6ES7412-2XG00-0AB0

01 / Product identity and control context

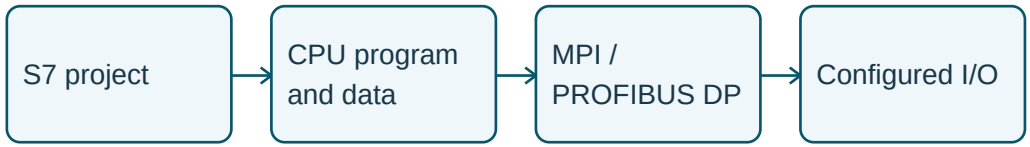
Central Processing Unit

Siemens 6ES7412-2XG00-0AB0 is a SIMATIC S7-400 CPU 412-2 with 144 KB working memory and integrated MPI/PROFIBUS DP communication for configured automation systems.

Key characteristics

Product type	CPU 412-2 central processing unit
Working memory	72 KB program and 72 KB data
Communication	One MPI/DP interface and one DP interface

Functional relationship



CPU and firmware

Match the full CPU order code and firmware with the hardware configuration.

Configuration boundary

The numerical CPU data describes the 6ES7412-2XG00-0AB0 configuration with firmware V3.1. Match installed firmware, memory card and STEP 7 project before replacement.

Product and installation enquiries

sales13@apterpower.com | +86 18030235313

Apply manufacturer instructions and approved site procedures.

6ES7412-2XG00-0AB0

02 / Technical characteristics

Hardware and functional data

Product series	SIMATIC S7-400
CPU designation	CPU 412-2
Program memory	72 KB
Data memory	72 KB
Working-memory expansion	Not expandable
Integrated load memory	256 KB RAM

Interfaces and operating conditions

Memory-card capacity	Up to 64 MB RAM or FLASH
Interface 1	MPI / PROFIBUS DP, isolated RS-485
Interface 2	PROFIBUS DP, isolated RS-485
Bus transmission rate	Up to 12 Mbit/s
S7 timers / counters	256 / 256
Power loss	7.5 W typical

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03 / Application and integration contexts

Central automation

Execute the configured S7 logic using separate program and data working-memory areas. Check the application footprint against each 72 KB area.

Distributed I/O

Use the configured PROFIBUS DP interfaces to communicate with distributed stations. Preserve slave addresses, data lengths and bus termination.

Rack relationship

Verify the rack power supply, module allocation and configured I/O addresses.

Operator communication

Use MPI and supported S7 communication services for the programmed operator and engineering connections. Account for the available connection resources.

Commissioning diagnostics

Use the diagnostic buffer, variable status and program-monitoring functions to investigate startup and communication faults in the installed application.

Communication

Record MPI and DP addresses, transmission rates, station data and termination.

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04 / Installation and release decisions

Confirm the CPU order code

Match 6ES7412-2XG00-0AB0, firmware and rack configuration before replacing the CPU.

Preserve project and memory

Back up the STEP 7 project and identify the installed memory card before changing hardware.

Check the bus roles

Retain the correct MPI/DP and DP configurations; the CPU may be configured as a DP slave only once.

Review retention

Check the backup battery and startup settings before relying on retained process data.

Maintain power isolation

Follow the S7-400 installation procedure and plant isolation requirements when removing or inserting hardware.

Validate commissioning

Check diagnostics, station communication and controlled outputs before returning the application to service.

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05 / Lifecycle, evidence and related portfolio

Lifecycle status

The manufacturer lifecycle phase is End of Product Lifecycle. Replacement planning must include the installed S7-400 configuration and application migration requirements.

Supply boundary

Apter Power availability and dispatch are confirmed separately from the manufacturer lifecycle phase.

Technical basis

Siemens S7-400 CPU Data, A5E00165963-01; Siemens CPU 412-2 product information.

Related product references

Siemens 6ES7421-7BH01-0AB0

Siemens 6ES7414-1XG02-0AB0

Siemens 6ES7417-4XL04-0AB0

Siemens 6ES7416-2XK02-0AB0

Navigation only; no substitute or accessory compatibility is implied.

Offered-unit verification

Compare the complete label, connectors, mounting arrangement and applicable hardware/software revision. Confirm included components and accompanying documents in the quotation.

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