

APTER POWER PRODUCT MANUAL

6ES7414-5HM06-0AB0

SIMATIC S7-400H CPU 414-5H PN/DP

The Siemens 6ES7414-5HM06-0AB0 is a SIMATIC S7-400H CPU 414-5H central processing unit with 4 MB work memory, split into 2 MB program and 2 MB data, and five interfaces: MPI/DP, PROFIBUS DP, PROFINET, and two synchronization-module interfaces.

A matched CPU pair executes high-availability or approved fail-safe process logic, exchanges plant data over PROFINET and PROFIBUS, and uses the two synchronization interfaces to maintain the redundant controller relationship.

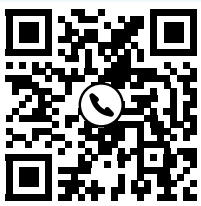
Manufacturer	Siemens
Prepared by	Apter Power
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APTER POWER SALES TEAM

INDUSTRIAL AUTOMATION PRODUCT SUPPORT

Five interfaces coordinated for one resilient control pair.

- WHATSAPP / PHONE** +86 180 3023 5313
- EMAIL** sales13@apterpower.com
- WEBSITE** www.apterpower.com



SCAN FOR PRODUCT & QUOTE
6ES7414-5HM06-0AB0

1. Product Overview and Identity

The Siemens 6ES7414-5HM06-0AB0 is a SIMATIC S7-400H CPU 414-5H central processing unit with 4 MB work memory, split into 2 MB program and 2 MB data, and five interfaces: MPI/DP, PROFIBUS DP, PROFINET, and two synchronization-module interfaces.

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Model Configuration

Field	Verified information
Complete model	6ES7414-5HM06-0AB0
Manufacturer	Siemens
Product description	SIMATIC S7-400H CPU 414-5H PN/DP

Key Features

- Exact Siemens MLFB 6ES7414-5HM06-0AB0
- SIMATIC S7-400H CPU 414-5H PN/DP
- 4 MB: 2 MB program and 2 MB data
- 1 × MPI/DP, 1 × PROFIBUS DP, 1 × PROFINET; 2
- Model-specific lifecycle and installation guidance

2. Technical Specifications

Only manufacturer-confirmed information is stated. Values absent from the named Siemens source are marked for nameplate or document verification.

Parameter	Verified value
Product type	CPU 414-5H PN/DP
Firmware generation	V6.0
Work memory	4 MB: 2 MB program and 2 MB data
Communication interfaces	1 × MPI/DP, 1 × PROFIBUS DP, 1 × PROFINET
Synchronization interfaces	2
Typical power loss	7.5 W
Siemens net weight	1.320 kg
Siemens packaging dimensions	23.30 × 30.10 × 6.30 cm
Country of origin	Germany
Lifecycle	PM300 active product

Verification Note

Use the complete 6ES7414-5HM06-0AB0 identifier. Siemens lists 6ES7414-5HM06-0AB0 as a PM300 active product. Values not published in the cited Siemens source are intentionally not inferred.

3. Functions, Applications and Components

Core Functions

- A matched CPU pair executes high-availability or approved fail-safe process logic, exchanges plant data over PROFINET and PROFIBUS, and uses the two synchronization interfaces to maintain the redundant controller relationship.
- Maintains the documented SIMATIC S7-400H and S7-400F/FH high-availability controller role for this complete Siemens article number.
- Provides a verified reference for configuration, commissioning, diagnostics, and lifecycle planning.

Application Areas

Application	System role
High-availability process automation	Uses synchronized CPU pairs for resilient controller operation
PCS 7 and S7-400H plants	Coordinates process data over PROFINET and PROFIBUS
Fail-safe high-availability systems	Runs approved safety logic within S7-400F/FH architectures
Critical utility control	Maintains controller redundancy for continuously monitored services

Compatible Components

- Matching CPU 414-5H partner with the approved hardware and firmware
- S7-400H synchronization modules and cables selected for the configured distance
- PROFINET and PROFIBUS devices defined in the validated STEP 7 or PCS 7 project
- S7-400F/FH components only within the approved functional-safety architecture

Lifecycle Status

Siemens lists 6ES7414-5HM06-0AB0 as a PM300 active product.

4. Installation Precautions

- CPU pairing: Match partner hardware, firmware, memory, and project configuration
- Synchronization: Verify module type, cable length, routing, connector seating, and diagnostics
- Networks: Preserve PROFINET names/IP settings and PROFIBUS addresses, termination, and timing
- Safety systems: Apply the approved F/FH change-control and proof-test procedure
- Commissioning: Test controller switchover and all redundant communication and I/O paths

STOP - Verify before installation

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Use the physical nameplate and current Siemens documents as the controlling records.

5. Official Source and Use Notice

Official source

Siemens Industry Mall product detail and Siemens technical data sheet for complete article number 6ES7414-5HM06-0AB0: <https://mall.industry.siemens.com/mall/en/ww/Catalog/Product/?mlfb=6ES7414-5HM06-0AB0>

Apter Power product page

<https://www.apterpower.com/Siemens/6es7414-5hm06-0ab0>

Use Notice

This is an original Apter Power product-specific reference prepared from the Siemens source named above. It is not a Siemens publication and does not replace the original data sheet, nameplate, certificate, installation drawing, safety instructions, or machine-builder documentation.

ASK FOR QUOTE

For availability and quotation details, visit www.apterpower.com or contact sales13@apterpower.com.