## **C-more Micro EA1 Series Selection Guide**

C-more Micro EA1 Series Panels			
Part Number		Description	Price
EA1-S3ML		<b>C-more</b> Micro EA1 series touch screen HMI, 3in monochrome STN LCD, analog resistive, 128 x 64 pixel, LED backlight, (1) serial port.	\$272.00
EA1-S3ML-N	Non- Touch	C-more Micro EA1 series HMI, 3in monochrome STN LCD, 128 x 64 pixel, LED backlight, (1) serial port.	Retired
EA1-S3MLW	Typing Course Street Little St	<b>C-more</b> Micro EA1 series touch screen HMI, 3in monochrome STN LCD, analog resistive, 128 x 64 pixel, high-contrast white LED backlight, (1) serial port.	\$272.00
EA1-S3MLW-N	Non-Touch	<b>C-more</b> Micro EA1 series HMI, 3in monochrome STN LCD, 128 x 64 pixel, high-contrast white LED backlight, (1) serial port.	Retired

Part Number	Panel Software / Firmware Version Required
EA1-S3ML	1.0 or later
EA1-S3MLW	4.5 salatas
EA1-S3MLW-N	1.5 or later

## **C-more Micro EA1 Series Selection Guide**

C-more Micro EA1 Series Panels Programming Software & Programming Cable			
Part Number		Description	Price
EA-MG-PGMSW	C-more.	C-more Micro Windows programming software, USB or free download. For use with C-more Micro panels. Requires USB port connection from PC to C-more Micro panel.	\$31.50
EA-MG-PGM-CBL		AutomationDirect programming cable assembly, USB A to 6-pin RJ12, 6ft cable length. For use with <i>C-more</i> Micro panels, CLICK CPUs, Do-more H2 series CPUs, and DirectLOGIC CPUs.	\$52.00

C-more Micro EA1 Series Panel Accessories			
Part Number		Description	Price
EA-COMCON-3	Service of the servic	C-more 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 and C-more CM5 series 4in HMI.	\$55.00
EA-COMCON-3A		C-more Micro DSUB port adapter, 15-pin male to 6-pole RS-422/485 terminal block, straight cable entry. For use with C-more Micro EA1 3in with EA1-MG-SP1, EA3 8in and 10in HMIs, C-more EA9 8in, 10in, 12in and 15in and CM5 7in, 10in, 12in, 15in and 22in HMIs.	\$30.50
EA-MG-COV-CL		C-more screen protector, clear, 3in. Package of 5. For use with C-more Micro 3in HMIs.	\$47.50
EA-4-COV2		C-more Micro screen protector, non-glare, 4in. Package of 3. For use with C-more Micro EA1-T4CL 4in HMIs.	Retired
EA-6-COV2		C-more screen protector, non-glare, 6in. Package of 3. For use with C-more and C-more Micro 6in HMIs.	\$49.50



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-12

## **C-more Micro 3-inch EA1 Specifications**

Model	3-inch STN Micro Panel	3-inch STN Micro Panel	
Specification	Touch Screen	Non-Touch Screen	
Part Number	EA1-S3ML, EA1-S3MLW	EA1-S3MLW-N	
Description	128 x 64 pixel LCD display, five user defined keyp	oad function buttons, and five user defined LED's	
Display			
• <i>Typ</i> e	3.1-inch STN monochrome LCD, graphical characters		
Resolution	128 (W) x 6	64 (H) pixel	
• Color	2 colors (norr	nal / 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 buil	t-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			
• <i>Typ</i> e	LED		
• Color	5 user defined colors: EA1-S3ML, - 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 <u>EA-MG-P1</u> DC Power Adapter (discontinued), and <u>EA-MG-SP1</u> Serial Port with DC Power Adapter (discontinued).		
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, 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 co	ontinued on next page.	· · · · · ·	

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## **C-more Micro 3-inch EA1 Specifications**

Model Specification	3-inch STN Micro Panel Touch Screen	3-inch STN Micro Panel Non-Touch Screen
Part Number	EA1-S3ML, EA1-S3MLW	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 RJ12 communication port.	
• Power Consumption	1.05W (220mA	A @ 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	
AutomationDirect Productivity Series	
AutomationDirect CLICK	
AutomationDirect Do-more / BRX*	
AutomationDirect K-sequence	
AutomationDirect DirectNET	
AutomationDirect Modbus	
Modicon Modbus RTU	
Entivity Modbus RTU	
ote: * <u>BX-P-SER2-RJ12</u> is required	



For a list of supported protocols and cabling options refer to the 3-inch *C-more* Micro Protocols and cabling chart starting on pagepage tCMM-12

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**Operator Interface**