6ES7412-2XJ05-0AB0

01 / System identity and preparation

Siemens 6ES7412-2XJ05-0AB0 coordinates the user program, rack I/O and distributed PROFIBUS stations within an engineered S7-400 system.



Preparation priorities

Execution identity	Compare 6ES7412-2XJ05-0AB0 and fitted firmware with the STEP 7 hardware configuration, memory card and project backup.
Rack and power	Check S7-400 rack compatibility, backplane loading, power-supply backup battery and the installed expansion configuration.

Guide boundary

This Apter Power guide organizes preparation and acceptance checks. Apply the manufacturer instructions and approved site procedure for detailed wiring, mounting, configuration and functional testing.

Application boundary

CPU 412-2 data applies to 6ES7412-2XJ05-0AB0 with the specified firmware; network limits depend on the selected interface and configuration.

Product and installation enquiries

sales13@apterpower.com | +86 18030235313

Apply manufacturer instructions and approved site procedures.

02 / Configuration review before service

Execution identity	Compare 6ES7412-2XJ05-0AB0 and fitted firmware with the STEP 7 hardware configuration, memory card and project backup.
Rack and power	Check S7-400 rack compatibility, backplane loading, power-supply backup battery and the installed expansion configuration.
Network and memory	Preserve separate MPI/DP and DP addressing, slave assignments, process-image allocation and code/data memory requirements.
Functional acceptance	Verify CPU startup, diagnostics, restored data, communication and I/O response against the approved station baseline.

Preserve the complete CPU identity

Compare the complete 6ES7412-2XJ05-0AB0 marking and fitted firmware with the project. Do not substitute another CPU 412 execution solely by its family name.

Back up program and data

Preserve the approved STEP 7 project, memory-card identity and current data. Battery-backed retention depends on the installed backup arrangement.

Mismatch decision

Resolve a different catalog marking, interface, software requirement or installed configuration before proceeding. Physical similarity alone does not establish an approved replacement.

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03 / Hardware and interface checks

Check backplane supply loading

Allow for typical 0.9 A and maximum 1.1 A consumption from the 5 V backplane. Connected MPI/DP devices also load their interface supply.

Respect separate DP limits

The first DP interface supports up to 32 slaves and the second up to 64. Check their different address capacities and per-slave data limits.

Key hardware references

CPU designation	CPU 412-2
Work memory	256 KB code + 256 KB data
Integrated load memory	512 KB RAM
Expandable load memory	FLASH or RAM card, up to 64 MB

Preserve the connection record

Photograph and label the affected connections before disconnection. Retain the original routing, module positions and identification with the work order, and compare the restored installation against that record.

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04 / Commissioning and diagnostic decisions

Match configured communication hardware

The CPU has MPI/DP and DP interfaces. Do not assume integrated Ethernet or PROFINET; check any separately fitted communication processor.

Validate before operational release

Review diagnostic events, program startup, retained data and all affected I/O. Resolve discrepancies before restarting the process.

Acceptance checkpoints

Before energization	Check S7-400 rack compatibility, backplane loading, power-supply backup battery and the installed expansion configuration.
Configuration review	Preserve separate MPI/DP and DP addressing, slave assignments, process-image allocation and code/data memory requirements.
Functional release	Verify CPU startup, diagnostics, restored data, communication and I/O response against the approved station baseline.

Abnormal result

If diagnostics, communication or functional response differ from the approved baseline, stop the release and resolve the configuration or installation issue. Do not bypass an interlock or protective function to obtain a passing test.

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05 / Service record and technical references

Lifecycle and support

The Siemens product lifecycle designation is Prod. Cancellation, and the product is offered through spare-parts support. Confirm current service and replacement arrangements with Siemens for the complete order number.

Technical basis

Siemens S7-400 Automation System, CPU Specifications, A5E00850746-08, 04/2009.

Applicability

CPU 412-2 data applies to 6ES7412-2XJ05-0AB0 with the specified firmware; network limits depend on the selected interface and configuration.

Related portfolio references

Siemens 6ES7421-7BH01-0AB0

Siemens 6ES7414-1XG02-0AB0

Siemens 6ES7417-4XL04-0AB0

Navigation only. These listings are not confirmed replacements, compatible accessories or included items.

Handover record

Retain the complete fitted marking, hardware/software revision where applicable, connection record and accepted test results. Confirm separate accessories and documents in the quotation.

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