Siemens 6GK7443-1EX11-0XE0

01 Industrial Ethernet Communications Processor / system role

Product function

Siemens 6GK7443-1EX11-0XE0 bridges application data and configured Ethernet peers, with transport selection and resource planning handled at station level.

Selected configuration

Transport services must match at both ends of the connection. ISO, ISO-on-TCP, TCP and UDP have different connection and data-handling requirements; the presence of an Ethernet link does not select the correct service automatically.

Integration checkpoints

- Controller data exchange
- Legacy Ethernet integration
- Datagram distribution
- Communication diagnostics

Data path	S7-400 application to external Ethernet peers
Service selection	Connection-oriented and datagram transport
Network administration	Configured access list and time source

SEND/RECEIVE blocks and configured connections link the application to the CP. Connection resources and data lengths must be evaluated across all active services, not by adding separate maximum ratings as if each were an independent capacity pool.

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02 Technical operating envelope

Ethernet data rate	10/100 Mbit/s
Backplane supply	5 V DC; +/-5%
Typical backplane current	1.4 A
Power loss	8.6 W
Operating temperature	0-60 degrees C
Enclosure rating	IP20

Maximum open connections	64
Maximum S7 connections	48
Maximum ISO/TCP payload	8 KiB
Maximum UDP payload	2 KiB
Integrated switch	No
C-PLUG	No

Use the exact hardware execution with the supported system configuration and installation conditions.

Why might a new peer be rejected by 6GK7443-1EX11-0XE0 after a network change?

The approved IP access list may still contain the previous address. Compare the new peer with the intended network policy and connection configuration. Do not broadly disable access control to conceal an addressing error.

What should be tested after changing the time source used by 6GK7443-1EX11-0XE0?

Verify the configured synchronization source and compare event times across the relevant devices. Check restart and loss-of-source behavior under the approved test plan. Network connectivity alone does not establish that the station clock is synchronized.

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03 System integration and applications

Controller data exchange

Use the selected S7 or open communication service.

Legacy Ethernet integration

Connect supported ISO/TCP/IP peers to an S7-400 station.

Datagram distribution

Use UDP or multicast only with the required application validation.

Communication diagnostics

Separate link, connection and application-level faults.

System and supply context

6GK7443-1EX11-0XE0 belongs to the SIMATIC S7-400 installation described by the technical reference. Connected equipment and accessories must be included explicitly in the configured assembly.

Application boundary

The following uses describe supported engineering roles; they do not establish interchangeability with another model or remove application-specific validation.

What changes when a 6GK7443-1EX11-0XE0 connection moves from TCP to UDP?

UDP does not provide the same connection-oriented delivery behavior. The application must account for missing, repeated or out-of-order datagrams as required by the process. Validate payload boundaries and error handling rather than changing only the protocol setting.

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04 Engineering selection decisions

Why can 6GK7443-1EX11-0XE0 have an active link but no application data?

A link proves the physical connection, not the transport service or application mapping. Compare peer addresses, connection parameters and SEND/RECEIVE status. Test a known payload and confirm its length and destination at both ends.

Can the separate connection maxima of 6GK7443-1EX11-0XE0 simply be added together?

No. Mixed services share processor resources and have a combined limit. Review the complete configured connection set and expected traffic, including engineering and operator access, before accepting a design based on individual maxima.

Does 6GK7443-1EX11-0XE0 provide an integrated network switch for daisy chaining?

No. Plan the connection through suitable external network infrastructure. Do not infer switching or ring-redundancy functions from newer CP variants or from the presence of different physical Ethernet connection options.

What distinguishes an addressing fault from a receive-buffer error on 6GK7443-1EX11-0XE0?

First establish whether the intended peer and connection are reachable. Then inspect block completion/status and the received length in the PLC. A healthy connection with rejected payloads points toward buffer layout or application protocol rather than cabling.

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05 Configuration boundary and references

Lifecycle and support

Spare-part / replacement-part execution. The current repair and support terms require confirmation for the installed hardware revision.

Replacement assessment

Compare the complete 6GK7443-1EX11-0XE0 identity, installed connections and configuration before selecting a replacement. Access lists and time synchronization are configuration features of the communication arrangement. Preserve approved peer addresses and the time source during maintenance, while keeping network isolation and cybersecurity controls at the installation level.

Document roles

Use the original manufacturer excerpt for its preserved technical tables and drawings. This product brief explains selection and system context. The separate installation guide covers preparation, connection, tests and handover; use it together with the applicable manufacturer instructions.

Technical basis

Siemens product data sheet, 6GK7443-1EX11-0XE0.

Related product navigation

- Siemens 6GK1571-1AA00
- Siemens 6GK7443-1EX30-0XE0
- Siemens 6GK5204-2BB10-2AA3

Related products for separate application assessment; verify the platform and interface. No interchangeability is implied.

Product enquiries