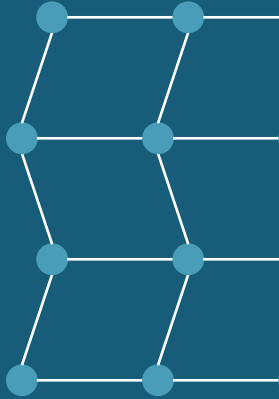


MANUFACTURER-SOURCE TECHNICAL REFERENCE

ABB SPASI23

Product Reference

ABB SPASI23 Isolated analog input module



DOCUMENT SCOPE

Independent Apter Power manual compiled only from the cited ABB manufacturer sources. No product photograph is included.

Product / lookup identity	ABB SPASI23
Reference number	SPASI23
Document basis	Published ABB product records, PDFs, and manuals listed on page 3



Product page

<https://www.apterpower.com/ABB/spasi23>
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Product role and published parameters

WHAT IT IS, WHAT IT DOES, AND WHERE IT FITS

ABB SPASI23 is a Symphony Plus Harmony rack isolated analog input module with 16 independently configured channels. Each channel has dedicated 24-bit conversion architecture. System context: ABB SPASI23 Isolated analog input module.

Published field	Manufacturer-published value or verified identity note
Input channels	16 independently configured channels
A/D architecture	Dedicated 24-bit conversion per channel
Current input	4–20 mA
High-level voltage inputs	1–5 VDC, 0–5 VDC, 0–10 VDC, –10 to +10 VDC, or a user range within –10 to +10 VDC
Millivolt inputs	–100 to +100 mV and 0 to 100 mV
Thermocouple types	B, E, J, K, L, N (14 AWG), N (28 AWG), R, S, T, U, Chinese E, and Chinese S
Three-wire RTD characteristics	100-ohm platinum US Laboratory, US Industrial, and European; 120-ohm nickel; 10-ohm copper; Chinese 53-ohm copper

System function and signal path

01	Input Classes: 4–20 mA current; High-level DC voltage within the documented ranges; Millivolt; Thermocouple; Three-wire RTD
02	Processing: Dedicated 24-bit conversion per channel; Input processing and automatic calibration; Gain and offset handling; Engineering-unit conversion; Lead-wire resistance adjustment; Cold-junction compensation
03	Held Claims: Do not claim HART unless an exact SPASI23 ABB source is produced.; Do not infer certification, enclosure rating, weight, or dimensions from A116e/A116ev.; Do not represent mixed channel capability as permission to connect incompatible signals without engineering.

Applications, answers, and official sources

1 Mixed process instrumentation: Acquire supported current, voltage, and temperature signals on independently engineered channels in a Symphony Plus rack I/O application.

2 Thermocouple monitoring: Measure supported thermocouple types with the correct extension wiring, cold-junction design, and channel configuration.

3 RTD temperature acquisition: Connect supported three-wire RTD characteristics after verifying sensor curve, lead-wire design, and termination documentation.

4 Legacy ASI modernization: Apply ABB's SPASI03/SPASI13/IMASI23 replacement guidance as part of an engineered migration with revision and power checks.

Frequently asked questions

What is ABB SPASI23?	It is a 16-channel isolated universal analog input module for Symphony Plus Harmony rack I/O.
How many channels does SPASI23 have?	ABB lists 16 independently configured input channels.
What conversion resolution is documented?	ABB describes a dedicated 24-bit conversion architecture for each channel.
Does SPASI23 accept 4–20 mA?	Yes. ABB lists 4–20 mA current input.
Which voltage ranges are supported?	ABB lists 1–5, 0–5, 0–10, and –10 to +10 VDC, plus a user range within the documented negative-to-positive 10 VDC span.
Can channels be configured for thermocouples?	Yes. ABB lists multiple thermocouple types, but the exact type, wiring, and compensation arrangement must be configured correctly.

Official ABB sources

SPASI23 Analog Input Module Instruction	https://search.abb.com/library/Download.aspx?DocumentID=2VAA001604&LanguageCode=en&DocumentPartId=&Action=Launch
Symphony Plus Product Catalog, Revision E	https://library.e.abb.com/public/fa6c9b92blef4d9cba4acd211ba01e5b/2VAA005340%20en%20E%20Symphony%20Plus%20Product%20Catalog.pdf.pdf
Symphony Plus Product Catalog, Revision G	https://library.e.abb.com/public/67f6b20f64d0443da36258e62a597791/2VAA005340%20en%20G%20Symphony%20Plus%20Product%20Catalog.pdf
Symphony Plus Life Cycle Updates / ASI23 Field Alert	https://library.e.abb.com/public/0e820d314f9e491380a1bfbf0e7073d1/04_Symphony%20Plus%20life%20cycle%20updates-Jim%20Day.pdf
ABB Symphony Plus Hardware Selector – AI16ev	https://symphonyplushardwareselector.automation.abb.com/product/ai16ev