DATA SHEET

I/O Systems - SDev Series I/O
ABB Ability™ Symphony® Plus Hardware Selector

SDev (Symphony DIN) Series I/O is a Symphony Plus flexible and modular I/O offering that works across the entire control landscape regardless of application type, size, or physical location. It includes traditional analog, HART, and digital modules as well also turbine specific modules for integrated turbine control solutions.

The SDev Series I/O product family includes DIN Rail horizontally or vertically mounted digital and analog modules, as well as integration with intelligent field devices and protocols. Hardwire I/O and Fieldbus I/O coexist and use the same function block library to build real-time control applications.

Traditional SDev Series analog input modules interface with field inputs such as pressure and flow transmitter signals, thermocouple inputs, and resistive temperature device (RTD) inputs. Analog output modules provide output signals to adjust final control elements such as control valves, positioners, actuators, etc. SDev Series digital input modules have input channels to read the states of switches, relay contacts, solenoids, etc. Digital output modules provide output channels for DC or AC switching applications.

The digital outputs can be used to drive annunciators and drive two-state final control elements such as actuators, relays, and solenoids. For SDev Series Digital I/O, each channel can be individually configured as an SOE (Sequence of Events) point. This flexibility removes the cost and complexity of assigning additional digital inputs as SOE in the field. SOE with a 1 msec timestamp is available across the entire system, whether the I/O is local or remotely located.

Below is an outline of the range of different SDev I/O modules available.




Specific feature [1]	AI12ev	AO02ev	DI06ev	DO01ev
General info				
Article number	7PAA004001R11	7PAA004003R11	7PAA004004R11	7PAA004005R11
Type	Analog Input	Analog Output	Universal Digital Input	Transistor Digital Output
Signal specification	4…20 mA, 0…+1 VDC, 1…+5 VDC, -10…+10 VDC	4…20 mA, 1…+5 VDC	24/48/110/125 VDC, 100/120 VAC	max 250 mA @ 24-48 VDC
Life cycle status	ACTIVE			
Number of channels	15	16		
Signal type	High Level AI	High Level AO	Universal DI	Transistor DO
HART	No			
SOE	No		Yes	No
Redundancy	No			
Form factor	HR MMU			
Mounting	MMU (1-Slot)			
MTBF (per MIL-HDBK-217-FN2)	PR: A = 146,733 Hours @ 30 ˚C; 109,094 Hours @ 40 ˚C; 43,780 Hours @ 70 ˚C	PR: A = 141,385 Hours @ 30˚C, 107,666 Hours @ 40˚C, 44,605 Hours @ 70˚C	PR: A = 181,071 Hours @ 30˚C, 149,154 Hours @ 40˚C, 77,381 Hours @ 70˚C	PR: A = 210,256 Hours @ 30˚C, 166,073 Hours @ 40˚C, 111,541 Hours @ 70˚C
MTTR (Hours)	8 Hours			
Dimensions				
Width	35.6 mm (1.40 inch)			
Depth	177.8 mm (7.0 inch)			
Height	298.5 mm (11.75 inch)			
Weight	414 g (14.6 oz.)	412 g (14.5 oz.)	420 g (14.8 oz.)	402 g (14.2 oz.)
Environment and certification				
RoHS compliance	RoHS Directive 2015/863			
WEEE compliance	DIRECTIVE/2012/19/EU			

[1] For detailed information on each module, please visit: **symphonyplushardwareselector.automation.abb.com**

solutions.abb/symphonyplus
solutions.abb/controlsystems