

MANUFACTURER-SOURCE TECHNICAL REFERENCE

ABB IMDSI02

Product Reference

ABB IMDSI02 16-channel digital 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 IMDSI02
Reference number	IMDSI02
Document basis	Published ABB product records, PDFs, and manuals listed on page 3



Product page

<https://www.apterpower.com/ABB/imdsi02>
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Product role and published parameters

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

ABB IMDSI02 is a legacy sixteen-channel digital input module used in the INFI 90 and Harmony Rack installed-base evolution path. The module receives discrete field states and presents them to the control system for status monitoring, permissives, alarms, and interlock logic. System context: ABB IMDSI02 16-channel digital input module.

Published field	Manufacturer-published value or verified identity note
Product type	Legacy digital input module
Channels	16 digital inputs
Documented input classes	24 VDC, 125 VDC, and 120 VAC
Isolation	Inputs optically isolated; ABB documents shared commons for pairs 7/8 and 15/16
Shared-source rule	Each shared-common pair must use the same voltage source
ABB evolution mapping	SPDSI22 replacement path; distinct product, not alias
Exact termination unit / cable	HOLD pending exact ABB instruction and installed drawings

System function and signal path

01	System Inputs: Sixteen discrete inputs in the officially documented 24 VDC, 125 VDC, or 120 VAC classes.
02	Processing: Optically isolated discrete-state acquisition; exact thresholds, filtering, timing, and function-code assignment remain HOLD.

Applications, answers, and official sources

1 Equipment status monitoring: Reads verified discrete running, stopped, ready, and fault states.

2 Alarm and trip acquisition: Brings isolated field alarm or protective-trip states into legacy control logic.

3 Permissive and interlock inputs: Supplies on/off conditions used by controller sequencing after voltage and common checks.

4 Engineered Harmony migration: Supports controlled assessment toward SPDSI22 while preserving field-source and termination constraints.

Frequently asked questions

What is ABB IMDSI02?	It is a legacy sixteen-channel digital input module in ABB's INFI 90 / Harmony evolution context.
Which input voltages are officially documented?	ABB lists 24 VDC, 125 VDC, and 120 VAC.
Are the inputs isolated?	ABB describes optical isolation, subject to the documented shared-common pairs on the termination unit.
Which channels share commons?	Inputs 7/8 share one common and inputs 15/16 share another.
Can mixed voltage sources be used within a shared pair?	No. ABB states that each of those pairs must use the same voltage source.
What does the module do in the system?	It acquires discrete field states for monitoring and control logic.

Official ABB sources

ABB Harmony evolution mapping presentation	https://library.e.abb.com/public/68e694fd1f5743ba949fbae1859ee3ac/02%20ABB%20Users%20Group%20Anchorage%20Harmony.pdf
ABB Harmony Rack I/O Product Overview WBPEEUS240011B1	https://library.e.abb.com/public/429d55ddf7c18f3ec1256c95006f67bc/WBPEEUS240011B1_-_en_Harmony_Rack_I_O_Product_Overview.pdf