DATA SHEET

Controllers - SDev Controllers
ABB Ability™ Symphony® Plus Hardware Selector

Symphony Plus SDev Controllers (SPC) is a powerful and scalable controller family for small, mid-range, and high-end applications. Supporting all types of control requirements including discrete, continuous, sequential, and advanced control applications. The SDev features include modular high-density design, low energy consumption, flexible DIN-Rail column or row mounting, and extreme operating temperature range (-40 to +70 °C)

The controllers belong to the ABB Ability Symphony Plus Control and I/O family: the SDev Series – a green portfolio of completely scalable control and I/O products that deliver a total plant automation solution for your process regardless of application type, size, or physical setting. Energy efficient, compact, and providing digital infrastructure to integrate smart field devices seamlessly makes the SDev Series the best automation solution for your new installation, upgrade, or expansion.

SDev Series controllers are the latest in a long line of ABB field-proven process controllers and can adapt to a broad spectrum of applications and process requirements. Configured by S+ Engineering, SDe Series controllers feature an extensive library of predefined function codes for easy building block design of complex control strategies to fit any control application, including continuous, sequential, batch, and advanced control.

The SDev Series controller subsystems are redundant at all levels - CPU, power, internal bus, I/O networks, communication ports, and plant network. Compliance with international standards assures the highest level of reliability and quality needed to meet the most rigorous global specifications and requirements. Together, they provide users with fast, accurate, uninterrupted control of their process.

Further, SDev Series controllers are designed to specifically address cybersecurity threats as defined by the industry-leading standard IEC 62443. For example, SDev Series controllers are ISA Secure Component Security Assurance (CSA) certified (formally known as Embedded Device Security Assurance, EDSA).

Below is an outline of the range of different SDev Controllers available.

Specific feature [1]	SPC810ev
General info	
Article number	7PAA001436R11
Life cycle status	Active
Redundancy	No
SIL	No
Clock Frequency	250 MHz
FBs per controller	30 000
Closed loop control performance	5000 I/O in under 250 msec (70% Digital, 30% Analog)
XR communications	Up to 100 import + 1000 export XR messages per sec
DRAM Memory	128 MB RAM
NVRAM	2.0 MB MRAM
Flash ROM	4 MB Flash ROM
Form factor	HR Module
Mounting	HR (1-Slot in MMU)
HN800 bus length	355 mm
MTBF (per MIL-HDBK-217-FN2)	SPC810ev PR: D = 230,710 hours @ 40 °C
MTTR (Hours)	SPC810ev1K02 MTTR = 1 hour
Dimensions	
Width	35.6 mm
Height	177.8 mm
Depth	298.5 mm
Weight (including base)	585 g
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