

6ES7416-2XK02-0AB0

S7-400 CPU

Siemens 6ES7416-2XK02-0AB0 is a SIMATIC S7-400 CPU 416-2 DP with firmware V3.1. The official CPU data identifies 1.6 MB of work memory divided equally between code and data and integrated PROFIBUS-DP master/slave capability.

IDENTITY	VERIFIED VALUE
Manufacturer	Siemens
Complete model	6ES7416-2XK02-0AB0
Product role	S7-400 CPU
System family	SIMATIC S7-400

Document scope

Exact identity, verified technical data, applications, precautions, model-specific FAQ and controlled acceptance records.

APTER POWER SALES TEAM

WHATSAPP / PHONE +86 180 3023 5313

EMAIL sales13@apterpower.com

WEBSITE www.apterpower.com



Technical Specifications

PARAMETER	VERIFIED VALUE
Order number	6ES7416-2XK02-0AB0
CPU type	SIMATIC S7-400 CPU 416-2 DP
Firmware version	V3.1
Engineering software	STEP 7 V5.2 or later
Work memory	1.6 MB total
Code work memory	0.8 MB
Data work memory	0.8 MB
Integrated load RAM	256 KB
Memory card capacity	Up to 64 MB Flash or RAM

PARAMETER	VERIFIED VALUE
Markers	16 KB
Clock markers	8
Data blocks	Up to 4095
Maximum DB size	64 KB
Local data	Up to 32 KB; 16 KB default
Integrated interface	MPI / PROFIBUS-DP
DP operation	Master or slave
Routing	S7 routing supported

Engineering boundary

Retain the complete 6ES7416-2XK02-0AB0 order number and installed firmware record. Back up the STEP 7 project, memory-card contents, interface configuration and routing data before replacement or recommissioning.

Functions and Applications

CPU 416-2 DP Provides the documented S7-400 central-processing function with integrated DP communication.	Work memory Uses 1.6 MB divided into 0.8 MB code and 0.8 MB data memory.
DP integration Supports documented PROFIBUS-DP master or slave operation on the integrated interface.	S7 routing Supports routing functions identified in the Siemens CPU compatibility overview.

Common Applications

APPLICATION	ENGINEERING CONTEXT
S7-400 central control	Executes the controlled STEP 7 application in a SIMATIC S7-400 station.
PROFIBUS-DP master	Coordinates approved distributed I/O and DP devices through the integrated interface.
PROFIBUS-DP slave	Operates in the documented DP-slave role when configured by the project.
S7 routing	Routes approved engineering communications through the configured S7 system.

Controlled acceptance duty

Confirm identity, interfaces, configured values and functional response against the installed-system record before release.

Engineering Precautions

NO.	PRECAUTION
1	Verify the complete 6ES7416-2XK02-0AB0 order number and firmware version.
2	Place the S7-400 station and controlled process in the approved maintenance state.
3	Back up the complete STEP 7 project and current hardware configuration.
4	Record MPI and PROFIBUS-DP addresses, bus parameters and node assignments.
5	Preserve the memory-card type, contents and installed access settings.
6	Confirm software and communication-processor compatibility before replacement.
7	Restore the controlled project and compare diagnostics after startup.
8	Complete I/O, communication and process-function tests before release.

Model-Specific FAQ - Part 1

QUESTION	ANSWER
What is Siemens 6ES7416-2XK02-0AB0?	6ES7416-2XK02-0AB0 is a SIMATIC S7-400 CPU 416-2 DP.
Which firmware is documented for Siemens 6ES7416-2XK02-0AB0?	The official CPU data identifies firmware V3.1.
How much work memory does Siemens 6ES7416-2XK02-0AB0 provide?	It provides 1.6 MB total, divided into 0.8 MB code and 0.8 MB data memory.
Which STEP 7 version is listed for Siemens 6ES7416-2XK02-0AB0?	The official CPU data lists STEP 7 V5.2 or later.

Related Products

MODEL	APTER POWER PAGE
Siemens 6ES7417-4HL04-0AB0	View Siemens 6ES7417-4HL04-0AB0
Siemens 6ES7417-5HT06-0AB0	View Siemens 6ES7417-5HT06-0AB0
Siemens 6ES7431-7QH00-0AB0	View Siemens 6ES7431-7QH00-0AB0
Siemens 6ES7417-4XL04-0AB0	View Siemens 6ES7417-4XL04-0AB0

Model-Specific FAQ - Part 2

QUESTION	ANSWER
Which DP roles can Siemens 6ES7416-2XK02-0AB0 use?	The integrated PROFIBUS-DP interface supports documented master or slave operation.
Does Siemens 6ES7416-2XK02-0AB0 support S7 routing?	Yes. Siemens lists S7 routing support for this CPU order number.
Which records should be backed up before replacing 6ES7416-2XK02-0AB0?	Back up the STEP 7 project, hardware configuration, memory-card contents, interface addresses and routing data.
What confirms Siemens 6ES7416-2XK02-0AB0 commissioning?	The restored project, CPU diagnostics, DP communications, I/O and controlled process functions must match the approved acceptance record.

Related Products and Release

MODEL	APTER POWER PAGE
Siemens 6ES7414-1XG02-0AB0	View Siemens 6ES7414-1XG02-0AB0
Siemens 6ES7432-1HF00-0AB0	View Siemens 6ES7432-1HF00-0AB0
Siemens 6ES7422-1BL00-0AA0	View Siemens 6ES7422-1BL00-0AA0
Siemens 6ES7421-1BL01-0AA0	View Siemens 6ES7421-1BL01-0AA0

MANUFACTURER SOURCE RECORDS

1. Siemens SIMATIC S7-400 CPU Data, CPU 416-2 order number 6ES7416-2XK02-0AB0
2. Siemens S7 Routing CPU Overview and compatibility record for 6ES7416-2XK02-0AB0

APTER POWER SALES TEAM

WHATSAPP / PHONE +86 180 3023 5313

EMAIL sales13@apterpower.com

WEBSITE www.apterpower.com



6ES7416-2XK02-0AB0