

The EL640.480-A4 SBS or -AD4 SBS as Replacement for EL7768MS display

The EL640.480-A4 SBS and -AD4 SBS are compatible with the EL7768MS with minor differences. These newer designs have additional features, but are designed to fit into the same mechanical mount and be driven from the same video signal source. See the respective manuals for the full specifications.

SIMILARITIES	EL640.480-A4 SBS and EL640.480-AD4 SBS	EL7768MS
Mechanical mounting	The x and y dimensions are identical. The mounting tabs are on different planes. See manuals for details.	
Height and width	The A4 SBS and AD4 SBS are slightly smaller overall.	
Connector and pinout	Video input connectors are compatible. Both use 4 pin power input connectors, but from different manufacturers.	
Video timing	Superset of EL7768MS The A4 SBS and AD4 SBS have additional video interfaces See timing diagrams for details.	
Shock	100g @ 4mS	50g @ 11mS
Vibration	"better" vibration specs: ASD level 0.05g ² /Hz	ASD level 0.02g ² /Hz
Temperature range	Same as EL7768MS	
Reliability	Same as EL7768MS	
Brightness	Same as EL7768MS	
Luminance variation with temperature	Same as EL7768MS	
Humidity	Same as EL7768MS	
Altitude	Same as EL7768MS	

DIFFERENCES	EL640.480-A4 SBS and EL640.480-AD4 SBS	EL7768MS
Mechanical	The packaging concepts are different between the displays resulting in differences in display element to front of display and mounting tab to display element dimensions. Optical filter or display element treatments and mounting are different. See the respective manuals for details	
Thickness	20 mm The DC/DC converter is integrated into the display.	37.9 mm with DC/DC converter. 17.8 mm with converter mounted remotely.
Weight	800 grams	600 grams
EMI	Frame is grounded. The A4 SBS and AD4 SBS have an internal ground plane layer.	Frame is ungrounded
Active Area	211.1mm x 158.3 The difference in active area is due to the slightly bigger pixel of the A4 SBS and AD4 SBS displays: 0.330 vs. 0.3226mm	206.4mm x 154.8mm
Luminance variation, time	20% max in 10,000hours	10% max in 10,000 hours
Nonuniformity	35%	26%
Brightness, contrast control	Yes—Control either with external potentiometer or customer electronic circuitry.	10%
Regulatory approvals	UL1950, UL2601-1, IEC950	UL544, UL1950

The EL640.480-AM Series as Replacement for EL7768MS display

The EL640.480-AM1 and AM8 are compatible with the EL7768MS with minor differences. These newer designs have additional features, but are designed to fit into the same mechanical mount and be driven from the same video signal source. See the respective manuals for the full specifications.

SIMILARITIES	EL640.480-AM Series	EL7768MS
Mechanical mounting	The x and y dimensions are identical. The mounting tabs are on different planes. See manuals for details.	
Height and width	The displays are similar in size. See manuals for details.	
Weight	650 grams	600 grams
Shock	100g @ 4mS	50g @ 11mS
Vibration	Same as EL7768MS	
Reliability	MTBF > 50,000 hours	MTBF > 30,000 hours
Brightness	Same as EL7768MS	
Luminance variation with temperature	Same as EL7768MS	
Humidity	Same as EL7768MS	
Altitude	Same as EL7768MS	

DIFFERENCES	EL640.480-AM Series			EL7768MS
Mechanical	The packaging concepts are different between the displays resulting in differences in display element to front of display and mounting tab to display element dimensions. Optical filter or display element treatments and mounting are different. See the respective manuals for details			
Thickness	<u>AM1</u> 20 mm	<u>AM8 IN</u> 15.8 mm	<u>AM8 ET</u> 17.8 mm	37.9 mm with DC/DC converter. 17.8 mm with converter mounted remotely.
Connector and pinout	Samtec 2 mm 20-pin connector.			0.1" center square pin
Video timing	Dual-scan 8-bit (pixels/clock)			"Feature Connector"
Temperature range	<u>AM1</u>	<u>AM8 IN</u>	<u>AM8 ET</u>	<u>7768MS</u>
Operating:	-5 to +55° C	-25 to +65° C	-40 to +65° C	-0 to +55° C
Non-operating:	-40 to +75° C	-40 to +75° C	-40 to +75° C	-40 to +75° C
EMI	No conductive frame.			Frame is ungrounded
Active Area	211.1mm x 192 The difference in active area is due to the slightly bigger pixel of the AM displays: 0.25 vs. 0.3226mm			206.4mm x 154.8mm
Luminance variation, time	20% max in 10,000hours			10% max in 10,000 hours
Nonuniformity	35%			26%
Brightness, contrast control	Brightness control is available on some AM models.			10%
Regulatory approvals	UL1950, IEC950			UL544, UL1950