6ES7318-3EL01-0AB0

01 / Product identity and control context

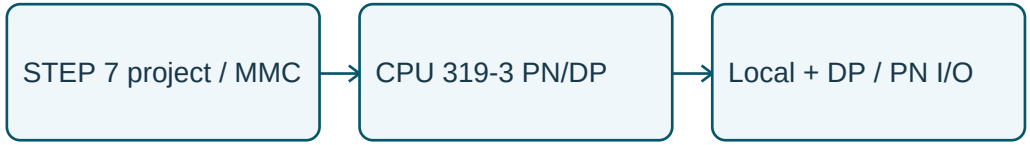
CPU Module

Siemens 6ES7318-3EL01-0AB0 is a SIMATIC S7-300 CPU 319-3 PN/DP with 2 MB work memory and integrated MPI/DP, PROFIBUS DP and PROFINET interfaces.

Key characteristics

Product type	CPU 319-3 PN/DP
Product series	SIMATIC S7-300
Work memory	2048 KB integrated
Network interfaces	MPI/DP, DP and two-port PROFINET

Functional relationship



Execution identity

Compare 6ES7318-3EL01-0AB0, hardware version, firmware and installed Micro Memory Card with the approved STEP 7 project.

Configuration boundary

Ratings and functions apply to the specified CPU execution; match the fitted firmware, memory card and configured interfaces.

Product and installation enquiries

sales13@apterpower.com | +86 18030235313

Apply manufacturer instructions and approved site procedures.

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02 / Technical characteristics

Hardware and functional data

Manufacturer	Siemens
Product series	SIMATIC S7-300
CPU designation	CPU 319-3 PN/DP
Work memory	2048 KB; not expandable
Load memory	SIMATIC Micro Memory Card, up to 8 MB
Retentive data-block memory	700 KB maximum
X1 interface	MPI / PROFIBUS DP; up to 12 Mbit/s
X2 interface	PROFIBUS DP master/slave; up to 12 Mbit/s

Interfaces and operating conditions

X3 interface	PROFINET; 2-port 10/100 Mbit/s Ethernet switch
Supply voltage	24 V DC nominal; 19.2-28.8 V DC
Rated current consumption	1250 mA
Typical power dissipation	14 W
Diagnostic buffer	500 entries; last 100 power-failure-retentive
Reference execution	Hardware 01; firmware V3.2.1
Engineering software	STEP 7 V5.5 or higher for reference execution

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03 / Application and integration contexts

Central machine control

Execute cyclic and interrupt-driven logic with local S7-300 I/O. Check the work-memory requirement and retained data against the application before transferring the project.

PROFIBUS distributed I/O

Use X1 or X2 as a configured DP master or slave. Preserve bus addresses, termination, transfer areas and the permitted interface-specific functions.

Power and station

Verify the 24 V DC supply, permitted voltage range, cabinet thermal allowance and S7-300 module arrangement.

PROFINET integration

Connect distributed devices through X3 and its two-port switch. Match device names, IP settings, update times and the selected controller or device role.

Diagnostics and maintenance

Use the event buffer and status information to investigate station faults. Retain the project and event record before replacing hardware or changing firmware.

Network configuration

Preserve MPI/DP addresses, DP master/slave assignments and PROFINET device names and IP configuration.

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04 / Installation and release decisions

Match hardware and firmware

Record the complete order number, hardware and firmware before selecting a replacement. The technical reference covers hardware 01 and firmware V3.2.1.

Preserve the memory card and project

Keep an approved STEP 7 project backup and identify the SIMATIC Micro Memory Card. Match card contents and retentive-data requirements before restart.

Check DC supply and thermal allowance

Use the specified 19.2-28.8 V DC range and include rated current and heat dissipation in panel planning. Isolate power before hardware work.

Keep network roles consistent

Check X1 MPI/DP, X2 DP and X3 PROFINET assignments separately. Do not interchange network connections merely because connectors appear similar.

Review timing-dependent functions

Isochronous operation is supported on X2 DP or PROFINET IO, not both simultaneously. Validate configured timing and device support.

Validate the restored station

Review the diagnostic buffer, I/O states, retained values and machine sequence before returning the station to service.

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05 / Lifecycle, evidence and related portfolio

Lifecycle status

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.

Supply boundary

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

Technical basis

Siemens CPU 31xC and CPU 31x: Technical specifications, A5E00105475-12, 03/2011.

Related product references

Siemens 6ES7312-1AE13-0AB0

Siemens 6ES7 313-6CF03-0AB0

Siemens 6ES7307-1KA00-0AA0

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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