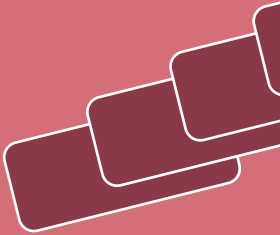


MANUFACTURER-SOURCE TECHNICAL REFERENCE

ABB IMMFP12

IMMFP12 Controller Architecture, Backup, and Migration Guide

ABB IMMFP12 INFI 90 Harmony Rack Multifunction Processor



DOCUMENT SCOPE

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

Product / lookup identity	ABB IMMFP12
Reference number	IMMFP12
Document basis	Published ABB product records, PDFs, and manuals listed on page 3



Product page

<https://www.apterpower.com/ABB/immfp12>
Apter Power contact

sales13@apterpower.com | +86 180 3023 5313

Process I/O, I/O Expander Bus, IMMFP12 control execution, Controlway, Cnet, and serial stations

ABB IMMFP12 is a Harmony Rack multifunction processor for process-control applications requiring multiple-loop analog, sequential, batch, and advanced control. The processor receives process I/O from analog and digital I/O modules over the I/O Expander Bus.

01	System Inputs: Process I/O data received from analog and digital rack I/O modules over the I/O Expander Bus; operator and computer commands arrive through the system communication architecture.
02	Processing: Executes multiple-loop, analog, sequential, batch, and advanced control strategies using the documented programming environments.
03	Outputs: Control data to rack I/O and shared process data to peer/system nodes through the documented rack architecture.
04	Communications: I/O Expander Bus, Controlway, Cnet through Harmony Rack communication modules, serial ports up to 19.2 kbaud, station links, and a 1 Mbaud redundant communication link.
05	Boundary: IMMFP12 is a controller, not an I/O module or termination unit. Port availability and redundancy depend on the installed architecture and termination hardware.

One-slot legacy controller scope with source-gated SPC810ev evolution boundaries

01	Verification Status: VERIFIED_EXACT_MODEL_AND_FUNCTION
02	Exact Mapping: ABB identifies IMMFP12, together with IMMFP11, as a Harmony Rack multifunction processor for multiple-loop analog, sequential, batch, and advanced control. ABB states that IMMFP12 has twice the memory capacity of IMMFP11.
03	Lifecycle Status: HOLD - ABB called an installed IMMFP12 outdated in a 2024 customer evolution example and current ABB catalogs present SPC810ev as the form/space-fit/functional replacement for MFPxx, but no current exact IMMFP12 lifecycle-phase statement was found.

Model/revision, memory, software, database, slot, serial wiring, peer links, redundancy, and recovery

01	Back up the complete controller configuration, function-code database, tuning data, and revision records before service.
02	Verify the exact IMMFP12 hardware and firmware revision and the redundancy arrangement; do not mix paired-controller settings casually.
03	Confirm the installed Controlway/module-bus mode, address, serial termination hardware, and station population from approved drawings.
04	Follow ABB and site isolation, ESD, insertion/removal, and commissioning procedures for the installed MMU.
05	Check the documented +5 VDC supply and 0 to 70 deg C ambient before energization.
06	After replacement, verify I/O Expander Bus communication, peer communication, Cnet access, serial stations, redundancy transfer, alarms, and control outputs.

Identity and release controls

Verification Status	VERIFIED_EXACT_MODEL_AND_FUNCTION
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Official ABB sources

ABB Multifunction Processors Data Sheet WBPEEUD230002A1	https://library.e.abb.com/public/2b03a2c8722784fcc1256d12005fb3e3/WBPEEUD230002A1_-_en_Multifunction_Processors_Data_Sheet.pdf
ABB Harmony Rack Controller Product Overview WBPEEUS230002B1	https://library.e.abb.com/public/1c7ed919c3349939c1256d29005d5c48/WBPEEUS230002B1_-_en_Harmony_Rack_Controller_Product_Overview.pdf
ABB Ability Symphony Plus Product Catalog Rev G	https://library.e.abb.com/public/67f6b20f64d0443da36258e62a597791/2VAA005340%20en%20G%20Symphony%20Plus%20Product%20Catalog.pdf
ABB customer evolution news - DS Smith	https://new.abb.com/news/detail/117010/common-values-make-ds-smith-and-abb-partners-for-power-and-paper