6ES7 414-4HM14-0AB0

01 / Product identity and control context

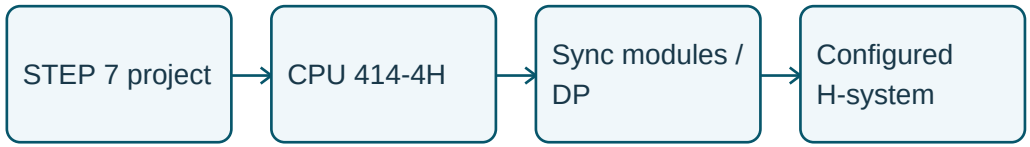
Redundant Processing Unit

Siemens 6ES7 414-4HM14-0AB0 is a SIMATIC S7-400H CPU 414-4H with 2.8 MB working memory and interfaces for MPI/DP, PROFIBUS DP and synchronization modules.

Key characteristics

Product type	CPU 414-4H central processing unit
Working memory	1.4 MB program and 1.4 MB data
Interfaces	MPI/DP, DP and two synchronization-module connections

Functional relationship



Paired configuration

Record CPU hardware, firmware and synchronization-module identities on both sides of the H-system.

Configuration boundary

The spaced supplied model identifies Siemens order code 6ES7414-4HM14-0AB0. H-system and safety-system capabilities require the matching hardware, software and approved system configuration.

Product and installation enquiries

sales13@apterpower.com | +86 18030235313

Apply manufacturer instructions and approved site procedures.

6ES7 414-4HM14-0AB0

02 / Technical characteristics

Hardware and functional data

Product series	SIMATIC S7-400H
CPU designation	CPU 414-4H
Working memory	2.8 MB total
Program / data memory	1.4 MB / 1.4 MB
Integrated load memory	256 KB RAM
Load-memory expansion	Up to 64 MB RAM or FEPROM

Interfaces and operating conditions

Communication interfaces	1 MPI/DP and 1 PROFIBUS DP
Synchronization connections	2 interfaces for synchronization modules
Firmware reference	V4.5
Engineering software	STEP 7 V5.3 SP2 or later with hardware update
Backplane current	1.4 A typical; 1.7 A maximum at 5 V DC
Power loss	6 W typical

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03 / Application and integration contexts

H-system processing

Execute the configured application within the paired S7-400H arrangement. Match CPU firmware, program state and synchronization hardware.

Distributed communication

Connect configured PROFIBUS DP stations through the integrated DP interfaces. Preserve station addresses and process-data assignments.

System relationship

Check the matching rack, system power supply and communication configuration.

Engineering access

Use MPI and supported S7 services for engineering and operator communication. Retain the installed connection and access settings.

Controlled migration

Evaluate processor, memory and synchronization requirements together when replacing a discontinued CPU or migrating the application.

Memory and backup

Preserve program, data, memory-card contents and battery backup requirements.

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04 / Installation and release decisions

Preserve the full identity

Check the complete CPU marking, hardware status and firmware before replacement.

Validate synchronization

Match synchronization modules and the installed H-system arrangement before enabling redundant operation.

Back up memory

Preserve the project and memory-card contents, and verify the battery-backed data requirements.

Match engineering tools

Use the appropriate STEP 7 version and hardware update for the installed firmware.

Review bus configuration

Retain MPI/DP and DP roles, network addresses and configured process-data lengths.

Test the complete system

Verify CPU diagnostics, communication and the approved redundancy test before releasing the system.

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05 / Lifecycle, evidence and related portfolio

Lifecycle status

The manufacturer lifecycle phase is Product Discontinuation. Assess the installed CPU and system configuration when planning service and migration.

Supply boundary

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

Technical basis

Siemens 6ES7414-4HM14-0AB0 Product Data Sheet, 2026-10-05; Safety Engineering in SIMATIC S7, A5E00109529-07.

Related product references

Siemens 6ES7417-5HT06-0AB0

Siemens 6ES7136-6BA00-0CA0

Siemens 6ES7331-7PF11-0AB0

Siemens 6ES7336-4GE00-0AB0

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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