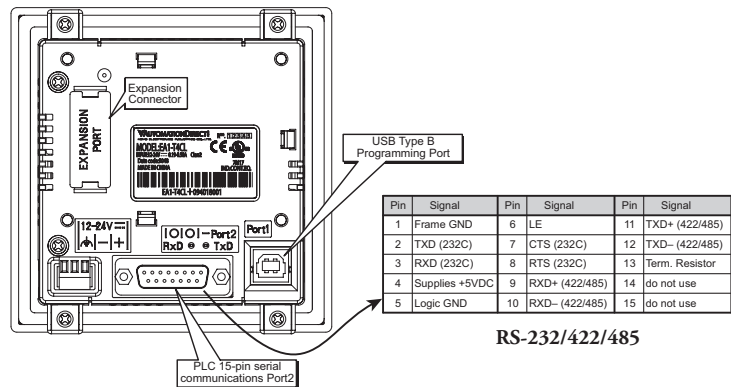
Drivers for your Controller

- AutomationDirect Productivity Series – serial
- AutomationDirect Do-more/BRX** – serial
- AutomationDirect CLICK (Modbus)– serial
- **Direct**LOGIC K-sequence, **Direct**LOGIC **Direct**NET, **Direct**LOGIC Modbus (Koyo Addressing)
- Modbus RTU
- Allen Bradley DF1 Full Duplex, Allen Bradley DF1 Half Duplex, Allen Bradley PLC5 DF1, AB DH485
- Omron Host Link (C200 Adapter, C500) Omron FINS serial (CJ1, CS1)
- GE SNPX (90/30, 90/70, Micro 90, VersaMax Micro)
- Mitsubishi Melsec FX
- Siemens PPI
- Entivity Modbus RTU
- AutomationDirect GS Drives
- AutomationDirect SOLO Temperature Controllers
- Mitsubishi Q/QnA

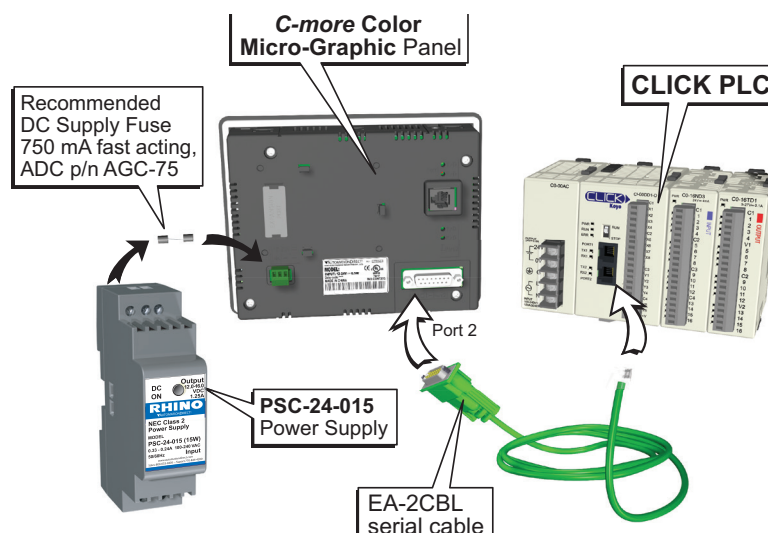
**BX-P-SER2-RJ12 is required

Communication Ports

EA1-T4CL



C-more EA1 Micro Port 2 to CLICK PLC Port 2



C-more Micro 4-inch EA1 Panel Accessories

D-SUB 15-pin 90-degree Communication Port Adapter

The EA-ADPTR-4 adapter plugs into the 15-pin serial port on the rear of a EA1-T4CL panel to allow a controller communication cable to be plugged in at a 90 degree angle to reduce panel depth requirements. 15-pin straight through pin-out. UL Recognized.

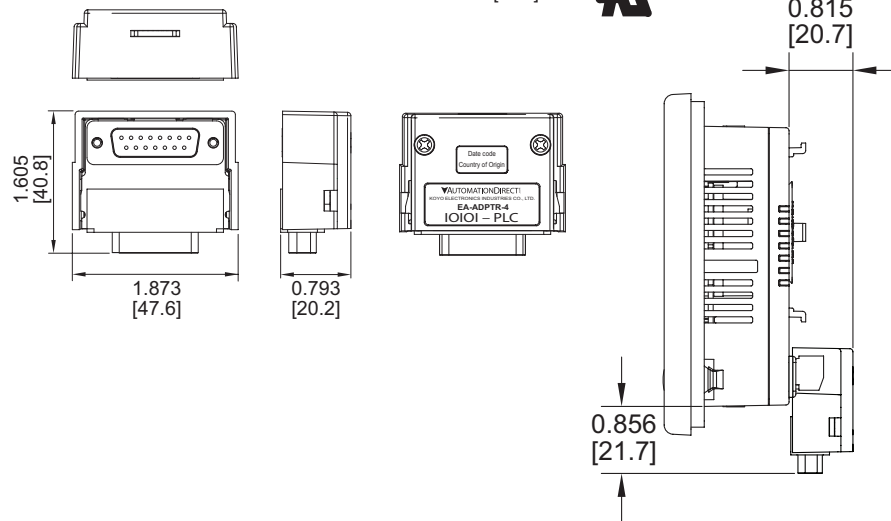
Part No.
EA-ADPTR-4



\$42.50

Dimensions

Units: inches [mm]



D-SUB 15-pin to Terminal Block Adapter

The EA-COMCON-3 adapter plugs into the 15-pin serial port on the rear of a EA1-T4CL panel to allow wire terminal connections for an RS-422/RS-485/DH485 PLC communication cable. UL Recognized.

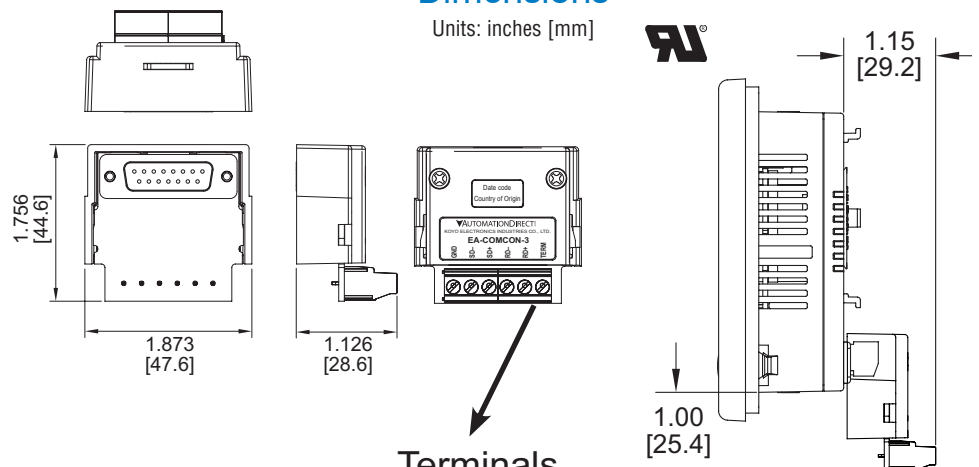
Part No.
EA-COMCON-3



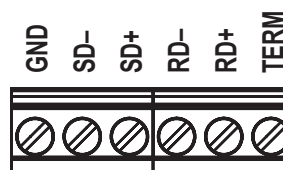
\$45.50

Dimensions

Units: inches [mm]



Terminals

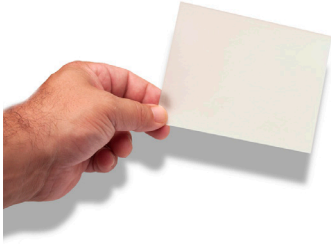


C-more Micro 4-inch EA1 Panel Accessories

Clear Screen Overlay

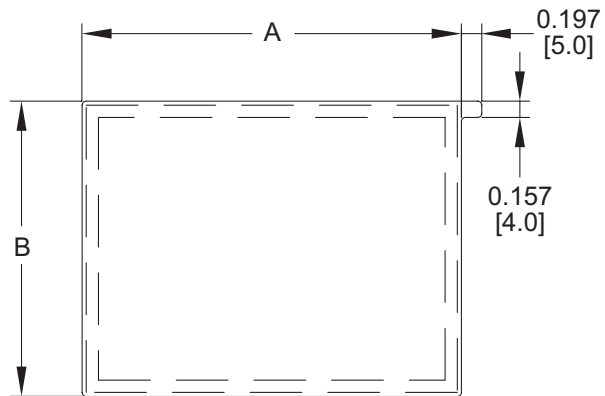
Optional clear screen overlay used to protect **C-more** Micro displays from minor scratches and wear. Package contains 3 clear screen overlays.

Part No. EA-4-COV2
\$36.50



Dimensions

Units: inches [mm]



Part Number	Dimensions - inch [mm]	
	A	B
EA-4-COV2	3.66 [93.0]	2.85 [72.5]

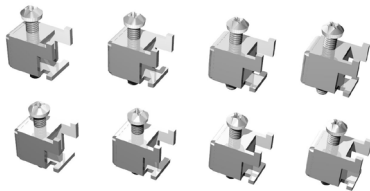
C-more Micro 4-inch EA1 Replacement Parts

The optional replacement parts can be used to replace damaged, worn or lost EA1-T4CL components.

Replacement parts at a glance:

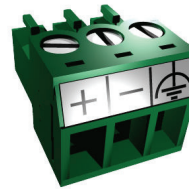
Part Number	Description	Price
EA-MG-BZ2-BRK	Panel mounting brackets, replacement. Package of 8. For use with C-more Micro 4in and 6in panels, all 6in bezels, and 3in bezel EA-MG-BZ2.	\$20.00
EA-MG-DC-CON	DC 3-terminal power connector, replacement. Package of 5. For use with all C-more Micro 4in, 6in, 8in and 10in panels, and power adapters EA-MG-P1 and EA-MG-SP1.	\$15.50
EA-MG4-GSK	Panel mounting gasket, replacement. For use with C-more Micro EA1-T4CL 4in HMIs.	\$9.50
EA-MG4-FKL	Function key label insert, replacement. Package of 4. For use with C-more Micro EA1-T4CL 4in HMIs. (3) blank label inserts and (1) landscape F1-F5 label insert included.	\$15.50

Panel Mounting Clips
Part No. EA-MG-BZ2-BRK



(pk of 8)

DC Power Connector
Part No. EA-MG-DC-CON

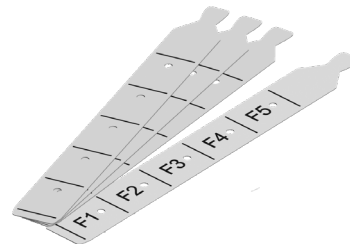


(pk of 5)

Panel Gasket
Part No. EA-MG4-GSK



Function Keys Label Inserts
Part No. EA-MG4-FKL







(pk of 4; 3 blank, 1 F1-F5 for landscape)






C-more Micro EA3 Series Selection Guide

C-more Micro EA3 Series Panels			
Part Number		Description	Price
EA3-S3ML-RN		C-more Micro EA3 series HMI, 3in monochrome STN LCD, 128 x 64 pixel, LED backlight, supports (1) serial port.	\$103.00
EA3-S3ML-R		C-more Micro EA3 series touch screen HMI, 3in monochrome STN LCD, 128 x 64 pixel, LED backlight, supports (1) serial port.	\$157.00
EA3-S3ML		C-more Micro EA3 series touch screen HMI, 3in monochrome STN LCD, 128 x 64 pixel, LED backlight, supports (2) serial, (1) Ethernet and (1) USB ports.	\$212.00
EA3-T4CL		C-more Micro EA3 series touch screen HMI, 4in color TFT LCD, widescreen, 480 x 272 pixel, WQVGA, LED backlight, supports (2) serial, (1) Ethernet and (1) USB ports.	\$289.00
EA3-T6CL		C-more Micro EA3 series touch screen HMI, 6in color TFT LCD, 320 x 240 pixel, QVGA, LED backlight, supports (2) serial and (1) USB port.	\$319.00
EA3-T8CL		C-more Micro EA3 series touch screen HMI, 8in color TFT LCD, 800 x 600 pixel, SVGA, LED backlight, supports (2) serial and (1) USB port.	\$802.00
EA3-T10CL		C-more Micro EA3 series touch screen HMI, 10in color TFT LCD, 800 x 600 pixel, SVGA, LED backlight, supports (2) serial and (1) USB port.	\$962.00



Part Number	Panel Software / Firmware Version Required
EA3-S3ML-RN	4.30 or later
EA3-S3ML-R	4.30 or later
EA3-S3ML	4.20 or later
EA3-T4CL	4.20 or later
EA3-T6CL	3.6 or later
EA3-T8CL	3.5 or later
EA3-T10CL	3.5 or later

C-more Micro EA3 Series Selection Guide



C-more Micro Programming Software			
Part Number		Description	Price
EA-MG-PGMSW		C-more Micro Windows programming software, CD. For use with C-more Micro panels. Requires USB port connection from PC to C-more Micro panel.	\$27.00
EA-MG-PGM-CBL		Programming cable assembly, USB A to 6-pin RJ12, 6ft cable length. For use with C-more Micro panels, CLICK CPUs, Do-more H2 series CPUs, and DirectLOGIC CPUs.	\$46.50
USB-CBL-AB3		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.	\$8.50
USB-CBL-AB6		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.	\$11.00
USB-CBL-AB10		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.	\$25.50
USB-CBL-AB15		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.	\$29.00
USB-CBL-AMICB6			Programming cable, USB A to micro-B USB, 6ft cable length. For use with Productivity1000 and Productivity2000 CPUs and most USB devices.


C-more Micro EA3 Series Panel Accessories			
Part Number		Description	Price
EA-ECOM		Communication expansion module, (1) RJ45 10/100 Mbps Ethernet port. For use with C-more Micro EA3 series 6in, 8in and 10in panels and all C-more HMIs except -R models.	\$54.00
EA-ADPTR-4		DSUB port adapter, 15-pin male to 15-pin female, right angle cable entry. For use with C-more Micro EA1 series 4in and 6in HMIs, C-more Micro EA3 series 3in, 4in, and 6in HMIs, C-more EA9 6in and 7in HMIs.	\$42.50
EA-COMCON-3		DSUB port adapter, 15-pin male to 6-pole RS-422/485 terminal block, right angle cable entry. For use with C-more Micro EA1 series 4in and 6in HMIs, C-more Micro EA3 series 3in, 4in, and 6in HMIs, C-more EA9 6in and 7in HMIs.	\$45.50
EA-COMCON-3A		DSUB port adapter, 15-pin male to 6-pole RS-422/485 terminal block, straight cable entry. For use with C-more Micro EA1 series 3in with EA1-MG-SP1, C-more Micro EA3 series 8in and 10in HMIs, C-more EA9 8in, 10in, 12in and 15in HMIs.	\$21.00
EA-MG-COV-CL		Screen protector, clear, 3in. Package of 5. For use with C-more Micro 3in HMIs.	\$38.50
EA-4-COV3		Screen protector, non-glare, 4in. Package of 3. For use with C-more Micro EA3-T4CL 4in HMIs.	\$36.50
EA-6-COV2		Screen protector, non-glare, 6in. Package of 3. For use with C-more and C-more Micro 6in panels.	\$40.50
EA-8-COV2		Screen protector, non-glare, 8in. Package of 3. For use with C-more and C-more Micro 8in panels.	\$43.50
EA-10-COV2		Screen protector, non-glare, 10in. Package of 3. For use with C-more EA9-T10CL and C-more Micro EA3-T10CL HMIs.	\$49.00

C-more Micro EA3-S3ML-RN and EA3-S3ML-R Panels Overview

C-more Micro EA3 Series Panels			
Part Number		Description	Price
EA3-S3ML-RN		C-more Micro EA3 series HMI, 3in monochrome STN LCD, 128 x 64 pixel, LED backlight, supports (1) serial port.	\$103.00
EA3-S3ML-R		C-more Micro EA3 series touch screen HMI, 3in monochrome STN LCD, 128 x 64 pixel, LED backlight, supports (1) serial port.	\$157.00

Part Number	Panel Software / Firmware Version Required
EA3-S3ML-RN	4.30 or later
EA3-S3ML-R	

C-more Micro Programming Software			
Part Number		ff3shortDescrip	listPrice
EA-MG-PGMSW		C-more Micro Windows programming software, CD. For use with C-more Micro panels. Requires USB port connection from PC to C-more Micro panel.	\$27.00
EA-MG-PGM-CBL		Programming cable assembly, USB A to 6-pin RJ12, 6ft cable length. For use with C-more Micro panels, CLICK CPUs, Do-more H2 series CPUs, and DirectLOGIC CPUs.	\$46.50

C-more Micro EA3 Series Panel Accessories			
Part Number		Description	Price
EA-MG-COV-CL		Screen protector, clear, 3in. Package of 5. For use with C-more Micro 3in HMIs.	\$38.50

C-more Micro 3-inch EA3 Non-Touch Panel

Model EA3-S3ML-RN **C-more** 3-inch Micro touch panel has a 3.1-inch STN LCD monochrome display and twelve selectable LED-driven backlight colors. It features a 128 x 64 pixel display, and five user-defined function keys each with a user-defined red LED indicator. This **C-more** Micro panel is powered through the RJ-12 serial communications port of most AutomationDirect PLC's or from the USB port of a PC using the EA-MG-PGM-CBL programming cable assembly. This panel supports only AutomationDirect PLC protocols and Modbus RTU. (For other controllers consider the EA3-S3ML). The panel is NEMA 1 as shipped but is NEMA 4/4X indoor, when installed correctly with the optional gasket EA-MG-S3ML-GSK (sold separately).

Part No. EA3-S3ML-RN



\$103.00



NOTE: EA3-S3ML-RN is NEMA 1 compliant. Add optional gasket EA-MG-S3ML-GSK for NEMA 4/4X compliance (sold separately).



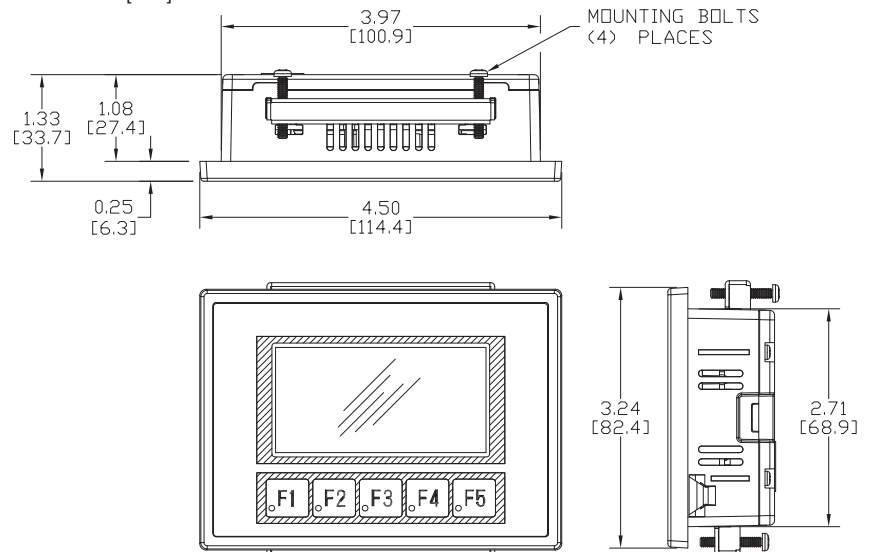
Features

- Free downloadable programming software
- 128 x 64 pixel display with up to 10 lines by 32 characters of text and graphics
- Up to 10 lines by 21 characters of dynamic text with embedded variables and phrases mixed with graphics
- 5 programmable function keys can change with every screen. Can increment / decrement values, trigger recipes, view index of screens.
- 12-Color LED backlight for longer lifetime; Red, Green, Amber, Yellow, Lime, Pink 1, Pink 2, Pink 3, Emerald 1, Emerald 2, Emerald 3 and White
- Optional clear screen overlay
- 1MB memory
- Built-in RJ12 serial communications port
- Built-in Alarm Control setup that activates beep, backlight flash, customized alarm banner, and red LED blinking
- 0 to 50 °C (32 to 122 °F) operating temperature range (IEC 60068-2-14)
- NEMA 1 compliant: NEMA 4/4X, IP65 compliant when mounted correctly with optional gasket (EA-MG-S3ML-GSK sold separately), indoor use only
- UL, cUL & CE agency approvals
- 2-year warranty from date of purchase

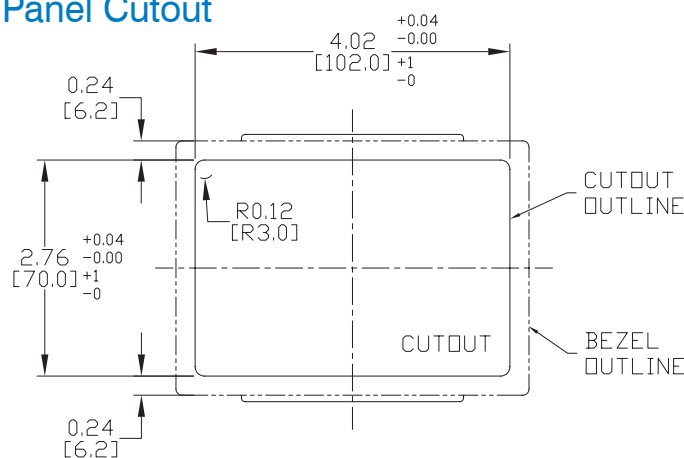
Function	Available
Ethernet	No
USB Programming Port	No
Serial RJ12 Port	Yes
Serial DB15 Port	No

Dimensions

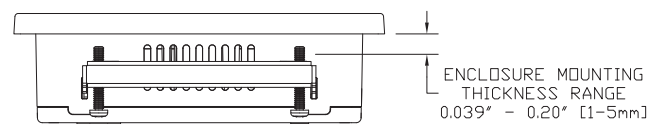
Units: inches [mm]



Panel Cutout



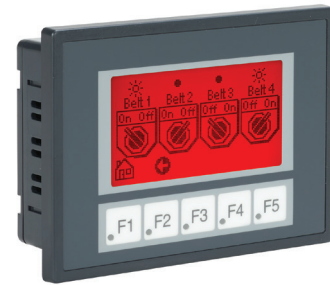
Panel Thickness



C-more Micro 3-inch EA3 Touch Panel

Model EA3-S3ML-R **C-more** 3-inch Micro touch panel has a 3.1-inch STN LCD monochrome display and twelve selectable LED-driven backlight colors. It features a 128 x 64 pixel display, and five user-defined function keys each with a user-defined red LED indicator. This **C-more** Micro panel is powered through the RJ-12 serial communications port of most AutomationDirect PLC's or from the USB port of a PC using the EA-MG-PGM-CBL programming cable assembly. This panel supports only AutomationDirect PLC protocols and Modbus RTU. (For other controllers consider the EA3-S3ML). The panel is NEMA 4/4X indoor when installed correctly.

Part No. EA3-S3ML-R



\$157.00



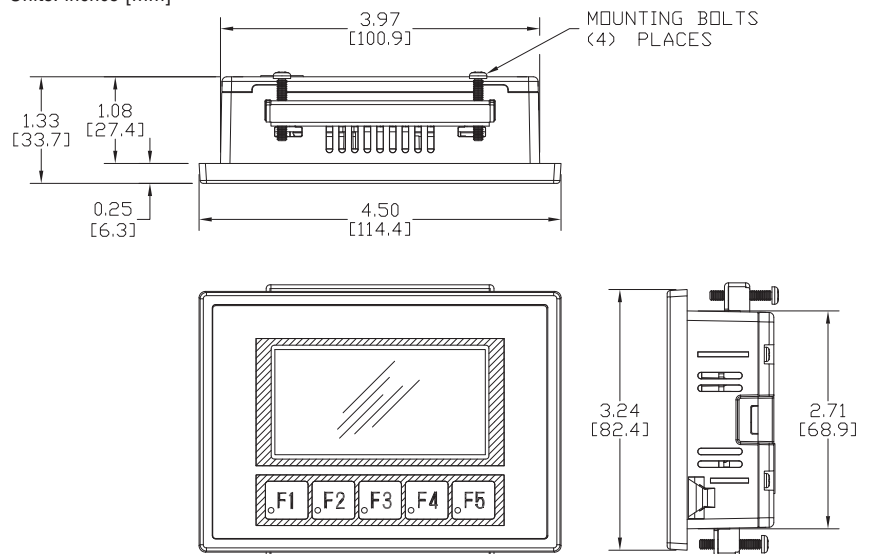
Features

- Touch screen display
- Free downloadable programming software
- 128 x 64 pixel display with up to 10 lines by 32 characters of text and graphics
- Up to 10 lines by 21 characters of dynamic text with embedded variables and phrases mixed with graphics
- 5 programmable function keys can change with every screen. Can increment / decrement values, trigger recipes, view index of screens.
- 12-Color LED backlight for longer lifetime; Red, Green, Amber, Yellow, Lime, Pink 1, Pink 2, Pink 3, Emerald 1, Emerald 2, Emerald 3 and White
- Optional clear screen overlay
- 1MB memory
- Built-in RJ12 serial communications port
- Built-in Alarm Control setup that activates beep, backlight flash, customized alarm banner, and red LED blinking
- 0 to 50 °C (32 to 122 °F) operating temperature range (IEC 60068-2-14)
- NEMA 4/4X, IP65 compliant when mounted correctly, indoor use only
- UL, cUL & CE agency approvals
- 2-year warranty from date of purchase

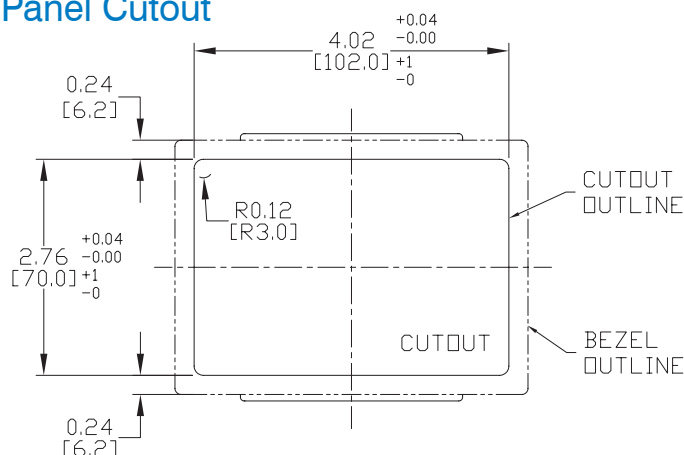
Function	Available
Ethernet	No
USB Programming Port	No
Serial RJ12 Port	Yes
Serial DB15 Port	No

Dimensions

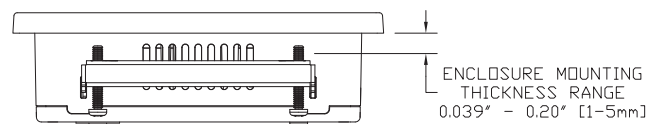
Units: inches [mm]



Panel Cutout



Panel Thickness





C-more Micro EA3-S3ML-RN and EA3-S3ML-R Panels Specifications

EA3-S3ML-RN and EA3-S3ML-R Specifications		
Part Number:	EA3-S3ML-RN	EA3-S3ML-R
Description:	128 x 64 pixel LCD display Five user defined keypad function buttons with five user defined LED indicators	
Display:		
• Type	3.1" STN Monochrome with LED Backlight	
• Resolution	128 (W) x 64 (H) pixel	
• Color	2 colors (normal / inverse)	
• Display Brightness (Reference)	W: Typ. 150 nit G: Typ. 150 nit R: Typ. 40 nit	
• Viewing Area Size	2.78" (W) x 1.53" (H) 70.7 mm x 38.8 mm	
• Active Area Size	2.62" (W) x 1.31" (H) mm 66.52 mm x 33.24 mm	
• Contrast / Brightness	Adjusted from the panel's built-in configuration setup menu	
• Viewing Angle (Landscape Mode)	3, 6, 9 o'clock axis → 45 degrees 12 o'clock axis → 30 degrees	
Backlight:		
• Type	LED	
• Color	White, Red, Green (12 colors)	
• User Replaceable	No	
Touch Screen:		
• Type	N/A	Analog resistive, single touch*
• Operation		100 gram force [0.8 N] maximum
• Life		Minimum of 1,000,000 cycles
Features:		
• User Memory	1MB	
• Number of Screens	Up to 999 – limited by project memory usage	
• Beep (Internal)	Yes	
• Keypad Function Buttons	Five user defined function key buttons with the ability to customize label with an overlay. Minimum of 500,000 cycles	
• Keypad Function Button LEDs	Each function key button includes a red LED that can be user programmed.	
• Programming Port	RJ12 serial	
• Serial Communications	RJ12 serial communications port (RS-232)	
• Ethernet Communications	N/A	
Screen Objects		
• Functional Devices	Pushbutton, Switch, Indicator Button, Indicator Light, Graphic Indicator Light, Numeric Display, Numeric Entry, Inc/Dec Value, Bar Graph, Bitmap Button, Static Bitmap, Dynamic Bitmap, Recipe Button, Static Text, Lookup Text, Dynamic Text, Screen Change Pushbutton, Screen Selector, Adjust Contrast, Function, Key Configuration Object, Real Time Graphics Line Graph, Analog Meter.	
• Static Shapes	Lines, Rectangles, Circles and Frames	
• Displayable Fonts	Fixed fonts: 4x6, 6x6, 6x6B, 6x8, 8x16, 8x32, 8x64, 16x16, 16x32, 16x64, 32x16, 32x32, 32x64, and Windows fonts	
*Note: 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 Micro EA3-S3ML-RN and EA3-S3ML-R panel specifications continued on next page.		



C-more Micro EA3-S3ML-RN and EA3-S3ML-R Panels Specifications



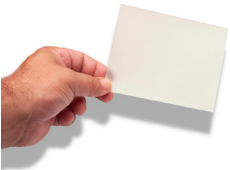
EA3-S3ML-RN and EA3-S3ML-R Specifications (cont'd)		
Part Number:	EA3-S3ML-RN	EA3-S3ML-R
Electrical:		
• Input Power	RJ12 port to any AutomationDirect PLC RJ12 port	
• Power Consumption	1.05W (RJ12)	
• Maximum Inrush Current	3.5 A for 50µs	
• Acceptable External Power Drop Duration	Maximum 1ms	
Environmental:		
• Operating Temperature	0 to 50 °C (32 to 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)	
• Environmental Air	For use in Pollution Degree 2 environment, no corrosive gases permitted	
• Housing Material	ABS Plastic	
• Gasket Material	Ships without gasket	Silicone Rubber
• Overlay Sheet Material	PET	
• Vibration	IEC60068-2-6 (Test Fc)	
• Shock	IEC60068-2-27 (Test Ea)	
• Altitude	Up to 2000m (6562ft)	
• 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	
• Enclosure	With EA-MG-S3ML-GSK - NEMA 250 type 4/4X indoor use only, UL50 type 4X indoor use only IP-65 indoor use only (Not tested by UL) (When mounted correctly) Without EA-MG-S3ML-GSK - NEMA 250 type 1 indoor use only, UL type 1 indoor use only IP-20 indoor use only (Not tested by UL) (When mounted correctly)	
• Agency Approvals	CE (EN61131-2), UL61010, CUL Canadian C22.2, UL E157382, RoHS (2011/65/EU) To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page	
Physical		
• Enclosure Mounting Thickness Range	0.04" – 0.2" [1 – 5 mm]	
• Mounting Clip Screw Torque Range	21 – 28 oz-in [0.15 – 0.20 Nm]	
• Weight	5.4 oz. (152g)	5.5 oz. (156g)

C-more Micro EA3-S3ML and EA3-T4CL Panels Overview

C-more Micro EA3 Series Panels			
Part Number		Description	Price
EA3-S3ML		C-more Micro EA3 series touch screen HMI, 3in monochrome STN LCD, 128 x 64 pixel, LED backlight, supports (2) serial, (1) Ethernet and (1) USB ports.	\$212.00
EA3-T4CL		C-more Micro EA3 series touch screen HMI, 4in color TFT LCD, widescreen, 480 x 272 pixel, WQVGA, LED backlight, supports (2) serial, (1) Ethernet and (1) USB ports.	\$289.00

Part Number	Panel Software / Firmware Version Required
EA3-S3ML	4.20 or later
EA3-T4CL	

C-more Micro Programming Software			
Part Number		Description	Price
EA-MG-PGMSW		C-more Micro Windows programming software, CD. For use with C-more Micro panels. Requires USB port connection from PC to C-more Micro panel.	\$27.00
USB-CBL-AMICB6		Programming cable, USB A to micro-B USB, 6ft cable length. For use with Productivity1000 and Productivity2000 CPUs and most USB devices.	\$3.75

C-more Micro EA3 Series Panel Accessories			
Part Number		ff3shortDescrip	listPrice
EA-ADPTR-4		DSUB port adapter, 15-pin male to 15-pin female, right angle cable entry. For use with C-more Micro EA1 series 4in and 6in HMIs, C-more Micro EA3 series 3in, 4in, and 6in HMIs, C-more EA9 6in and 7in HMIs.	\$42.50
EA-COMCON-3		DSUB port adapter, 15-pin male to 6-pole RS-422/485 terminal block, right angle cable entry. For use with C-more Micro EA1 series 4in and 6in HMIs, C-more Micro EA3 series 3in, 4in, and 6in HMIs, C-more EA9 6in and 7in HMIs.	\$45.50
EA-MG-COV-CL		Screen protector, clear, 3in. Package of 5. For use with C-more Micro 3in HMIs.	\$38.50
EA-4-COV3		Screen protector, non-glare, 4in. Package of 3. For use with C-more Micro EA3-T4CL 4in HMIs.	\$36.50

C-more Micro 3-inch EA3 Touch Panel

Model EA3-S3ML **C-more** 3-inch Micro touch panel has a 3.1-inch STN LCD monochrome display and twelve selectable LED-driven backlight colors. It features a 128 x 64 pixel display, and five user-defined function keys each with a user-defined red LED indicator. The EA3-S3ML is powered from a Class 2, 12-24 VDC power supply*. This **C-more** Micro panel can receive power from the serial communications port of most AutomationDirect PLC's or through the USB port when connected to a PC for programming. The panel is NEMA 4/4X indoor when installed correctly.

Part No. EA3-S3ML



\$212.00



***NOTE: Recommended DC power supply to power the C-more Micro Panel, AutomationDirect Part No. PSL-24-010.**

Features

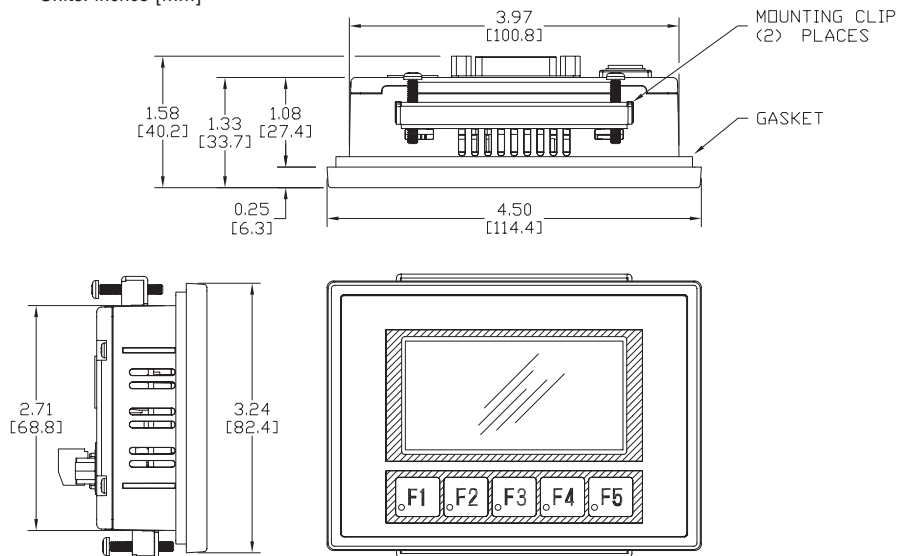
- Touch screen display
- Free downloadable programming software
- 128 x 64 pixel display with up to 10 lines by 32 characters of text and graphics
- Up to 10 lines by 21 characters of dynamic text with embedded variables and phrases mixed with graphics
- 5 programmable function keys can change with every screen. Can increment / decrement values, trigger recipes, view index of screens.
- 12-Color LED backlight for longer lifetime; Red, Green, Amber, Yellow, Lime, Pink 1, Pink 2, Pink 3, Emerald 1, Emerald 2, Emerald 3 and White
- Optional clear screen overlay
- 3MB memory
- Built-in USB type Micro-B programming port
- Built-in RJ45 Ethernet Port
- Built-in 15-pin serial communications port
- Built-in RJ12 serial communications port
- Built-in Alarm Control setup that activates beep, backlight flash, customized alarm banner, and red LED blinking
- 0 to 50 °C (32 to 122 °F) operating temperature range (IEC 60068-2-14)
- NEMA 4/4X, IP65 compliant when mounted correctly, indoor use only
- UL, cUL & CE agency approvals
- 2-year warranty from date of purchase



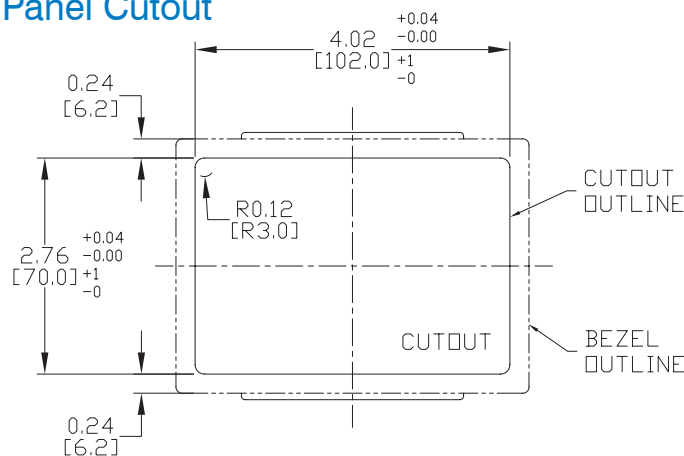
Function	Available
Ethernet	Yes (Built-in)
USB Programming Port	Yes
Serial RJ12 Port	Yes
Serial DB15 Port	Yes

Dimensions

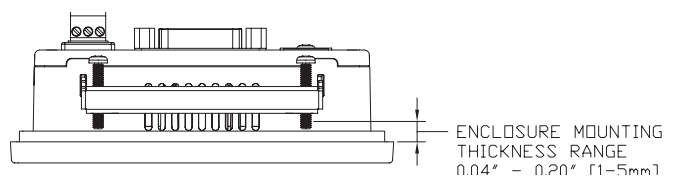
Units: inches [mm]



Panel Cutout



Panel Thickness



C-more Micro 4-inch EA3 Touch Panel

Model EA3-T4CL **C-more** 4" Micro touch panel has a 4.3-inch TFT LCD 482 x 272 pixel display (WQVGA) and a palette of 32K colors for customizing objects, screen backgrounds and displaying bitmap graphics. EA3-T4CL is powered from a Class 2, 12-24 VDC power supply*. The panel is NEMA 4/4X indoor when installed correctly.

Part No. **EA3-T4CL**



\$289.00

Function	Available
Ethernet	Yes (Built-in)
USB Programming Port	Yes
Serial RJ12 Port	Yes
Serial DB15 Port	Yes



***NOTE: Recommended DC power supply to power the C-more Micro Panel, AutomationDirect Part No. PSL-24-010.**

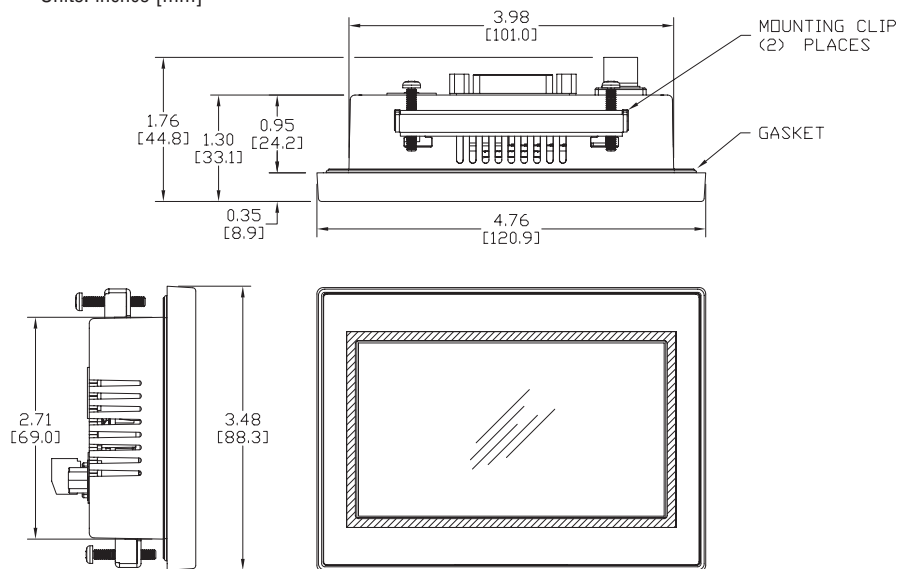
Features

- Touch screen display
- Free downloadable programming software
- 482 x 272 pixel display (WQVGA) with up to 40 lines by 80 characters of text and graphics
- 32K colors
- Optional clear screen overlay
- 14MB memory
- Built-in USB type Micro-B programming port
- Built-in RJ45 Ethernet Port
- Built-in 15-pin serial communications port
- Built-in RJ12 serial communications port
- Built-in Alarm Control setup that activates beep, backlight flash, customized alarm banner, and red LED blinking
- 0 to 50 °C (32 to 122 °F) operating temperature range (IEC 60068-2-14)
- NEMA 4/4X, IP65 compliant when mounted correctly, indoor use only
- UL, cUL & CE agency approvals
- 2-year warranty from date of purchase

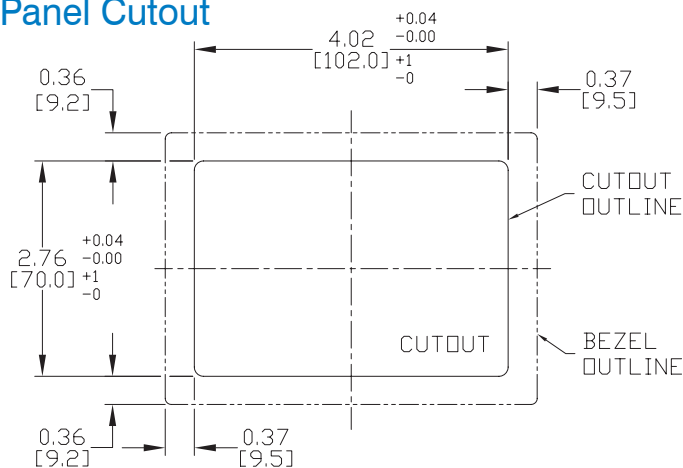


Dimensions

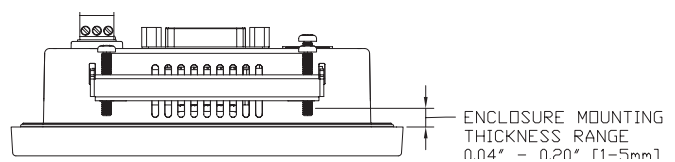
Units: inches [mm]



Panel Cutout



Panel Thickness



NOTE: Model EA3-T4CL and EA1-T4CL use different panel cutouts.




C-more Micro EA3-S3ML and EA3-T4CL Panel Specifications

EA3-S3ML and EA3-T4CL Specifications		
Part Number:	EA3-S3ML	EA3-T4CL
Description:	128 x 64 pixel LCD display Five user defined keypad function buttons with five user defined LED indicators	480 x 272 pixel LCD display
Display:		
• Type	3.1" STN Monochrome with LED Backlight	4.3" TFT Graphical type with LED Backlight
• Resolution	128 (W) x 64 (H) pixel	480 (W) x 272 (H) pixel
• Color	2 colors (normal / inverse)	32768 colors
• Display Brightness (Reference)	W: Typ. 150 nit G: Typ. 150 nit R: Typ. 40 nit	370 nits (typ)
• Viewing Area Size	2.78" (W) x 1.53" (H) 70.7 mm x 38.8 mm	3.89" (W) x 2.26" (H) 98.70 mm x 57.50 mm
• Active Area Size	2.62" (W) x 1.31" (H) mm 66.52 mm x 33.24 mm	3.74" (W) x 2.12" (H) mm 95.04 mm x 53.86 mm
• Contrast / Brightness	Adjusted from the panel's built-in configuration setup menu	
• Viewing Angle (Landscape Mode)	3, 6, 9 o'clock axis → 45 degrees 12 o'clock axis → 30 degrees	3, 6, 9, 12 o'clock axis → 80 degrees
Backlight:		
• Type	LED	
• Color	White, Red, Green (12 colors)	White
• User Replaceable	No	
Touch Screen:		
• Type	Analog resistive, single touch*	
• Operation	100 gram force [0.8 N] maximum	82 gram force [0.98 N] maximum
• Life	Minimum of 1,000,000 cycles	
Features:		
• User Memory	3MB	14MB
• Number of Screens	Up to 999 – limited by project memory usage	
• Beep (Internal)	Yes	
• Keypad Function Buttons	Five user defined function key buttons with the ability to customize label with an overlay. Minimum of 500,000 cycles	N/A
• Keypad Function Button LEDs	Each function key button includes a red LED that can be user programmed.	N/A
• Programming Port	USB 2.0 Type Micro-B Built-in Ethernet port	
• Serial Communications	RJ12 serial communications port (RS-232) 15-pin D-sub serial communications port (RS-232, RS-485 / 422).	
• Ethernet Communications	10/100 Base-T (Automatic Negotiation MDI/MDIX)	
Screen Objects		
• Functional Devices	Pushbutton, Switch, Indicator Button, Indicator Light, Graphic Indicator Light, Numeric Display, Numeric Entry, Inc/Dec Value, Bar Graph, Bitmap Button, Static Bitmap, Dynamic Bitmap, Recipe Button, Static Text, Lookup Text, Dynamic Text, Screen Change Pushbutton, Screen Selector, Adjust Contrast, Function, Key Configuration Object, Real Time Graphics Line Graph, Analog Meter.	
• Static Shapes	Lines, Rectangles, Circles and Frames	
• Displayable Fonts	Fixed fonts: 4x6, 6x6, 6x6B, 6x8, 8x16, 8x32, 8x64, 16x16, 16x32, 16x64, 32x16, 32x32, 32x64, and Windows fonts	
*Note: 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 Micro EA3-S3ML and EA3-T4CL panel specifications continued on next page.		



C-more Micro EA3-S3ML and EA3-T4CL Panel Specifications

EA3-S3ML and EA3-T4CL Specifications (cont'd)		
Part Number:	EA3-S3ML	EA3-T4CL
Electrical:		
• Input Power	RJ12 port to any AutomationDirect PLC RJ12 port (for serial communication only) USB Micro-B port to PC 10.2 - 26.4 VDC; Class 2 or SELV (Safety Extra-Low Voltage) or Limited Energy Circuit power supply	USB Micro-B port to PC 10.2 - 26.4 VDC; Class 2 or SELV (Safety Extra-Low Voltage) or Limited Energy Circuit power supply
• Power Consumption	1.05W (RJ12) 2W (USB) 3W (External Power Supply)	2.5W (USB) 4W (External Power Supply)
• Maximum Inrush Current	20A for 240µs (DC power supply)	22A for 240µs (DC power supply)
• Acceptable External Power Drop Duration	Maximum 1ms	
Environmental:		
• Operating Temperature	0 to 50 °C (32 to 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)	
• Environmental Air	For use in Pollution Degree 2 environment, no corrosive gases permitted	
• Housing Material	ABS Plastic	ABS-GF20
• Gasket Material	Silicone Rubber	
• Overlay Sheet Material	PET	
• Vibration	IEC60068-2-6 (Test Fc)	
• Shock	IEC60068-2-27 (Test Ea)	
• Altitude	Up to 2000m (6562ft)	
• 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	
• Enclosure	NEMA 250 type 4/4X indoor use only UL50 type 4X indoor use only IP-65 indoor use only (not tested by UL) (When mounted correctly)	
• Agency Approvals	CE (EN61131-2), UL61010, CUL Canadian C22.2, UL E157382, RoHS (2011/65/EU) To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page	
Physical		
• Enclosure Mounting Thickness Range	0.04" - 0.2" [1 - 5 mm]	
• Mounting Clip Screw Torque Range	21 - 28 oz-in [0.15 - 0.20 Nm]	
• Weight	6.7 oz. (190g)	7.76 oz. (220g)






C-more Micro 6-inch, 8-inch & 10-inch EA3 Panels Overview

C-more Micro EA3 Series Panels			
Part Number	Description		Price
EA3-T6CL		C-more Micro EA3 series touch screen HMI, 6in color TFT LCD, 320 x 240 pixel, QVGA, LED back-light, supports (2) serial and (1) USB port.	\$319.00
EA3-T8CL		C-more Micro EA3 series touch screen HMI, 8in color TFT LCD, 800 x 600 pixel, SVGA, LED back-light, supports (2) serial and (1) USB port.	\$802.00
EA3-T10CL		C-more Micro EA3 series touch screen HMI, 10in color TFT LCD, 800 x 600 pixel, SVGA, LED back-light, supports (2) serial and (1) USB port.	\$962.00

Part Number	Panel Software / Firmware Version Required
EA3-T6CL	3.6 or later
EA3-T8CL	3.5 or later
EA3-T10CL	3.5 or later

C-more Micro Programming Software			
Part Number	Description		Price
EA-MG-PGMSW		C-more Micro Windows programming software, CD. For use with C-more Micro panels. Requires USB port connection from PC to C-more Micro panel.	\$27.00
USB-CBL-AB3		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.	\$8.50
USB-CBL-AB6		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.	\$11.00
USB-CBL-AB10		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.	\$25.50
USB-CBL-AB15		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.	\$29.00

C-more Micro 6-inch, 8-inch & 10-inch EA3 Panels Overview

C-more Micro EA3 Series Panel Accessories			
Part Number		Description	Price
EA-ECOM		Communication expansion module, (1) RJ45 10/100 Mbps Ethernet port. For use with C-more Micro EA3 series 6in, 8in and 10in panels and all C-more HMIs except -R models.	\$54.00
EA-ADPTR-4		DSUB port adapter, 15-pin male to 15-pin female, right angle cable entry. For use with C-more Micro EA1 series 4in and 6in HMIs, C-more Micro EA3 series 3in, 4in, and 6in HMIs, C-more EA9 6in and 7in HMIs.	\$42.50
EA-COMCON-3		DSUB port adapter, 15-pin male to 6-pole RS-422/485 terminal block, right angle cable entry. For use with C-more Micro EA1 series 4in and 6in HMIs, C-more Micro EA3 series 3in, 4in, and 6in HMIs, C-more EA9 6in and 7in HMIs.	\$45.50
EA-COMCON-3A		DSUB port adapter, 15-pin male to 6-pole RS-422/485 terminal block, straight cable entry. For use with C-more Micro EA1 series 3in with EA1-MG-SP1, C-more Micro EA3 series 8in and 10in HMIs, C-more EA9 8in, 10in, 12in and 15in HMIs.	\$21.00
EA-6-COV2		Screen protector, non-glare, 6in. Package of 3. For use with C-more and C-more Micro 6in panels.	\$40.50
EA-8-COV2		Screen protector, non-glare, 8in. Package of 3. For use with C-more and C-more Micro 8in panels.	\$43.50
EA-10-COV2		Screen protector, non-glare, 10in. Package of 3. For use with C-more EA9-T10CL and C-more Micro EA3-T10CL HMIs.	\$49.00

C-more Micro 6-inch TFT EA3 Touch Panel

Model EA3-T6CL **C-more** 6-inch Micro touch panel has a 5.7-inch TFT LCD 320 x 240 pixel display and a palette of 32K colors for customizing objects, screen backgrounds and displaying bitmap graphics. It features five user-defined function keys, each key with a user-defined red LED indicator. The **C-more** 6-inch Micro TFT panels are powered from a Class 2, 12-24 VDC power supply*. The panel is NEMA 4/4X indoor when installed correctly.

Part No. **EA3-T6CL**

Shown in Landscape (Horizontal) mode



\$319.00



***NOTE: Recommended DC power supply to power the C-more Micro Panel, AutomationDirect Part No. PSL-24-010.**

Features

- Touch screen display
- Free downloadable programming software
- 320 x 240 pixel display with up to 40 lines by 80 characters of text and graphics in landscape mode
- Up to 40 characters of dynamic text with embedded variables and phrases mixed with graphics
- Five programmable function keys can change with every screen. Can increment / decrement values, trigger recipes, view index of screens.
- 32K colors
- Optional replaceable clear screen overlay
- 6MB memory
- Supports Ethernet expansion module (EA-ECOM)
- Built-in USB type B programming port
- Built-in 15-pin serial communications port
- Built-in RJ12 serial communications port
- Built-in Alarm Control setup that activates beep, backlight flash, customized alarm banner, and red LED blinking
- 0 to 50 °C (32 to 122 °F) operating temperature range (IEC 60068-2-14)
- NEMA 4/4X, IP65 compliant when mounted correctly, indoor use only
- UL, cUL & CE agency approvals
- 2-year warranty from date of purchase

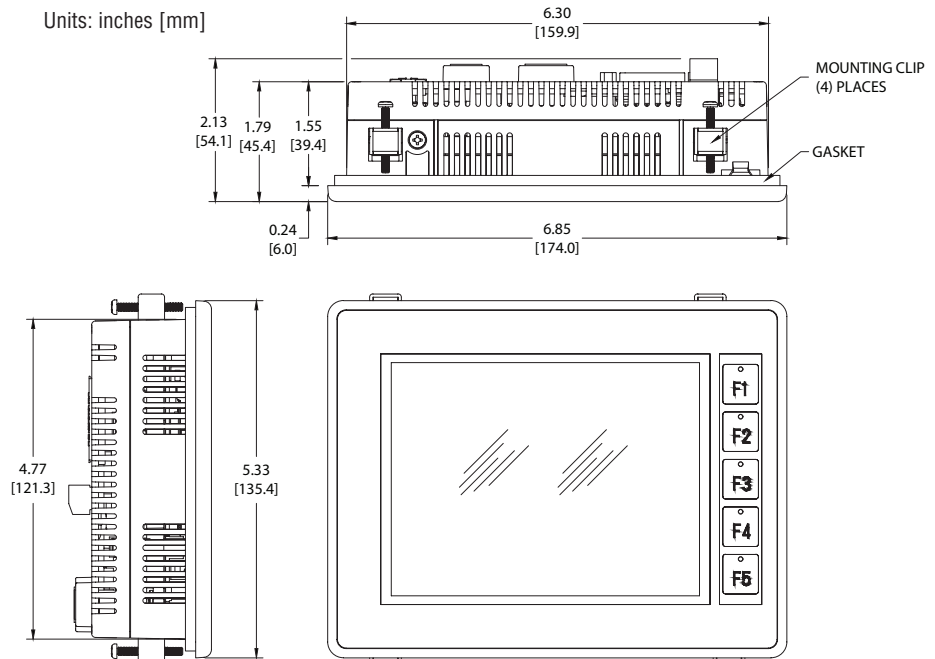
Function	Available
Ethernet	Optional (EA-ECOM)
USB Programming Port	Yes
Serial RJ12 Port	Yes
Serial DB15 Port	Yes



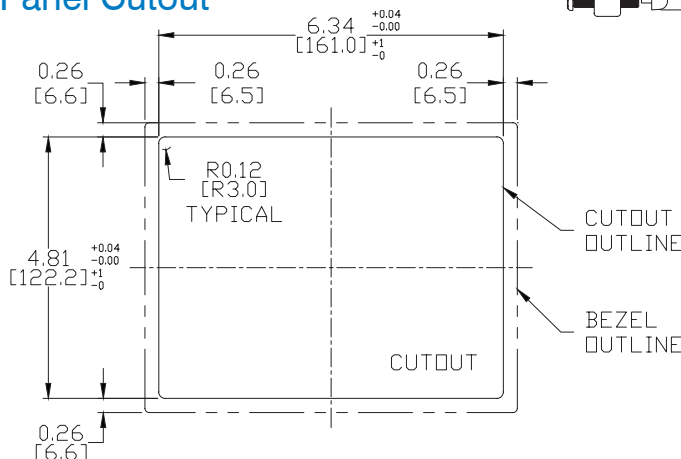
***NOTE: The EA3-T6CL can be powered through the USB port when connected to a PC for programming, the screen brightness is diminished because the panel is running in Low-Power Mode. For full brightness, connect an external Class 2, 12-24 VDC power source to the 6" panel's power connection. An external Class 2, 12-24 VDC power source must be used when the panel is installed in its application.**

Dimensions

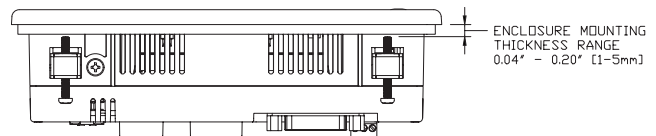
Units: inches [mm]



Panel Cutout



Panel Thickness



NOTE: The C-more 6-inch Micro cutout dimensions are not equivalent to previous AutomationDirect text panels. The C-more 6-inch Micro panels will not fit in cutouts for DV-1000, EZText, Optimate panels or C-more 6-inch panels.

C-more Micro 8-inch TFT EA3 Touch Panel

Model EA3-T8CL **C-more** 8" Micro touch panel has a 8.4-inch TFT LCD 800 x 600 pixel display and a palette of 32K colors for customizing objects, screen backgrounds and displaying bitmap graphics. It features seven user-defined function keys, each key with a user-defined red LED indicator. **C-more** 8" Micro TFT panels are powered from a Class 2, 12-24 VDC power supply*. The panel is NEMA 4/4X indoor when installed correctly.

Part No. **EA3-T8CL**



\$802.00



***NOTE: Recommended DC power supply to power the C-more Micro Panel, AutomationDirect Part No. PSL-24-010.**

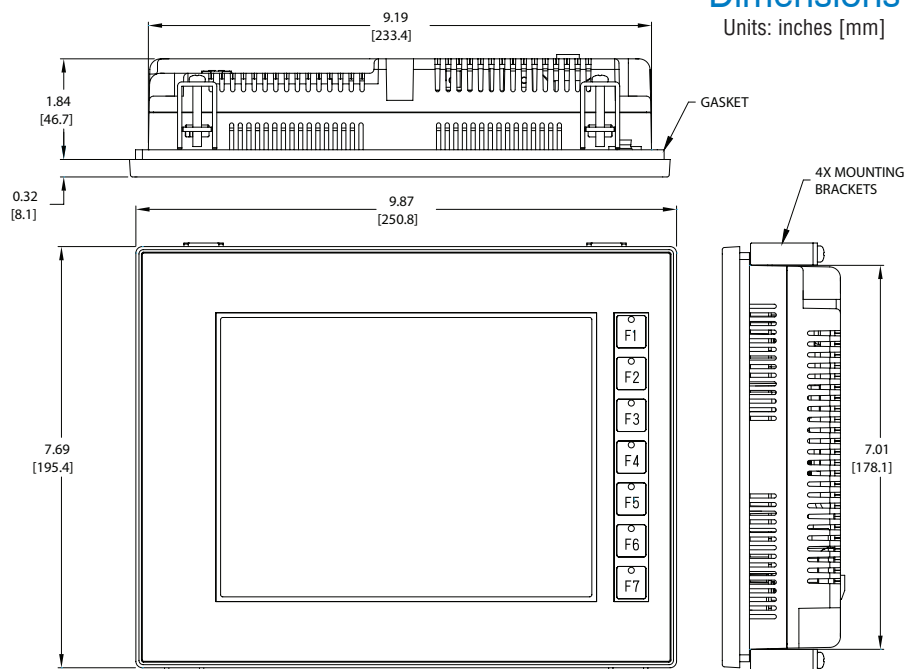
Features

- Touch screen display
- Free downloadable programming software
- 800 x 600 pixel display with up to 100 lines by 200 characters of text and graphics in landscape mode
- Up to 40 characters of dynamic text with embedded variables and phrases mixed with graphics
- Seven programmable function keys can change with every screen. Can increment/ decrement values, trigger recipes, view index of screens.
- 32K colors
- Optional replaceable clear screen overlay
- 30MB memory
- Supports Ethernet expansion module (EA-ECOM)
- Built-in USB type B programming port
- Built-in 15-pin serial communications port
- Built-in RJ12 serial communications port
- Built-in Alarm Control setup that activates beep, backlight flash, customized alarm banner, and red LED blinking
- 0 to 50 °C (32 to 122 °F) operating temperature range (IEC 60068-2-14)
- NEMA 4/4X, IP65 compliant when mounted correctly, indoor use only
- UL, cUL & CE agency approvals
- 2-year warranty from date of purchase

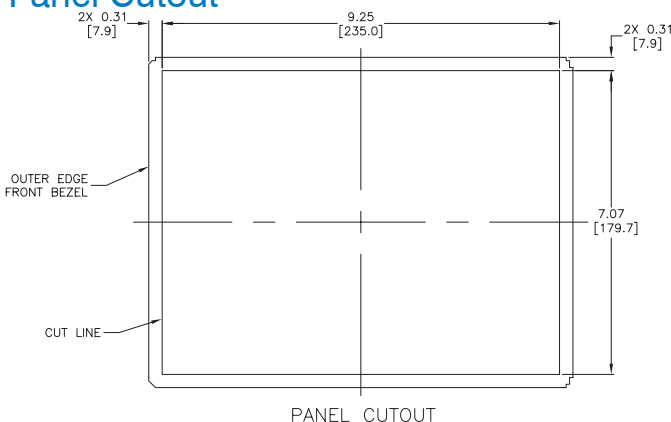
Function	Available
Ethernet	Optional (EA-ECOM)
USB Programming Port	Yes
Serial RJ12 Port	Yes
Serial DB15 Port	Yes

Dimensions

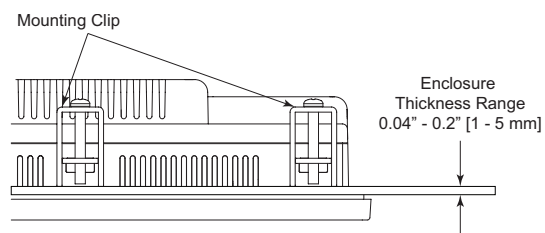
Units: inches [mm]



Panel Cutout



Panel Thickness



C-more Micro 10-inch TFT EA3 Touch Panel

Model EA3-T10CL **C-more** 10-inch Micro touch panel has a 10.4-inch TFT LCD 800 x 600 pixel display and a palette of 32K colors for customizing objects, screen backgrounds and displaying bitmap graphics. It features seven user-defined function keys, each key with a user-defined red LED indicator. **C-more** 10" Micro TFT panels are powered from a Class 2, 12-24 VDC power supply*. The panel is NEMA 4/4X indoor when installed correctly.

Part No. EA3-T10CL



***NOTE: Recommended DC power supply to power the C-more Micro Panel, AutomationDirect Part No. PSC-24-015.**

Features

- Touch screen display
- Free downloadable programming software
- 800 x 600 pixel display with up to 100 lines by 200 characters of text and graphics in landscape mode
- Up to 40 characters of dynamic text with embedded variables and phrases mixed with graphics
- Seven programmable function keys can change with every screen. Can increment / decrement values, trigger recipes, view index of screens.
- 32K colors
- Optional replaceable clear screen overlay
- 30MB memory
- Supports Ethernet expansion module (EA-ECOM)
- Built-in USB type B programming port
- Built-in 15-pin serial communications port
- Built-in RJ12 serial communications port
- Built-in Alarm Control setup that activates beep, backlight flash, customized alarm banner, and red LED blinking
- 0 to 50 °C (32 to 122 °F) operating temperature range (IEC 60068-2-14)
- NEMA 4/4X, IP65 compliant when mounted correctly, indoor use only
- UL, cUL & CE agency approvals
- 2-year warranty from date of purchase

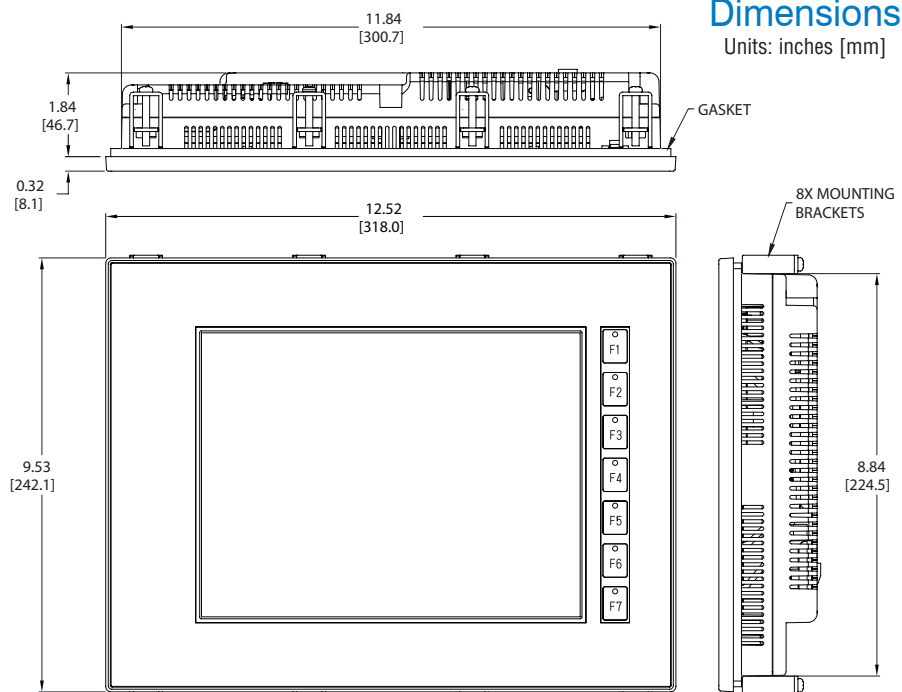
Function	Available
Ethernet	Optional (EA-ECOM)
USB Programming Port	Yes
Serial RJ12 Port	Yes
Serial DB15 Port	Yes



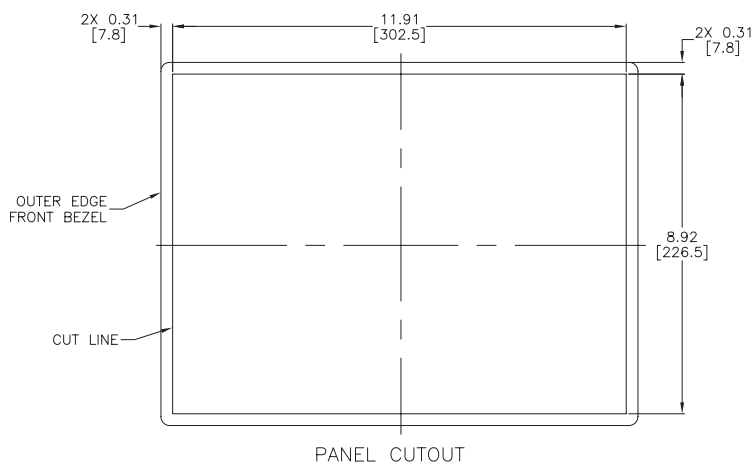
\$962.00

Dimensions

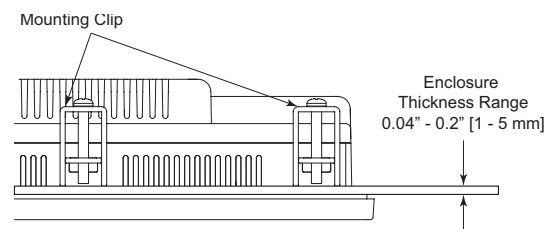
Units: inches [mm]



Panel Cutout



Panel Thickness



C-more Micro 6-inch, 8-inch and 10-inch EA3 Panel Specifications

EA3-T6CL, EA3-T8CL and EA3-T10CL Specifications			
Part Number:	EA3-T6CL	EA3-T8CL	EA3-T10CL
Description:	320 x 240 pixel LCD display (Landscape mode), Five user defined keypad function buttons with five user defined LED indicators	800 x 600 pixel LCD display (Landscape mode), Seven user defined keypad function buttons with seven user defined LED indicators	
Display:			
• Type	5.7" TFT Graphical type with LED Backlight	8.4" TFT Graphical type with LED Backlight	10.4" TFT Graphical type with LED Backlight
• Resolution	320 (W) x 240 (H) pixel (Landscape Mode) 240 (W) x 320 (H) pixel (Portrait Mode)	800 (W) x 600 (H) pixel (Landscape Mode) 600 (W) x 800 (H) pixel (Portrait Mode)	
• Color	32768 colors		
• Display Brightness (Reference)	270 nits (typ)	295 nits (typ)	270 nits (typ)
• Viewing Area Size	4.57" (W) x 3.44" (H) [116.2 mm x 87.4 mm]	6.86" (W) x 5.17" (H) [174.2 mm x 131.2 mm]	8.46" (W) x 6.41" (H) [214.8 mm x 162.7 mm]
• Active Area Size	4.54" (W) x 3.40" (H) [115.2 mm x 86.4 mm]	6.71" (W) x 5.03" (H) [170.4 mm x 127.8 mm]	8.31" (W) x 6.24" (H) [211.2 mm x 158.4 mm]
• Contrast / Brightness	Adjusted from the panel's built-in configuration setup menu		
• Viewing Angle (Landscape Mode)	3, 9 o'clock axis → 80 degrees 6 o'clock axis → 65 degrees 12 o'clock axis → 80 degrees	3, 9 o'clock axis → 80 degrees 6 o'clock axis → 60 degrees 12 o'clock axis → 80 degrees	3, 9 o'clock axis → 80 degrees 6 o'clock axis → 80 degrees 12 o'clock axis → 60 degrees
Backlight:			
• Type	LED		
• Color	White		
• User Replaceable	No		
Touch Screen:			
• Type	Analog resistive, single touch*		
• Operation	82 gram force [0.8 N] maximum		
• Life	Minimum of 1,000,000 cycles		
Features:			
• User Memory	6MB	30MB	
• Number of Screens	Up to 999 – limited by project memory usage		
• Beep (Internal)	Yes		
• Keypad Function Buttons	Five user defined function key buttons with the ability to customize label with an overlay. Minimum of 500,000 cycles	Seven user defined function key buttons with the ability to customize label with an overlay. Minimum of 500,000 cycles	
• Keypad Function Button LEDs	Each function key button includes a red LED that can be user programmed.		
• Programming Port	USB 2.0 Type B		
• Serial Communications	RJ12 serial communications port (RS-232) 15-pin D-sub serial communications port (RS-232, RS-485 / 422).		
• Ethernet Communications	10/100 Base-T (Automatic Negotiation) with EA-ECOM Module		
Screen Objects			
• Functional Devices	Pushbutton, Switch, Indicator Button, Indicator Light, Graphic Indicator Light, Numeric Display, Numeric Entry, Inc/Dec Value, Bar Graph, Bitmap Button, Static Bitmap, Dynamic Bitmap, Recipe Button, Static Text, Lookup Text, Dynamic Text, Screen Change Pushbutton, Screen Selector, Adjust Contrast, Function, Key Configuration Object, Real Time Graphics Line Graph, Analog Meter.		
• Static Shapes	Lines, Rectangles, Circles and Frames		
• Displayable Fonts	Fixed fonts: 4x6, 6x6, 6x6B, 6x8, 8x16, 8x32, 8x64, 16x16, 16x32, 16x64, 32x16, 32x32, 32x64, and Windows fonts		
*Note: 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 Micro EA3-T6CL, EA3-T8CL and EA3-T10CL panel specifications continued on next page.			

C-more Micro 6-inch, 8-inch and 10-inch EA3 Panel Specifications

EA3-T6CL, EA3-T8CL and EA3-T10CL Specifications (cont'd)			
Part Number:	EA3-T6CL	EA3-T8CL	EA3-T10CL
Electrical:			
• Input Power	10.2 - 26.4 VDC; Class 2 or SELV (Safety Extra-Low Voltage) or Limited Energy Circuit power supply 5VDC USB B-Port to PC	10.2 - 26.4 VDC; Class 2 or SELV (Safety Extra-Low Voltage) or Limited Energy Circuit power supply	
• Power Consumption	7.5 W (External power supply) 2.0 W (USB)	8W	10W
• Maximum Inrush Current	13A for 800µs	10A for 1ms	
• Acceptable External Power Drop Duration	Maximum 1ms		
Environmental:			
• 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)		
• Environmental Air	For use in Pollution Degree 2 environment, no corrosive gases permitted		
• Housing Material	ABS Plastic		
• Gasket Material	Silicone Rubber		
• Overlay Sheet Material	PET		
• Vibration	IIEC60068-2-6 (Test Fc)		
• Shock	IEC60068-2-27 (Test Ea)		
• Altitude	Up to 2000m (6562ft)		
• 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		
• Enclosure	NEMA 250 type 4/4X indoor use only UL50 type 4X indoor use only IP-65 indoor use only (not tested by UL) (When mounted correctly)		
• Agency Approvals	CE (EN61131-2), UL508, CUL Canadian C22.2 No. 142-M95, UL E157382, RoHS (2011/65/EU) To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page		
Physical:			
• Enclosure Mounting Thickness Range	0.04" - 0.2" [1 - 5 mm]		
• Mounting Clip Screw Torque Range	21 - 28 oz-in [0.15 - 0.20 Nm]	63 - 77 oz-in [0.45 - 0.55 Nm]	
• Weight	21.1 oz. (600g)	39.9 oz. (1130g)	57.1 oz. (1620g)

C-more Micro EA3 Series PLC Drivers

PLC Drivers		
Serial - port1 or port2	Serial - port2 only	Ethernet*
AutomationDirect Productivity Series	Allen-Bradley DF1 Half Duplex	AutomationDirect Productivity Series Ethernet
AutomationDirect Do-more / BRX**	Allen-Bradley DF1 Full Duplex	AutomationDirect Do-more / BRX Ethernet
AutomationDirect CLICK	Allen-Bradley PLC5 DF1	AutomationDirect CLICK Ethernet
AutomationDirect K-sequence	Allen-Bradley DH485	AutomationDirect ECOM Ethernet
AutomationDirect DirectNET	GE SNPX (90/30, 90/70, Micro 90, VersaMax Micro)	Modbus TCP/IP
AutomationDirect Modbus	Mitsubishi FX	Allen-Bradley EtherNet/IP(Client) SLC5/05
Modicon Modbus RTU	Mitsubishi Q & QnA	Allen-Bradley EtherNet/IP(Client) ENI Adapter
Entivity Modbus RTU	Omron Host Link (C200 Adapter, C500)	Allen-Bradley EtherNet/IP(Client) MicroLogix 1100/1400
	Omron FINS Serial (CJ1, CS1)	Allen-Bradley EtherNet/IP (Client) Control/CompactLogix (SLC Mapping only)
	Siemens PPI (S7-200 CPU)	
	AutomationDirect SOLO Temperature Controller	
	AutomationDirect GS Drives	

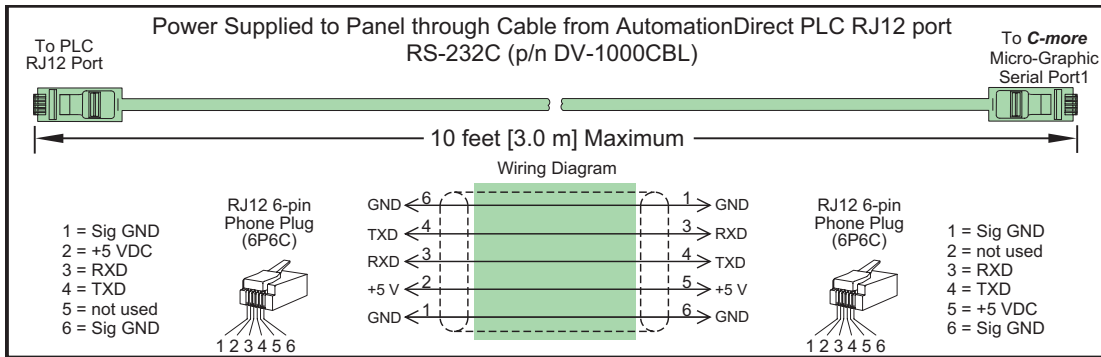
* Ethernet port is built in to EA3-S3ML and EA3-T4CL. EA3-T6CL, EA3-T8CL and EA3-T10CL require the optional EA-ECOM module for Ethernet. Ethernet communications require external power supply.

** BX-P-SER2-RJ12 is required

C-more Micro EA3 Series Power Connection Wiring

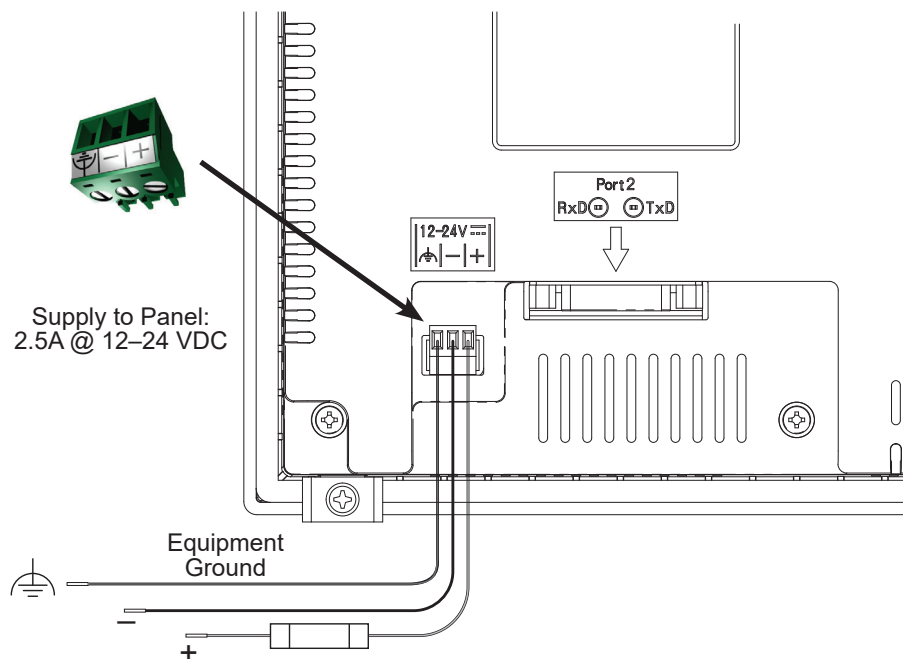
EA3-S3ML-RN and EA3-S3ML-R

- EA3-S3ML-RN and EA3-S3ML-R **C-more** Micro panels are powered during programming from the PC through the USB to RS-232 Programming Cable Assembly, EA-MG-PGM-CBL.
- During operation, EA3-S3ML-RN and EA3-S3ML-R **C-more** Micro panels can be powered from most AutomationDirect PLC's RJ12 serial communications ports by using the DV-1000CBL communications cable.



EA3-S3ML, EA3-T4CL, EA3-T6CL, EA3-T8CL and EA3-T10CL

EA3-S3ML, EA3-T4CL, EA3-T6CL, EA3-T8CL and EA3-T10CL **C-more** Micro EA3 series panels are powered by a Class 2, 2.5 Amp @ 12-24 VDC power source in normal operation.



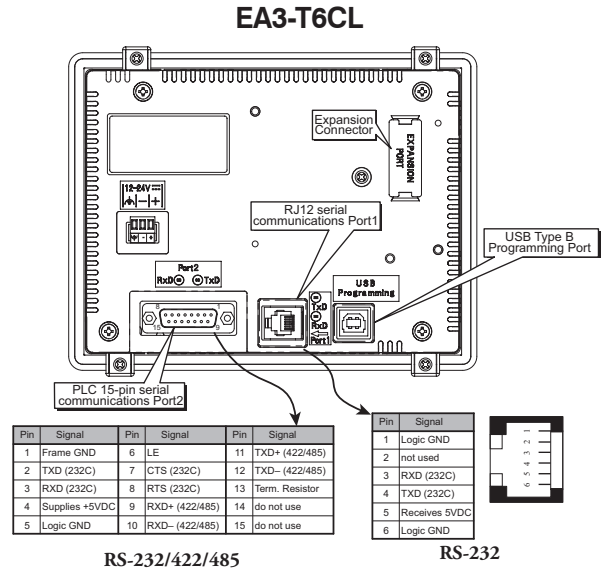
C-more Micro EA3 Series PLC Connections

Cabling requirements

The table below describes the EA3 series cabling options available for most AutomationDirect PLCs.

EA3 Series Cabling Options			
Part Number	Port1 RJ12 (RS-232)	Port2 15-pin (RS-232) See PLC List A	Port2 15-pin (RS-232) See PLC List B
EA3-S3ML	DV-1000CBL*	EA-2CBL	EA-2CBL-1
EA3-S3ML-R		N/A	N/A
EA3-S3ML-RN		N/A	N/A
EA3-T4CL	DV-1000CBL, DO-CBL	EA-2CBL	EA-2CBL-1
EA3-T6CL			
EA3-T8CL	DO-CBL	EA-2CBL	EA-2CBL-1
EA3-T10CL			
PLC List A	Productivity Series, Do-more / BRX**, CLICK, DL05, DL105, DL205, D3-350, D4-450 phone jack		
PLC List B	D2-250, D250-1, D2-260, DL06 VGA connector		
*Cable can provide +5VDC for panel power			
**BX-P-SER2-RJ12 is required			

Communication Ports

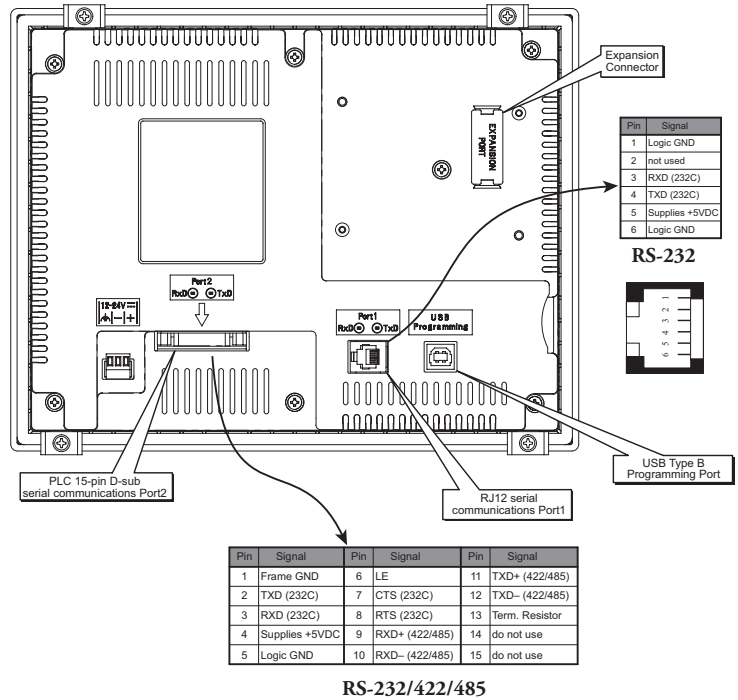


Drivers for your Controller

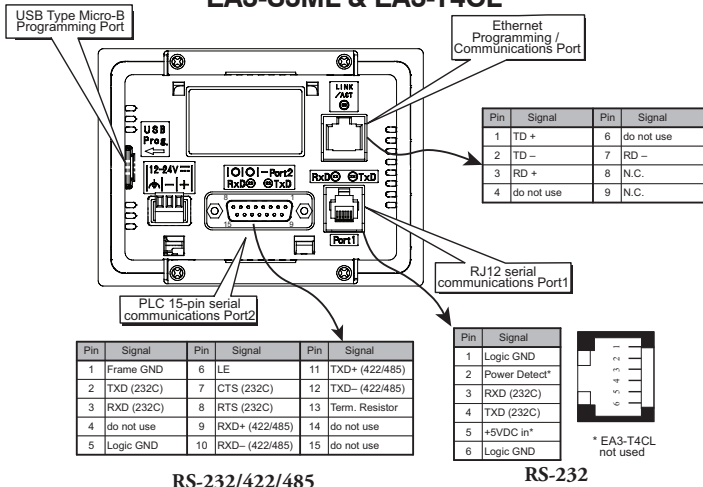
- AutomationDirect Productivity Series – serial / Ethernet*
- AutomationDirect Do-more / BRX – serial / Ethernet*
- AutomationDirect CLICK (Modbus)– serial / Ethernet*
- Direct**LOGIC K-sequence, **Direct**LOGIC DirectNET, **Direct**LOGIC Modbus (Koyo Addressing)
- Direct**LOGIC ECOM Ethernet*
- Modbus RTU
Modbus TCP/IP*
- Allen-Bradley DF1 Full Duplex, Allen-Bradley DF1 Half Duplex, Allen-Bradley PLC5 DF1, AB DH485, Allen-Bradley EtherNet/IP (Client) SLC5/05, NET-ENI, MicroLogix 1100/1400*, Control/CompactLogix (SLC mapping only)
- Omron Host Link (C200 Adapter, C500)
Omron FINS serial (CJ1, CS1)
- GE SNPX (90/30, 90/70, Micro 90, VersaMax Micro)
- Mitsubishi Melsec FX
- Siemens PPI
- Entivity Modbus RTU
- AutomationDirect GS Drives
- AutomationDirect SOLO Temperature Controllers
- Mitsubishi Q/QnA

* Ethernet port is built in to EA3-S3ML and EA3-T4CL. EA3-T6CL, EA3-T8CL and EA3-T10CL require the optional EA-ECOM module for Ethernet.

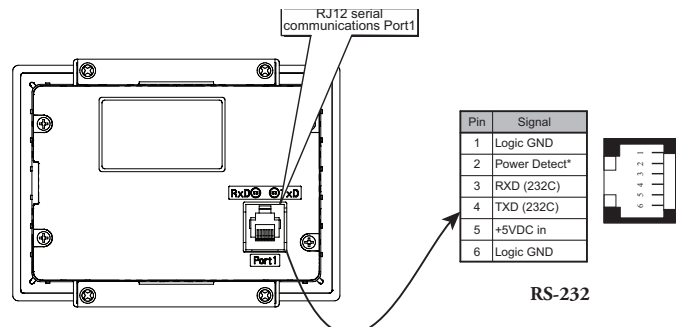
EA3-T8CL & EA3-T10CL



EA3-S3ML & EA3-T4CL



EA3-S3ML-RN & EA3-S3ML-R



Communication Expansion Module

EA-ECOM Ethernet Communication Module

The EA-ECOM communication module is compatible with EA3 series **C-more** Micro 6-inch, 8-inch and 10-inch panels and most **C-more** panels. It adds an Ethernet (RJ45) port for programming and PLC communications at 10/100 Mbps. **C-more** Micro Software and firmware version 4.0 or later is required. **C-more** Software and firmware version 6.50 or later is required.

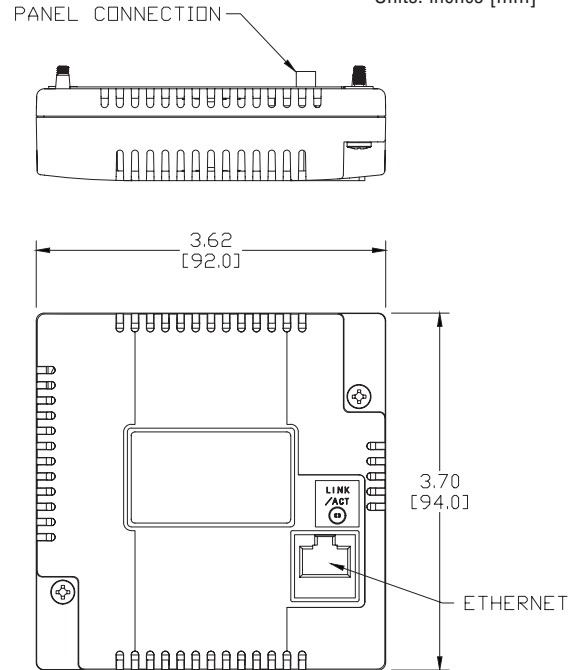
Part No. EA-ECOM



\$54.00

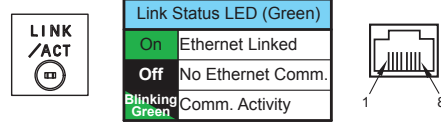
Dimensions

Units: inches [mm]



Ethernet Communication Interface Specifications	
Standard Specification	Conforms to IEEE802.3
Communication Speed	10/100 Base-T (Automatic Negotiation)
Cable Specification	Category 5
Auto MDI / MDI-X	Yes
Connector Type	RJ45

Communication Drivers	
C-more	C-more Micro
Supports all C-more Ethernet drivers	AutomationDirect Productivity Series Ethernet
	AutomationDirect Do-more / BRX Ethernet
	AutomationDirect CLICK Ethernet
	AutomationDirect ECOM Ethernet
	Modbus TCP/IP
	Allen-Bradley EtherNet/IP (Client) SLC5/05
	Allen-Bradley EtherNet/IP (Client) ENI Adapter
	Allen-Bradley EtherNet/IP (Client) MicroLogix 1100/1400
Allen-Bradley EtherNet/IP (Client) control/CompactLogix (SLC Mapping only)	



EA-ECOM Specifications	
Part Number	EA-ECOM
Operating Temperature	0 to 50 °C (32 to 122 °F) Maximum surrounding air temperature rating: 50 °C
Storage Temperature	-20 to +60 °C (-4 to +140 °F)
Humidity	5-95% RH (non-condensing)
Environmental Air	For use in pollution degree 2 environment
Vibration	IEC60068-2-6 (Test Fc), 5-9 Hz: 3.5 mm amplitude, 9-150 Hz: 1.0G, sweeping, at a rate of 1 octave/min. (±10%), 10 sweep cycles per axis on each of 3 mutually perpendicular axes
Shock	IEC60068-2-27 (Test Ea), 15 G peak, 11ms duration, three shocks in each direction per axis, on 3 mutually perpendicular axes (total of 18 shocks)
Noise Immunity	NEMA ICS3-304 RFI, (145 MHz, 440 MHz 10 W @ 10 cm) Impulse 1000 V @ 1 µs pulse
Emission	EN55011 Class A (Radiated RF emission)
Enclosure (panel door installation)	NEMA 250 type 4/4X indoor use only UL50 type 4X indoor use only IP-65 indoor use only (When mounted correctly)
Agency Approvals	CE (EN61131-2), UL508, CUL Canadian C22.2 To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page
Mounting Torque	50 oz-in [0.35 N-m]
Weight	0.23 lb [105g]

C-more Micro EA3 Panel Accessories

D-SUB 15-pin 90-degree Communication Port Adapter

The EA-ADPTR-4 adapter plugs into the 15-pin serial port on the rear of **C-more** Micro EA3 Series 3-inch*, 4-inch and 6-inch panels to allow a controller communication cable to be plugged in at a 90 degree angle to reduce panel depth requirements. 15-pin straight through pin-out. UL Recognized.

* EA3-S3ML-RN and EA3-S3ML-R are not equipped with a 15-pin serial port.

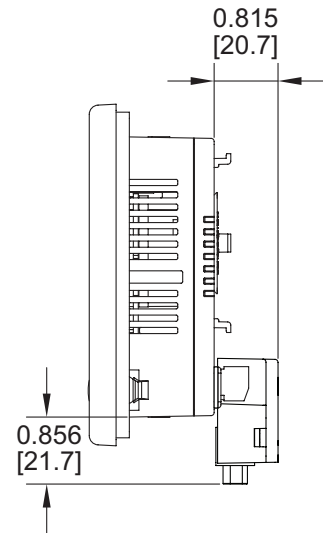
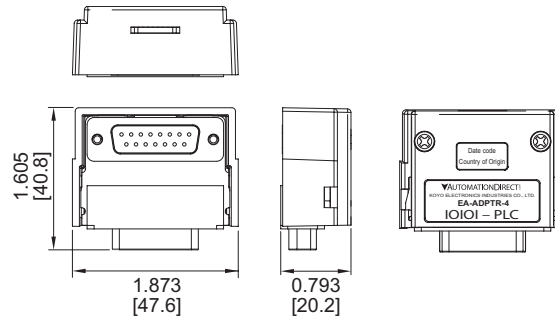
Part No.
EA-ADPTR-4



\$42.50

Dimensions

Units: inches [mm]



D-SUB 15-pin to Terminal Block Adapter

The EA-COMCON-3 adapter plugs into the 15-pin serial port on the rear of C-more Micro EA3 Series 3-inch*, 4-inch and 6-inch panels to allow wire terminal connections for an RS-422/RS-485/DH485 PLC communication cable. UL Recognized.

* EA3-S3ML-RN and EA3-S3ML-R are not equipped with a 15-pin serial port.

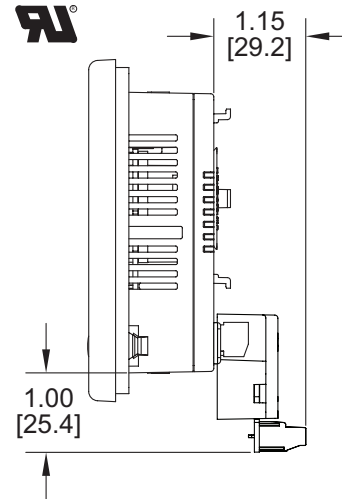
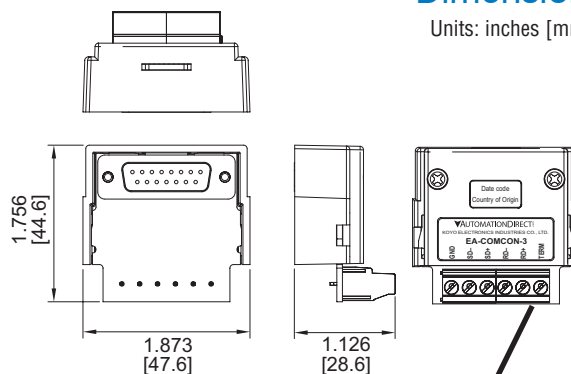
Part No.
EA-COMCON-3



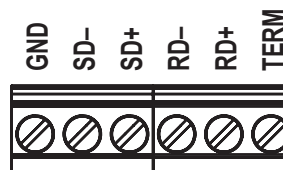
\$45.50

Dimensions

Units: inches [mm]



Terminals

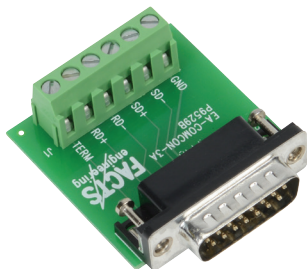


C-more Micro EA3 Panel Accessories

D-SUB 15-pin to Terminal Block Adapter

The EA-COMCON-3A adapter plugs into the 15-pin serial port on the rear of C-more Micro EA3 Series 8-inch and 10-inch panels to allow wire terminal connections for an RS-422/RS-485/DH485 PLC communication cable.

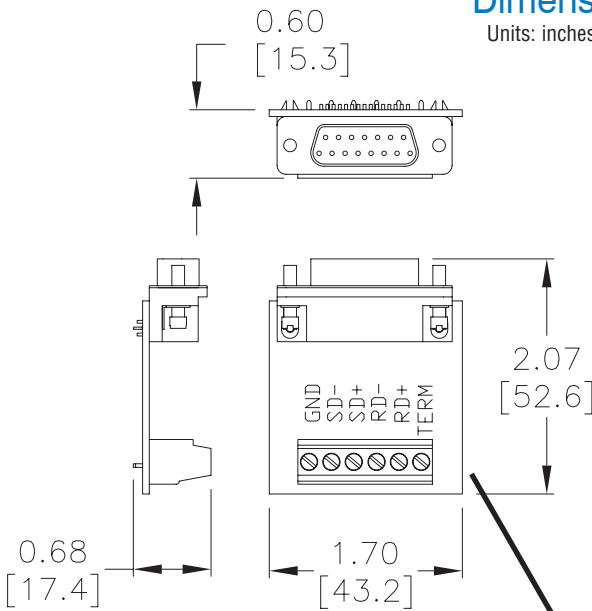
Part No.
EA-COMCON-3A



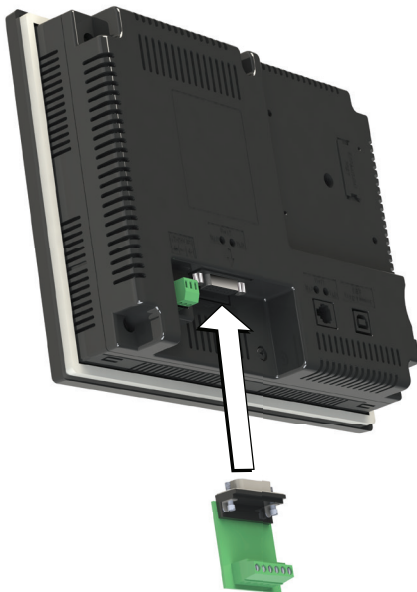
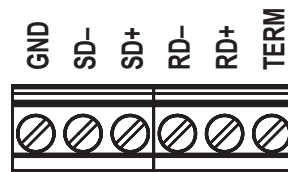
\$21.00

Dimensions

Units: inches [mm]



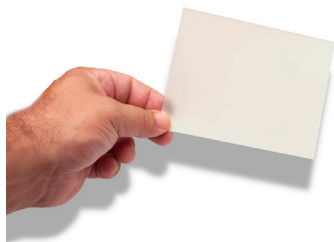
Terminals



C-more Micro EA3 Panel Accessories

Clear Screen Overlay

Optional clear screen overlay used to protect **C-more** Micro displays from minor scratches and wear. EA-MG-COV-CL contains 5 clear screen overlays. All other packages contain 3 clear screen overlays.



Part No. EA-MG-COV-CL
\$38.50

Part No. EA-4-COV3
\$36.50

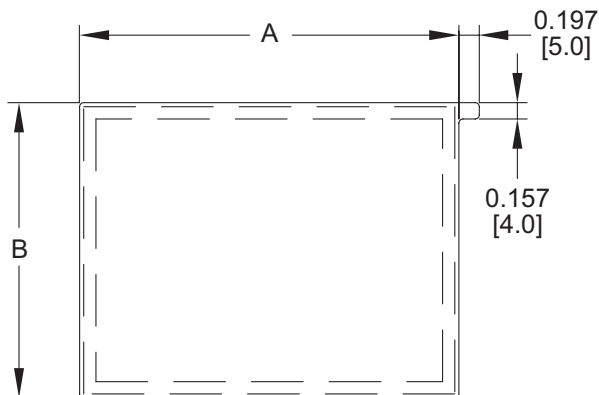
Part No. EA-6-COV2
\$40.50

Part No. EA-8-COV2
\$43.50

Part No. EA-10-COV2
\$49.00

Dimensions

Units: inches [mm]



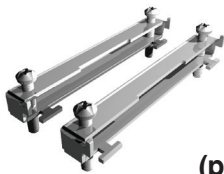
Part Number	Dimensions - inch [mm]	
	A	B
EA-MG-COV-CL	3.13 [79.4]	1.75 [44.4]
EA-4-COV3	4.15 [105.5]	2.52 [64.0]
EA-6-COV2	4.91 [124.8]	3.80 [96.4]
EA-8-COV2	7.32 [185.8]	5.44 [138.2]
EA-10-COV2	8.91 [226.2]	6.61 [168.0]

C-more Micro 3-inch and 4-inch EA3 Panel Replacement Parts

Replacement parts at a glance:

Part Number	Description	Price
EA-MG-S3ML-BRK	Panel mounting brackets, replacement. Package of 2. For use with C-more Micro 3in and EA3-T4CL HMIs.	\$19.00
EA-MG-DC-CON	DC 3-terminal power connector, replacement. Package of 5. For use with all C-more Micro 4in, 6in, 8in and 10in panels, and power adapters EA-MG-P1 and EA-MG-SP1.	\$15.50
EA-MG-S3ML-GSK	Panel mounting gasket, replacement. For use with C-more Micro EA1 series 3in HMIs.	\$13.50
EA-4-GSK	Panel mounting gasket, replacement. For use with C-more Micro EA3-T4CL 4in HMIs.	\$9.25
EA-MG-S3ML-FKL	Function key label insert, replacement. Package of 10. For use with C-more Micro 3in panels. (5) blank labels (5) landscape F1-F5 label included.	\$10.00

Panel Mounting Clips
Part No. EA-MG-S3ML-BRK



(pk of 2)

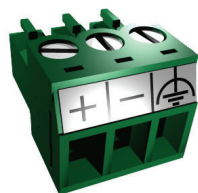
3" Panel Gasket
Part No. EA-MG-S3ML-GSK



EA3-T4CL Panel Gasket
Part No. EA-4-GSK

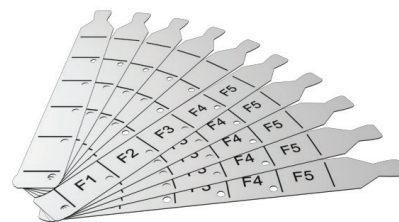


DC Power Connector
Part No. EA-MG-DC-CON



(pk of 5)

3" Panel Function Keys Label Inserts
Part No. EA-MG-S3ML-FKL



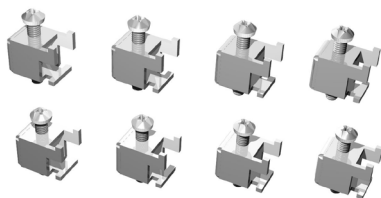
(pk of 10 - 5 blank, 5 F1-F5)

C-more Micro 6-inch EA3 Panel Replacement Parts

Replacement parts at a glance:

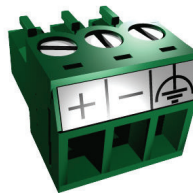
Part Number	Description	Price
EA-MG-BZ2-BRK	Panel mounting brackets, replacement. Package of 8. For use with C-more Micro 4in and 6in panels, all 6in bezels, and 3in bezel EA-MG-BZ2.	\$20.00
EA-MG-DC-CON	DC 3-terminal power connector, replacement. Package of 5. For use with all C-more Micro 4in, 6in, 8in and 10in panels, and power adapters EA-MG-P1 and EA-MG-SP1.	\$15.50
EA-MG6-S6ML-GSK	Panel mounting gasket, replacement. For use with C-more Micro 6in panels.	\$12.00
EA-MG6-S6ML-FKL	Function key label insert, replacement. Package of 5. For use with C-more Micro 6in panels. (3) blank labels (1) portrait F1-F5 label (1) landscape F1-F5 label included.	\$19.50

Panel Mounting Clips
Part No. EA-MG-BZ2-BRK



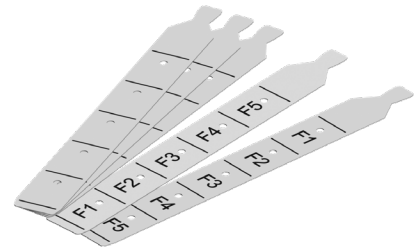
(pk of 8)

DC Power Connector
Part No. EA-MG-DC-CON



(pk of 5)

Function Keys Label Inserts
Part No. EA-MG6-S6ML-FKL



(pk of 5; 3 blank, 1 F1-F5 for landscape, 1 F1-F5 for portrait)

Panel Gasket
Part No. EA-MG6-S6ML-GSK

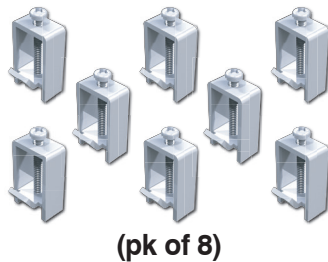


C-more Micro 8-inch and 10-inch EA3 Panel Replacement Parts

Replacement parts at a glance:

Part Number	ff3shortDescrip	listPrice
EA3-BRK	Panel mounting brackets, replacement. Package of 8. For use with C-more Micro EA3 series touch panels.	\$29.00
EA-MG-DC-CON	DC 3-terminal power connector, replacement. Package of 5. For use with all C-more Micro 4in, 6in, 8in and 10in panels, and power adapters EA-MG-P1 and EA-MG-SP1.	\$15.50
EA3-8-GSK	Panel mounting gasket, replacement. For use with C-more Micro EA3-T8CL 8in touch panel.	\$18.50
EA3-10-GSK	Panel mounting gasket, replacement. For use with C-more Micro EA3-T10CL 10in touch panel.	\$20.50
EA3-MG-8-FKL	Function key label insert, replacement. Package of 5. For use with C-more Micro EA3-T8CL HMI. (3) blank labels, (1) portrait F1-F7 label and (1) landscape F1-F7 label included.	\$16.50
EA3-MG-10-FKL	Function key label insert, replacement. Package of 5. For use with C-more Micro EA3-T10CL HMI. (3) blank labels, (1) portrait F1-F7 label and (1) landscape F1-F7 label included.	\$20.50

Panel Mounting Clips
Part No. EA3-BRK



DC Power Connector
Part No. EA-MG-DC-CON



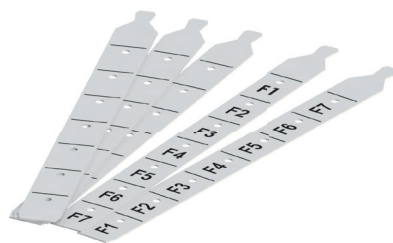
Panel Gasket
Part No. EA3-8-GSK



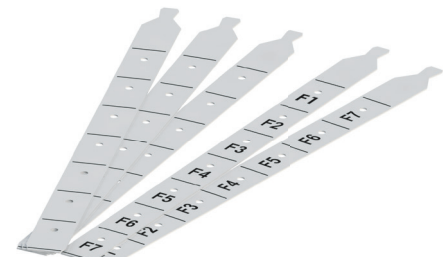
Panel Gasket
Part No. EA3-10-GSK



Function Keys Label Inserts
Part No. EA3-MG-8-FKL



Function Keys Label Inserts
Part No. EA3-MG-8-FKL



C-more Micro Communication Cables and Cable Kits

Cable Description	Cable Part Number	Price
Cables for direct connect to panel's serial Port1 (Panel powered from PLC's serial port.)		
Networking cable, RS-232 (RJ12 6P6C) to RS-232 (RJ12 6P6C), shielded, 12ft cable length. For use with CLICK, DL05, D2-240, D4-450 and Productivity3000 PLCs.	D0-CBL	\$38.00
DirectLOGIC DL06 connector, 15-pin D-sub HD15 male to RJ12 female. For use with DL06 CPUs and DL205 D2-250, D2-250-1, D2-260 and D2-262 CPUs.	FA-15HD	\$13.50
DirectLOGIC universal cable kit, for use with all DirectLOGIC PLCs with RS-232 ports.	FA-CABKIT	\$49.00
Communication cable, 6-pin RJ12 to 6-pin RJ11, 2m/6.6ft cable length. For use with any OP400 series OptiMate unit and a D3-340 CPU.	OP-3CBL-1	\$6.00
Cables used with serial Port2		
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	\$21.50
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	\$22.00
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	\$21.50
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	\$21.50
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	\$22.50
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	\$33.00
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	\$21.50
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	\$21.50
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	\$21.00
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	\$21.50
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	\$21.50
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	\$21.50
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	\$21.50
EA3-T8CL and EA3-T10CL cannot be powered by a PLC and cannot communicate with a PLC through the USB Programming Port.		
Note: Adding the optional EA-ECOM module allows communication via an Ethernet connection (EA3 series only).		



D0-CBL



OP-3CBL-1



FA-15HD



FA-CABKIT



EA-2CBL-1



EA-2CBL



EA-4CBL-1



EA-3CBL



EA-MLOGIX-CBL



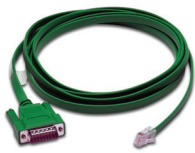
EA-4CBL-2



EA-PLC5-232-CBL



EA-SLC-232-CBL



EA-DH485-CBL



EA-90-30-CBL



EA-MITSU-CBL



EA-MITSU-CBL-1



EA-OMRON-CBL

C-more Micro Programming Software

FREE software!

C-more Micro Programming Software can be downloaded at no charge or a CD version may be purchased by ordering EA-MG-PGMSW. The software requires a USB port or Ethernet connection* on your PC to connect to the **C-more** Micro panel. Software Help Files are included in the download. This software programs all the **C-more** Micro panels (does not program the **C-more** 6-inch through 15-inch touch panels).



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Note: This software is used to program C-more Micro panels only.



Note: The Ethernet port is built in to EA3-S3ML and EA3-T4CL. EA3-T6CL, EA3-T8CL and EA3-T10CL require the optional EA-ECOM module for Ethernet.

Part Number	Panel Software / Firmware Version Required
EA3-S3ML-RN	4.30 or later
EA3-S3ML-R	
EA3-S3ML	4.20 or later
EA3-T4CL	
EA3-T6CL	3.6 or later
EA3-T8CL	3.5 or later
EA3-T10CL	

C-more Micro Programming Software is a spin-off of its powerful sibling **C-more** Touch Panel. It offers very high end features designed to reduce your configuration time. Simply drag and drop the objects from the object list (right side of screen) onto the screen construction area. Then configure your PLC tags and click on the objects you wish to use. Use the built-in simulator to review your work on your PC before ever downloading your project! The time saving benefits of the **C-more** Micro configuration software could easily pay for the panel. Check out www.CmoreMicro.com to download a free version.

Thumbnail project preview pane

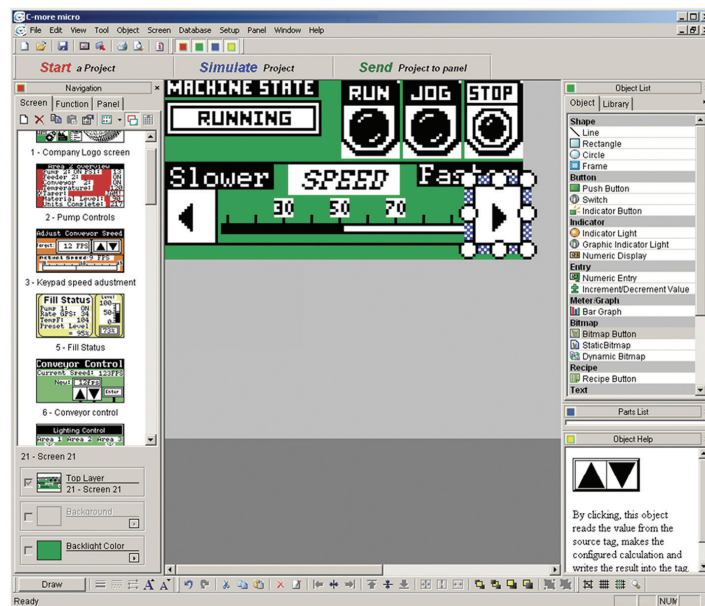
Helps keep track of multi-screen projects.

Built-in project simulator

- Runs your project on your PC
- Test all of your screens before downloading
- Time savings pays for the panel
- Simulate function keys and keypad bezel

Built-in user object/ screen libraries

Save time by re-using your custom objects and screens.



Scrolling object selection window

Lets you find the object you want fast. Just drag and drop it on the screen.

Scrolling help window

Gives you helpful information on each object

PC requirements

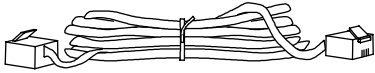
Following are the minimum system requirements for running **C-more** Micro Programming Software, EA-MG-PGMSW, on a PC:

- Windows® Operating System (See automationdirect.com for specific operating system requirements.)
- 150 MB free hard-disk space
- CD-ROM or DVD drive for installing software from the CD, or internet access to download free programming software
- USB port to use with the correct Programming Cable Assembly for project transfer from the programming software to the panel

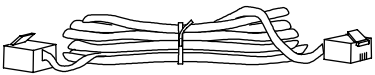
FA-CABKIT Universal Cable Kit

The table lists various devices that can be connected quickly with the universal cable kit. To determine which parts you need to use, simply use the table to find the connection you wish to make. Then match each device required for that connection with its part number. Snap the pieces together and you're ready to communicate. The following seven parts are included in the Universal Cable Kit. These parts are not sold separately, except for the FA-15HD high density 15-pin connector.

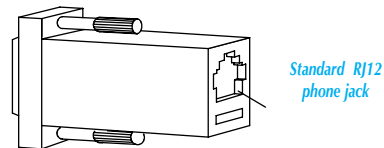
1. Standard phone-style connectors (RJ12), non-shielded



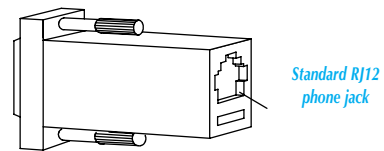
2. Standard phone and handset style connectors (RJ12, RJ11), non-shielded



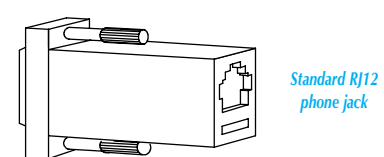
3. Universal 9-pin female D-sub connector



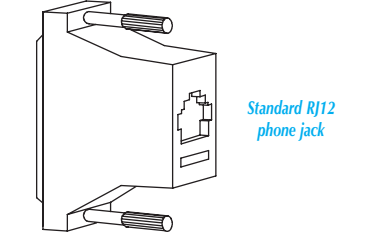
4. Universal 9-pin male D-sub connector



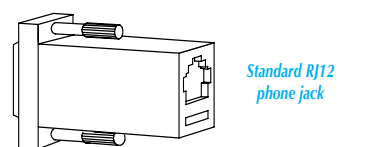
5. Universal 15-pin male D-sub connector



6. Universal 25-pin male D-sub connector



7. Universal 15-pin HD male D-sub connector (FA-15HD)



Universal cable kit

Items included in the universal cable kit

Device Description

- 7 ft. standard cable, 6P6C to 6P6C phone type
- 6 ft. adapter cable, 6P6C to 4P4C phone type
- AT connector 9-pin female to 6P6C connector
- (ASCII BASIC module) 9-pin male connector to 6P6C connector
- DL405 15-pin male connector to 6P6C connector
- DL405 CPU and DCM 25-pin male connector to 6P6C connector
- DL06, D2-250(-1) and D2-260 CPUs 15-pin HD male connector to 6P6C connector

Common connection examples

DL05, DL06, DL105, DL205, D3-350 and (D4-450 port 2) CPU connections

Connection desired	Devices required
1. DL05/06/105/205/DL350/D4-450 to AT type computer 9-pin	1,3
2. CPU to DV-1000	1
3. CPU to DL205 or DL405 DCM	1,6
4. CPU to DL340 CPU	2
5. CPU to ABM (DL205 only)	1,4

DL06, D2-250(-1), D2-260 CPU port 2 connections

Connection desired	Devices required
1. DL06/250(-1)/260 port 2 to AT type computer 9-pin	1,3,7
2. DL06/250(-1)/260 port 2 to DV-1000	1,3,7

DL305 D3-232-DCU connections

Connection desired	Devices required
1. DCU to AT type computer 9-pin	1,6,3
2. DCU to DL405 series DCM (requires 2 kits)	1,6,6
3. DCU to DL340 CPU	2,6
4. DCU to ABM	1,6,4

DL305 CPU connections

Connection desired	Devices required
1. DL340 CPU to AT type computer 9-pin	2,3
2. DL340 CPU to DL405 series CPU/DCM	2,6
3. DL340 CPU to DL240 CPU	2
4. DL340 to ABM	2,4
5. DL340 CPU to DCU CPU	2,6

DL405 CPU (15-pin) top port connections

Connection desired	Devices required
1. DL405 CPU to AT type computer 9-pin	1,5,3
2. DL405 CPU to DV-1000	1,5

DL405 CPU (25-pin) bottom port connections

Connection desired	Devices required
1. DL405 CPU to AT type computer 9-pin	1,6,3
2. DL405 CPU to DL405 series DCM (requires 2 kits)	1,6,6
3. DL405 CPU to DL340 CPU	2,6
4. DL405 CPU to ABM	1,6,4