

MANUFACTURER-SOURCE TECHNICAL REFERENCE

ABB IMDSM05

Product Reference

ABB IMDSM05 16-circuit, 24 VDC selectable digital input/output module

DOCUMENT SCOPE

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

Product / lookup identity	ABB IMDSM05
Reference number	IMDSM05
Document basis	Published ABB product records, PDFs, and manuals listed on page 3



Product page

<https://www.apterpower.com/ABB/imdsm05>
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Product role and published parameters

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

ABB IMDSM05 is a legacy sixteen-circuit digital input/output module for 24 VDC signals in the INFI 90 and Harmony Rack installed-base evolution path. The module can bring discrete field states into the controller and send discrete commands back to field-control circuits, according to the configured group roles. System context: ABB IMDSM05 16-circuit, 24 VDC selectable digital input/output module.

Published field	Manufacturer-published value or verified identity note
Product type	Selectable digital input/output module
Circuits	16 digital I/O circuits
Signal class	24 VDC
Configuration grouping	Inputs or outputs selectable in groups of 8
ABB input migration	SPDSI22, subject to engineered review
ABB output migration	SPDSOI4, subject to engineered review
Migration wiring	Change dipshunt and reverse field-wire polarity as specified by ABB

System function and signal path

01	Sixteen 24 VDC discrete circuits configured as inputs or outputs in groups of eight.
02	Acquires on/off field states for controller logic; exact thresholds and timing remain HOLD.
03	Commands on/off field circuits; exact current, topology, and protection remain HOLD.
04	Input and output duties split to different ABB successors; mixed or DLS use has no direct replacement.

Applications, answers, and official sources

1 Grouped machine status I/O: Acquires 24 VDC status groups where the installed module is configured for input duty.

2 Grouped discrete actuation: Commands 24 VDC on/off circuit groups where the installed module is configured for output duty.

3 Legacy mixed-I/O panels: Maintains verified legacy configurations while recognizing that mixed duty has no direct replacement.

4 Engineered I/O split migration: Supports planned separation to SPDSI22 inputs and SPDSOI14 outputs with wiring and logic validation.

Frequently asked questions

What is ABB IMDSM05?	It is a legacy sixteen-circuit 24 VDC digital input/output module.
How are its circuits configured?	ABB says they are selectable as inputs or outputs in groups of eight.
Can individual channels be freely mixed?	The official evidence supports group-of-eight selection, not arbitrary per-channel mixing.
What does it process?	It handles 24 VDC discrete input states and output commands according to the configured group roles.
What is the input-duty migration path?	ABB maps input duty to SPDSI22, subject to engineering review.
What is the output-duty migration path?	ABB maps output duty to SPDSOI14, subject to engineering review.

Official ABB sources

ABB Harmony evolution mapping presentation	https://library.e.abb.com/public/68e694df1f5743ba949fbae1859ee3ac/02%20ABB%20Users%20Group%20Anchor%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