

# I/O MTUs - SDe Series I/O

## ABB Ability™ Symphony® Plus Hardware Selector

Module Termination Units (MTUs) provide mounting and connectivity for SDe series control and I/O modules. The Evolution Mounting Chassis is a form, space-fit, functional replacement for a Harmony rack MMU. Mounting bases provide the host for SDe control and I/O modules when mounted in an evolution chassis or on a rail.

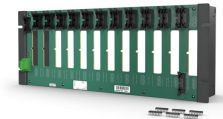
The MTUs combine with the SDe Series I/O product family including DIN Rail horizontally or vertically mounting. The flexible and modular I/O offering works across the entire control landscape regardless of application type, size, or physical location. It includes traditional analog, HART, and digital modules as also turbine specific modules for integrated turbine control solutions.

Below is an outline of the range of different MTUs for SDe I/O modules available.



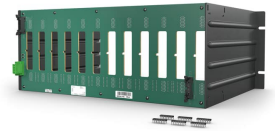
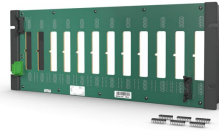
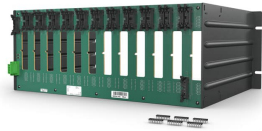
Specific feature <sup>1</sup>	EMB01S-CIO	EMB01S-EMR	EMB01S-PIO	EMB01S-SOE
<b>General info</b>				
Article number	7PAA005092R1 (EMB01S-CIO)	7PAA008522R1 (EMB01S-EMR)	7PAA008524R1 (EMB01S-PIO)	7PAA008647R1 (EMB01S-SOE)
Life cycle status	Active			
Line redundancy	Yes			
Channels	13	8		16
Hot swap	No			
Supported IO modules	AD11e	DO05e	PI01e	DI06e
Singular or redundant	Singular			
Form factor	EMC-_B0_ Evolution Mounting Chassis			
Mounting	EMC-DB01, EMC-DB02, EMC-SB01, EMC-SB02			
HN800 bus length	190 mm	19 mm	190 mm	
MTBF (per MIL-HDBK-217-FN2)	PR C: 1,384,953 Hours @ 30 °C, 1,350,557Hours @ 40 °C, 1,231,591 Hours @ 70 °C	PR C: 1,404,403 Hours @ 30 °C, 1,369,046 Hours @ 40 °C, 1,246,948 Hours @ 70 °C		PR B: 1,404,403 Hours @ 30 °C, 1,369,046 Hours @ 40 °C, 1,246,948 Hours @ 70 °C
MTTR (Hours)	8 Hrs			
<b>Dimensions</b>				
Width	35.5 mm			
Depth	173.46 mm			
Height	177 mm			
Weight	204 grams			
<b>Environment and certification</b>				
RoHS compliance	RoHS Directive 2015/863			
WEEE compliance	DIRECTIVE/2012/19/EU			

<sup>1</sup> For detailed information on each module, please visit: [symphonyplushardwareselector.automation.abb.com](https://symphonyplushardwareselector.automation.abb.com)



Specific feature <sup>1</sup>	EMB01S-UAI	EMB01S-XIO	EMB910e	EMC-DB01
<b>General info</b>				
Article number	7PAA005094R1 ((EMB01S-UAI)	7PAA005096R1 (EMB01S-XIO)	7PAA005098R1 (EMB910)	7PAA005101R1 (EMC-DB01)
Life cycle status	Active			
Line redundancy	Yes			
Channels	16	14, 15 or 16		
Hot swap	No			
Supported IO modules	AI16e	AI12e, AO02e, DI06e, DO01e	SPC810e	EMB01S-CIO, EMB01S-EMR, EMB01S-PIO, EMB01S-SOE, EMB01S-UAI, EMB01S-XIO
Singular or redundant	Singular		Redundant	Singular
Form factor	EMC_B0_Evolution Mounting Chassis			19-Inch Rack
Mounting	EMC-DB01, EMC-DB02, EMC-SB01, EMC-SB02			REAR Mounting Rail
HN800 bus length	190 mm			610 mm
MTBF (per MIL-HDBK-217-FN2)	PR C: 73,572 Hours @ 30 ° C, 73,473 Hours @ 40 ° C, 73,089 Hours @ 70 ° C	PR E: 245,577 Hours @ 30 ° C, 244,473 Hours @ 40 ° C, 240,272 Hours @ 70 ° C	PR C: 8,568,246 Hours @ 30 ° C, 7,392,563 Hours @ 40 ° C, 4,825,271 Hours @ 70 ° C	PR C: 569,872 Hours @ 30 ° C, 483,065 Hours @ 40 ° C, 310,534 Hours @ 70 ° C
MTRR (Hours)	8Hrs	8 Hrs		16 Hrs
<b>Dimensions</b>				
Width	35.5 mm		483.1 mm (19.0 inches)	
Depth	173.46 mm			99.04 mm (3.90 inches)
Height	177 mm			177.80 mm (7.0 inches)
Weight	218 grams	210 grams	181 grams	1.792 kg
<b>Environment and certification</b>				
RoHS compliance	RoHS Directive 2015/863			
WEEE compliance	DIRECTIVE/2012/19/EU			

<sup>1</sup> For detailed information on each module, please visit: [symphonyplushardwareselector.automation.abb.com](https://www.abb.com/automation/1000/symphonyplus/hardwareselector)



Specific feature <sup>1</sup>	EMC-DB02	EMC-SB01	EMC-SB02
<b>General info</b>			
Article number	7PAA005102R1 (EMC-DB02)	7PAA005099R1 (EMC-SB01)	7PAA005100R1 (EMC-SB02)
Life cycle status	Active		
Line redundancy	Yes		
Hot swap	No		
Supported IO modules	EMB01S-CIO, EMB01S-EMR, EMB01S-PIO, EMB01S-SOE, EMB01S-UAI, EMB01S-XIO		
Singular or redundant	Singular		
Form factor	19-Inch Rack		
Mounting	FRONT Mounting Rail	REAR Mounting Rail	Front Mounting Rack
HN800 bus length	610 mm	520 mm	
MTBF (per MIL-HDBK-217-FN2)	PR C: 569,872 Hours @ 30 °C, 483,065 Hours @ 40 °C, 310,534 Hours @ 70 °C	PR C: 685,379 Hours @ 30 °C, 598,469 Hours @ 40 °C, 409,247 Hours @ 70 °C	
MTTR (Hours)	16 Hrs		
<b>Dimensions</b>			
Width	483.1 mm (19.0 inches)	483.1 mm (19.0 inches)	
Depth	99.04 mm (3.90 inches)		
Height	177.80 mm (7.0 inches)		
Weight	3.175 kg	1.701 kg	3.084 kg
<b>Environment and certification</b>			
RoHS compliance	RoHS Directive 2015/863		
WEEE compliance	DIRECTIVE/2012/19/EU		

<sup>1</sup> For detailed information on each module, please visit: [symphonyplushardwareselector.automation.abb.com](https://symphonyplushardwareselector.automation.abb.com)

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