![SIEMENS Ingenuity for life]

SCALANCE X

The comprehensive range
of Industrial Ethernet switches

On a direct path to the optimal Industrial Ethernet switch

The demands placed on industrial communication networks are tremendous. Our answer to these challenges is SCALANCE X. Are you already familiar with our system family? Here you'll quickly find the right Industrial Ethernet switch for your application.

PRODUCT PORTFOLIO

	Unmanaged	Managed
Backbone layer		
Aggregation layer		
Cell layer		
		X-200RNA
		Device versions with IRT functionality (isochronous real time)

→ Product portfolio

Specific requirements for optimal Industrial Ethernet switches

The demands placed on industrial communication networks are tremendous. Our answer to these challenges is SCALANCE X. Do you know what switch features are required for your application? Here we'll quickly guide you to the right product.

SELECTION CRITERIA

Specific requirements for optimal Industrial Ethernet switches

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SELECTION CRITERIA

Communication layer

SCALANCE X covers a wide range of types and communication layers. Our rugged, easy-to-use, unmanaged switches enable you to set up cost-effective Industrial Ethernet networks. Our versatile and high-performance Layer 2 switches are recommended for machine-level applications and the networking of plant areas.

And our Layer 2/3 devices for large networks are prepared to meet all your communication network challenges. They're known for maximum flexibility and the highest network availability.

Specific requirements for optimal Industrial Ethernet switches

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SELECTION CRITERIA

Communication layer > Unmanaged

SCALANCE X-200	SCALANCE X-300	SCALANCE X-400	SCALANCE X-500
Universal, ideal for setting up line, star, and ring topologies.	For the powerful expansion of plant networks with Gigabit Ethernet – including harsh conditions.	Modular design, for simple and straightforward segmentation on all levels.	For the flexible and powerful connection of an industrial network to the office IT system.
Managed Layer 2	Managed Layer 2	Managed Layer 2/3	Managed Layer 2/3

Unmanaged   Unmanaged   Unmanaged

Specific requirements for optimal Industrial Ethernet switches

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SELECTION CRITERIA

Communication layer > Managed Layer 2

CSM	SCALANCE X-000	SCALANCE X-100			SCALANCE X-400	SCALANCE X-500
Unmanaged, ideal for interface extension of LOGO!, SIMATIC S7-300/ET 200M, or S7-1200.	Unmanaged, for implementing easy machine networking, including enhanced environmental conditions.	Unmanaged, robust, and with different port configurations – also available as media converter.			Modular design, for simple and straightforward segmentation on all levels.	For the flexible and powerful connection of an industrial network to the office IT system.
Unmanaged	Unmanaged	Unmanaged	Managed Layer 2	Managed Layer 2	Managed Layer 2/3	Managed Layer 2/3

Specific requirements for optimal Industrial Ethernet switches

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SELECTION CRITERIA

Communication layer 〉 Managed Layer 2/3

CSM	SCALANCE X-000	SCALANCE X-100	SCALANCE X-200	SCALANCE X-300
Unmanaged, ideal for interface extension of LOGO!, SIMATIC S7-300/ET 200M, or S7-1200.	Unmanaged, for implementing easy machine networking, including enhanced environmental conditions.	Unmanaged, robust, and with different port configurations – also available as media converter.	Universal, ideal for setting up line, star, and ring topologies.	For the powerful expansion of plant networks with Gigabit Ethernet – including harsh conditions.
Unmanaged	Unmanaged	Unmanaged	Managed Layer 2	Managed Layer 2	Managed Layer 2/3	Managed Layer 2/3

Specific requirements for optimal Industrial Ethernet switches

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With SCALANCE X you benefit from complete integration in PROFINET diagnostics. You can also utilize the expanded diagnostic options via EtherNet/IP if you use a suitable EtherNet/IP controller. Other options are central network diagnostics using SINEC NMS, integrated system diagnostics using TIA Portal, and remote diagnostics with SINEMA Remote Connect.

Specific requirements for optimal Industrial Ethernet switches

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SELECTION CRITERIA

Diagnostics

CSM	SCALANCE X-000	SCALANCE X-100
Unmanaged, ideal for interface extension of LOGO!, SIMATIC S7-300/ET 200M, or S7-1200.	Unmanaged, for implementing easy machine networking, including enhanced environmental conditions.	Unmanaged, robust, and with different port configurations – also available as media converter.
Unmanaged	Unmanaged	Unmanaged	Managed Layer 2	Managed Layer 2	Managed Layer 2/3	Managed Layer 2/3

Specific requirements for optimal Industrial Ethernet switches

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SELECTION CRITERIA

Enhanced environmental conditions

Equipped for all environmental conditions: Given our comprehensive range of Industrial Ethernet switches, you're sure to find the right switch for your application. We offer devices with the high IP65/67 degree of protection and for use under enhanced environmental conditions.

→ Selection criteria

Specific requirements for optimal Industrial Ethernet switches

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Do you know what switch features are required for your application?
Here we'll quickly guide you to the right product.

SELECTION CRITERIA

Enhanced environmental conditions > Temperature range −40° to +70°C

CSM	SCALANCE X-000				SCALANCE X-500
Unmanaged, ideal for interface extension of LOGO!, SIMATIC S7-300/ET 200M, or S7-1200.	Unmanaged, for implementing easy machine networking, including enhanced environmental conditions.				For the flexible and powerful connection of an industrial network to the office IT system.
Unmanaged	Unmanaged	Unmanaged	Managed Layer 2	Managed Layer 2	Managed Layer 2/3	Managed Layer 2/3

Specific requirements for optimal Industrial Ethernet switches

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SELECTION CRITERIA

Enhanced environmental conditions > Conformal coating

CSM	SCALANCE X-000	SCALANCE X-100			SCALANCE X-400	SCALANCE X-500
Unmanaged, ideal for interface extension of LOGO!, SIMATIC S7-300/ET 200M, or S7-1200.	Unmanaged, for implementing easy machine networking, including enhanced environmental conditions.	Unmanaged, robust, and with different port configurations – also available as media converter.			Modular design, for simple and straightforward segmentation on all levels.	For the flexible and powerful connection of an industrial network to the office IT system.
Unmanaged	Unmanaged	Unmanaged	Managed Layer 2	Managed Layer 2	Managed Layer 2/3	Managed Layer 2/3

Specific requirements for optimal Industrial Ethernet switches

The demands placed on industrial communication networks are tremendous. Our answer to these challenges is SCALANCE X.
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SELECTION CRITERIA

Enhanced environmental conditions > IP65/67 degree of protection

CSM	SCALANCE X-000	SCALANCE X-100		SCALANCE X-300	SCALANCE X-400	SCALANCE X-500
Unmanaged, ideal for interface extension of LOGO!, SIMATIC S7-300/ET 200M, or S7-1200.	Unmanaged, for implementing easy machine networking, including enhanced environmental conditions.	Unmanaged, robust, and with different port configurations – also available as media converter.		For the powerful expansion of plant networks with Gigabit Ethernet – including harsh conditions.	Modular design, for simple and straightforward segmentation on all levels.	For the flexible and powerful connection of an industrial network to the office IT system.
Unmanaged	Unmanaged	Unmanaged	Managed Layer 2	Managed Layer 2	Managed Layer 2/3	Managed Layer 2/3

Specific requirements for optimal Industrial Ethernet switches

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Here we'll quickly guide you to the right product.

SELECTION CRITERIA

Design

Whether modular, compact, flat, or as a rack switch: With SCALANCE X, you have access to a graded portfolio of Industrial Ethernet switches in different designs.

→ Selection criteria

Specific requirements for optimal Industrial Ethernet switches

The demands placed on industrial communication networks are tremendous. Our answer to these challenges is SCALANCE X. Do you know what switch features are required for your application? Here we'll quickly guide you to the right product.

SELECTION CRITERIA

Design > Modular

CSM	SCALANCE X-000	SCALANCE X-100	SCALANCE X-200
Unmanaged, ideal for interface extension of LOGO!, SIMATIC S7-300/ ET 200M, or S7-1200.	Unmanaged, for implementing easy machine networking, including enhanced environmental conditions.	Unmanaged, robust, and with different port configurations – also available as media converter.	Universal, ideal for setting up line, star, and ring topologies.
Unmanaged	Unmanaged	Unmanaged	Managed Layer 2

Managed Layer 2   Managed Layer 2/3   Managed Layer 2/3

Specific requirements for optimal Industrial Ethernet switches

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Do you know what switch features are required for your application?
Here we'll quickly guide you to the right product.

SELECTION CRITERIA

Design > Compact

					SCALANCE X-400	SCALANCE X-500
					Modular design, for simple and straightforward segmentation on all levels.	For the flexible and powerful connection of an industrial network to the office IT system.
Unmanaged	Unmanaged	Unmanaged	Managed Layer 2	Managed Layer 2	Managed Layer 2/3	Managed Layer 2/3

Specific requirements for optimal Industrial Ethernet switches

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SELECTION CRITERIA

Design > Flat

CSM	SCALANCE X-000	SCALANCE X-100		SCALANCE X-300	SCALANCE X-400	SCALANCE X-500
Unmanaged, ideal for interface extension of LOGO!, SIMATIC S7-300/ET 200M, or S7-1200.	Unmanaged, for implementing easy machine networking, including enhanced environmental conditions.	Unmanaged, robust, and with different port configurations – also available as media converter.		For the powerful expansion of plant networks with Gigabit Ethernet – including harsh conditions.	Modular design, for simple and straightforward segmentation on all levels.	For the flexible and powerful connection of an industrial network to the office IT system.
Unmanaged	Unmanaged	Unmanaged	Managed Layer 2	Managed Layer 2	Managed Layer 2/3	Managed Layer 2/3

Specific requirements for optimal Industrial Ethernet switches

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SELECTION CRITERIA

Design > Rack

CSM	SCALANCE X-000	SCALANCE X-200	SCALANCE X-400
Unmanaged, ideal for interface extension of LOGO!, SIMATIC S7-300/ET 200M, or S7-1200.	Unmanaged, for implementing easy machine networking, including enhanced environmental conditions.	Universal, ideal for setting up line, star, and ring topologies.	Modular design, for simple and straightforward segmentation on all levels.
Unmanaged	Unmanaged	Unmanaged	Managed Layer 2	Managed Layer 2	Managed Layer 2/3	Managed Layer 2/3

Specific requirements for optimal Industrial Ethernet switches

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SELECTION CRITERIA

Software features

PA ready: Maximum machine and system availability thanks to redundant arrangement of hardware and network infrastructure.

Redundancy: Integrated redundancy mechanisms mean reduced downtimes, resulting in high system and machine availability levels beyond network boundaries.

UMAC/RADIUS: Central user administration ensures secure authentication via a single contact point within the network.

→ Selection criteria

Specific requirements
for optimal Industrial
Ethernet switches

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SELECTION CRITERIA

Support of software features

CSM	SCALANCE X-000	SCALANCE X-100
Unmanaged, ideal for interface extension of LOGO!, SIMATIC S7-300/ET 200M, or S7-1200.	Unmanaged, for implementing easy machine networking, including enhanced environmental conditions.	Unmanaged, robust, and with different port configurations – also available as media converter.
Unmanaged	Unmanaged	Unmanaged	Managed Layer 2	Managed Layer 2	Managed Layer 2/3	Managed Layer 2/3

→ Selection criteria

Specific requirements for optimal Industrial Ethernet switches

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SELECTION CRITERIA

Bandwidth

Even in terms of bandwidth, with SCALANCE X there is a choice of devices, with bandwidths of 10/100 Mbit/s (FastEthernet) up to 10 Gbit/s. All devices support at least 10/100 Mbit/s.

Specific requirements for optimal Industrial Ethernet switches

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SELECTION CRITERIA

Bandwidth > 1 Gbit/s

CSM

Unmanaged, ideal for interface extension of LOGO!, SIMATIC S7-300/ET 200M, or S7-1200.

Unmanaged	Unmanaged	Unmanaged	Managed Layer 2	Managed Layer 2	Managed Layer 2/3	Managed Layer 2/3

Specific requirements for optimal Industrial Ethernet switches

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SELECTION CRITERIA

Bandwidth > 10 Gbit/s

CSM	SCALANCE X-000				SCALANCE X-400	
Unmanaged, ideal for interface extension of LOGO!, SIMATIC S7-300/ET 200M, or S7-1200.	Unmanaged, for implementing easy machine networking, including enhanced environmental conditions.				Modular design, for simple and straightforward segmentation on all levels.	
Unmanaged	Unmanaged	Unmanaged	Managed Layer 2	Managed Layer 2	Managed Layer 2/3	Managed Layer 2/3

Specific requirements for optimal Industrial Ethernet switches

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SELECTION CRITERIA

Power over Ethernet (PoE)

With Power over Ethernet (PoE), end devices can be connected and powered without additional power supplies or cables. This is especially convenient for places that are difficult to access – or wherever cables would get in the way. Instead, end devices receive power via Industrial Ethernet switches with PoE functionality.

→ Selection criteria

Specific requirements for optimal Industrial Ethernet switches

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SELECTION CRITERIA

Power over Ethernet (PoE)

CSM	SCALANCE X-000					SCALANCE X-500
Unmanaged, ideal for interface extension of LOGO!, SIMATIC S7-300/ ET 200M, or S7-1200.	Unmanaged, for imple-menting easy machine networking, including enhanced environmental conditions.					For the flexible and powerful connection of an industrial network to the office IT system.
Unmanaged	Unmanaged	Unmanaged	Managed Layer 2	Managed Layer 2	Managed Layer 2/3	Managed Layer 2/3

Specific requirements
for optimal Industrial
Ethernet switches

Are you looking for the right switch for your application but you don't have expert knowledge? We'll guide you there with just a few clicks.

APPLICATION AREAS

Specific requirements for optimal Industrial Ethernet switches

Are you looking for the right switch for your application but you don't have expert knowledge? We'll guide you there with just a few clicks.

Machine and plant engineering

CSM	SCALANCE X-000	SCALANCE X-300	SCALANCE X-500
Unmanaged, ideal for interface extension of LOGO!, SIMATIC S7-300/ET 200M, or S7-1200.	Unmanaged, for implementing easy machine networking, including enhanced environmental conditions.	For the powerful expansion of plant networks with Gigabit Ethernet – including harsh conditions.	For the flexible and powerful connection of an industrial network to the office IT system.
Unmanaged	Unmanaged	Unmanaged	Managed Layer 2	Managed Layer 2	Managed Layer 2/3	Managed Layer 2/3

Specific requirements for optimal Industrial Ethernet switches

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Industry-related applications

CSM	SCALANCE X-000	SCALANCE X-100
Unmanaged, ideal for interface extension of LOGO!, SIMATIC S7-300/ET 200M, or S7-1200.	Unmanaged, for implementing easy machine networking, including enhanced environmental conditions.	Unmanaged, robust, and with different port configurations – also available as media converter.
Unmanaged	Unmanaged	Unmanaged

Managed Layer 2   Managed Layer 2   Managed Layer 2/3   Managed Layer 2/3

Specific requirements for optimal Industrial Ethernet switches

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Power generation and distribution

CSM	SCALANCE X-000	SCALANCE X-100			SCALANCE X-400	SCALANCE X-500
Unmanaged, ideal for interface extension of LOGO!, SIMATIC S7-300/ET 200M, or S7-1200.	Unmanaged, for implementing easy machine networking, including enhanced environmental conditions.	Unmanaged, robust, and with different port configurations – also available as media converter.			Modular design, for simple and straightforward segmentation on all levels.	For the flexible and powerful connection of an industrial network to the office IT system.
Unmanaged	Unmanaged	Unmanaged	Managed Layer 2	Managed Layer 2	Managed Layer 2/3	Managed Layer 2/3

Specific requirements for optimal Industrial Ethernet switches

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Connection to enterprise IT

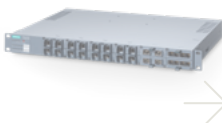| CSM	SCALANCE X-000	SCALANCE X-100	SCALANCE X-200	SCALANCE X-300
Unmanaged, ideal for interface extension of LOGO!, SIMATIC S7-300/ ET 200M, or S7-1200.	Unmanaged, for implementing easy machine networking, including enhanced environmental conditions.	Unmanaged, robust, and with different port configurations – also available as media converter.	Universal, ideal for setting up line, star, and ring topologies.	For the powerful expansion of plant networks with Gigabit Ethernet – including harsh conditions.
Unmanaged	Unmanaged	Unmanaged	Managed Layer 2	Managed Layer 2

Managed Layer 2/3   Managed Layer 2/3

Specific requirements for optimal Industrial Ethernet switches

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APPLICATION AREAS

Plant networking

CSM	SCALANCE X-000	SCALANCE X-100
Unmanaged, ideal for interface extension of LOGO!, SIMATIC S7-300/ ET 200M, or S7-1200.	Unmanaged, for implementing easy machine networking, including enhanced environmental conditions.	Unmanaged, robust, and with different port configurations – also available as media converter.
Unmanaged	Unmanaged	Unmanaged

Managed Layer 2	Managed Layer 2	Managed Layer 2/3	Managed Layer 2/3

Specific requirements for optimal Industrial Ethernet switches

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Plant unit networking

CSM	SCALANCE X-000			SCALANCE X-300	SCALANCE X-400	SCALANCE X-500
Unmanaged, ideal for interface extension of LOGO!, SIMATIC S7-300/ET 200M, or S7-1200.	Unmanaged, for implementing easy machine networking, including enhanced environmental conditions.			For the powerful expansion of plant networks with Gigabit Ethernet – including harsh conditions.	Modular design, for simple and straightforward segmentation on all levels.	For the flexible and powerful connection of an industrial network to the office IT system.
Unmanaged	Unmanaged	Unmanaged	Managed Layer 2	Managed Layer 2	Managed Layer 2/3	Managed Layer 2/3

Specific requirements for optimal Industrial Ethernet switches

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Series machines

CSM				SCALANCE X-300	SCALANCE X-400	SCALANCE X-500
Unmanaged, ideal for interface extension of LOGO!, SIMATIC S7-300/ET 200M, or S7-1200.				For the powerful expansion of plant networks with Gigabit Ethernet – including harsh conditions.	Modular design, for simple and straightforward segmentation on all levels.	For the flexible and powerful connection of an industrial network to the office IT system.
Unmanaged	Unmanaged	Unmanaged	Managed Layer 2	Managed Layer 2	Managed Layer 2/3	Managed Layer 2/3

Specific requirements for optimal Industrial Ethernet switches

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Machine networking

CSM		SCALANCE X-100	SCALANCE X-200	SCALANCE X-300	SCALANCE X-400	SCALANCE X-500
Unmanaged, ideal for interface extension of LOGO!, SIMATIC S7-300/ET 200M, or S7-1200.		Unmanaged, robust, and with different port configurations – also available as media converter.	Universal, ideal for setting up line, star, and ring topologies.	For the powerful expansion of plant networks with Gigabit Ethernet – including harsh conditions.	Modular design, for simple and straightforward segmentation on all levels.	For the flexible and powerful connection of an industrial network to the office IT system.
Unmanaged	Unmanaged	Unmanaged	Managed Layer 2	Managed Layer 2	Managed Layer 2/3	Managed Layer 2/3

Specific requirements for optimal Industrial Ethernet switches

Are you looking for the right switch for your application but you don't have expert knowledge? We'll guide you there with just a few clicks.

Network setup through SIMATIC S7-300, S7-1200, or LOGO!

SCALANCE X-000	SCALANCE X-100	SCALANCE X-200	SCALANCE X-300	SCALANCE X-400	SCALANCE X-500
Unmanaged, for implementing easy machine networking, including enhanced environmental conditions.	Unmanaged, robust, and with different port configurations – also available as media converter.	Universal, ideal for setting up line, star, and ring topologies.	For the powerful expansion of plant networks with Gigabit Ethernet – including harsh conditions.	Modular design, for simple and straightforward segmentation on all levels.	For the flexible and powerful connection of an industrial network to the office IT system.
Unmanaged	Unmanaged	Unmanaged	Managed Layer 2	Managed Layer 2	Managed Layer 2/3	Managed Layer 2/3

Compact
Switch Modules (CSM)

Simply more connectivity to SIMATIC: These unmanaged switches stand for optimal interface extension for SIMATIC S7-300/ET 200M and S7-1200.

Your benefits at a glance

- Low-cost setup of small, local Industrial Ethernet networks

- Fast and simple connection of SIMATIC S7, ET 200M, or LOGO! logic modules to Industrial Ethernet networks

- Flexible expansion of the network thanks to simple connection of the CSM

- Space-saving design of each terminal device, such as SIMATIC or LOGO!

- Support for stand-alone use as an unmanaged 4-port switch for Industrial Ethernet networks

Low-cost fan-out unit specially for LOGO! and SIMATIC S7-300/ET 200M or S7-1200. With these Compact Switch Modules, up to three stations can be quickly connected.

More information

Get to know all the members of the product family →
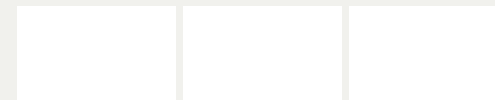
Compact
Switch Modules (CSM)

Simply more connectivity to SIMATIC: These unmanaged switches stand for optimal interface extension for SIMATIC S7-300/ET 200M and S7-1200.

CSM 1277

LOGO! CSM

CSM 377

To increase the number of interfaces for SIMATIC S7-1200.

To increase the number of interfaces for the LOGO! logic model.

To increase the number of interfaces for SIMATIC S7-300, S7-mEC, or ET 200M.

SCALANCE X-000

Join the world of Industrial Ethernet network topologies: Use the SCALANCE X-000 switches to implement simple machine networks that are compact and low-cost.

Your benefits at a glance

- Simple handling
- Space-saving installation in the control cabinet or wall mounting
- Industry-standard for use in machine networks
- Switched-mode power supply (24 V DC/AC)
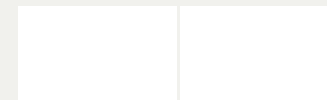
The SCALANCE X-000 unmanaged Industrial Ethernet switches are the space-saving solution for setting up small Industrial Ethernet networks with transmission rates of 10/100 Mbit/s in a line or star topology. Their small size and cost-efficiency make them the ideal entry-level solution for simple machine networking. Selected SCALANCE XB-000 versions with a network voltage of 24 V AC can also be used in building automation.

More information

Get to know all the members of the product family →

SCALANCE X-000

Join the world of Industrial Ethernet network topologies: Use the SCALANCE X-000 switches to implement simple machine networks that are compact and low-cost.

For setting up small Industrial Ethernet star and line topologies with switching functionality.

Version with plastic enclosure for use in less demanding industrial environments from −10°C to +60°C.

SCALANCE X-100

You can rely on these unmanaged Industrial Ethernet switches in machine-level applications for electrical or optical networks – even under harsh environmental conditions.

The unmanaged Industrial Ethernet switches in the SCALANCE X-100 product line are ideal for setting up Industrial Ethernet networks with transmission rates of up to 10 Gbit/s in line and star topologies. They guarantee perfect data transmission at ambient temperatures from –40°C to +70°C.

Your benefits at a glance

- Fail-safe thanks to redundant voltage infeed
- Full industrial compatibility thanks to rugged enclosure for RJ45 ports, including 19" design
- PROFINET (CC-A)
- Versions for harsh environmental conditions (–40°C to +70°C)
- High-performance in hazardous areas of Zone 2 (ATEX, IECEx)
- Cost-saving due to different product versions (up to 24 ports, Power over Ethernet)
- Industry-compliant retaining collar for data transmission
- Fast error detection thanks to clear diagnostic LEDs
- Different device versions
- Rack version with 6×1 Gbit/s and 2×10 Gbit/s ports

More information

Get to know all the members of the product family →

XB-100   XR-100WG

SCALANCE X-100

You can rely on these unmanaged Industrial Ethernet switches in machine-level applications for electrical or optical networks – even under harsh environmental conditions.

For setting up line and star topologies, especially suited for applications in building automation (24 V DC/AC).

For use in control rooms and other industry-related environments.

With extended applications: e.g., in hazardous areas.

For the fast and low-cost conversion of electrical signals into optical signals.

SCALANCE X-200

Perfection for all network topologies – from machine-level applications to networked plant units. With these highly versatile Industrial Ethernet switches, you rely on a universal solution for setting up line, star, and ring topologies.

Your benefits at a glance

- Customized design of small and large industrial networks

- Easily expandable electrical or optical networks

- Consistent, reliable, and powerful data networks based on proven standards and redundancy procedures

- Continuous network monitoring, diagnostics, and reporting for maximum transparency in industrial networks

- Easy assembly on-site without errors – using the FastConnect mounting system

- Support of MRP Interconnect and RSTP+ redundancy processes

- Versions with PoE and 2×10 Gbit/s SFP ports

More information

Are you planning to set up line, star, and ring topologies (10/100/1000/10000 Mbit/s) with MRP Interconnect in ring and RSTP+ as redundant connection for electrical or optical paths? The SCALANCE X-200 switches do just that. They also have a compact design available in various port configurations. They offer up to 24 electrical and optical ports in ST/BFOC and SC, as well as versatile configuration through SFP transceivers for distances of up to 200 km. The system family also includes switches with IRT functionality designed for strict real-time applications.

Get to know all the members of the product family →

| XB-200 | XC-200 | XP-200/ XP-200PoE EEC | XF-200BA | XF-200 |

SCALANCE X-200

Perfection for all network topologies – from machine-level applications to networked plant units: With these highly versatile Industrial Ethernet switches, you rely on a universal solution for setting up line, star, and ring topologies.

Real-time communication supported by PROFINET and EtherNet/IP.

VLAN and the complete PROFINET or EtherNet/IP diagnostics in one device.

VLAN and the complete PROFINET or EtherNet/IP diagnostics in one device.

SCALANCE XF-200BA DNA ("Y-Switch")

Up to four Gigabit ports enable the transfer of large volumes of data.

The Y-Switch functionality increases availability and helps avoid plant downtimes.

For networks in which high availability or remote diagnostics options are required.

SCALANCE X-200IRT

Real-time applications on the field level, all the way to high-performance motion control applications – SCALANCE X-200IRT switches based on PROFINET meet these requirements. These extremely versatile switches for setting up isochronous real-time (IRT) Industrial Ethernet networks provide you with a universal solution for the setup of line, star, and ring topologies in time-critical applications.

SCALANCE X-200IRT PRO

SCALANCE XF-200IRT

Specially designed for strict real-time applications: for use in an exceptionally wide range of applications.

For setting up IRT line and star topologies – also suitable for ring topologies and redundant ring connections.

For setting up IRT line and star topologies – with future-oriented switching technology.

For setting up IRT line and star topologies with polymer optical fiber (POF) – also suitable for ring topologies and redundant ring connections.

SCALANCE X-200

In the course of ongoing digitalization, the data volume in the process industry is growing at an ever increasing rate. Big data necessitates end-to-end communication down to the field level and calls for flexible and reliable communication networks – with the reliable SCALANCE X Industrial Ethernet switches. PROFINET supports flexible network architectures and also allows the integration of existing PROFINET field buses.

Process automation

SCALANCE XF-200BA DNA

SCALANCE XF-200BA

The Y-Switch functionality increases availability and helps avoid plant downtimes.

For networks requiring high levels of availability or remote diagnostic options.

Up to four Gigabit ports enable the transfer of large volumes of data.

Increased plant availability with NAMUR-compliant SCALANCE XC200EEC.

SCALANCE X-300

High functionality and extreme flexibility – these are the features characterizing the SCALANCE X-300 managed Industrial Ethernet switches as compact devices or as 19" rack versions. They enable you to easily expand your plant networks with Gigabit Ethernet.

Your benefits at a glance

- Cost-effective and space-saving 19" control cabinet
- Can also be used in hazardous areas
- Full integration into PROFINET or EtherNet/IP diagnostics
- Versions with PoE and 2×10 Gbit/s

The SCALANCE X-300 switches are valued for their small mounting depth – two switches can be comfortably installed in one control cabinet. This makes them ideally suited for a wide variety of industry-related applications. The SCALANCE X-300 product family features up to 28 Gigabit ports and combo ports and can also bridge long distances thanks to their fiber-optic interfaces (SFP). Some device types also support up to 10 Gbit/s and Power over Ethernet (PoE).

More information

Get to know all the members of the product family →

XR-300WG	X-300	XR-300

SCALANCE X-300

High functionality and extreme flexibility – these are the features characterizing the SCALANCE X-300 managed Industrial Ethernet switches as compact devices or as 19" rack versions. They enable you to easily expand your plant networks with Gigabit Ethernet.

Thanks to modular design: Plant expansion with up to 24 electrical or four optical ports.

For switched networks with high requirements in terms of availability, diagnostics, and transfer rate.

Switches with small mounting depths for saving space in the control cabinet – flexibly and economically.

Primarily for high-performance plant networks with connections to the corporate network.

SCALANCE X-400

High performance when space is restricted – that's exactly what the SCALANCE X-400 product line offers thanks to its modular design. It also boasts maximum flexibility in the automation network.

Your benefits at a glance

- Electrical or optical networking via combo ports – even during operation

- High performance and network availability, e.g., via virtual networks (VLANs)

- Tool-free network expansion – even during operation (hot swappable)

- Support for MRP Interconnect and RSTP+ redundancy processes

The demands placed on the communication network are growing. With a plug-in transceiver for distances up to 200 km, the SCALANCE X-400 product family offers you tremendous flexibility in the automation network. Thanks to the modular design, you can expand your Industrial Ethernet switches with additional port extenders – tool-free. But that's not all: You can improve performance even further by activating Layer 3 functions.

More information

Get to know all the members of the product family →

XM-400   PE-400

SCALANCE X-400

High performance when space is restricted – that's exactly what the SCALANCE X-400 product line offers thanks to its modular design. It also boasts maximum flexibility in the automation network.

Expandable by port extenders and plug-in transceivers for a maximum configuration with up to 24 ports.

Thanks to extender modules, network expansions can be performed easily and conveniently without the use of tools – including during operation.

SCALANCE X-500

Are you planning to restructure your plant network?
SCALANCE X-500 gives you the freedom to choose your connection
media and use various redundancy concepts. You can easily link
your plant network to your enterprise IT.

SCALANCE XR552-12M

Your benefits at a glance

- Unlimited flexibility in network expansions

- Modifications thanks to full modularity

- Electrical or optical networking via combo ports
  (SCALANCE XR524-8C/XR526-8C) during operation

- Reduction of stock-keeping costs for different device types
  due to fully modular design

- Layer 2 and Layer 3 versions available

- High availability due to redundant power supply and redundancy
  functions

- Diverse versions with different (AC/DC) and optionally redundant
  power supply for all requirements

- High device performance and transfer of large amounts of data
  via 10 Gbit/s ports

A key component with the SCALANCE X-500 is a genuine
topology manager for your system network. This creates
new scope for creativity when you select your connection
media and access the various redundancy options. As a
result, you can connect your system network to your office IT
system. That means you can enjoy maximum network avail-
ability – and you'll continue to enjoy security in the future
with all three base devices in the SCALANCE X-500 product
family, with their range of media modules up to 10 Gbit/s.

More information

Get to know all the members of the product family

X-500

SCALANCE X-500

Are you planning to restructure your plant network?
SCALANCE X-500 gives you the freedom to choose your connection
media and use various redundancy concepts. You can easily link
your plant network to your enterprise IT.

Thanks to full modularity, unlimited
flexibility in network expansions with
widely variable installation options.

SCALANCE X for transportation

Punctual rail traffic – thanks to network communication building the foundation for reliable monitoring and precise control of more and more complex transportation infrastructure. SCALANCE X switches comply with all relevant certifications for wayside/trackside rail traffic as well as onboard/wayside requirements (e.g., EN 50121, EN 50155, or EN 45545).

Onboard/wayside EN 50155/EN 45545

SCALANCE X005EEC

For configuration of small-scale Industrial Ethernet star and line topologies with switching functionality.

Specifically for demanding applications, for example in Ex environments; also suited for Gigabit topologies.

Flexible design for plant networks, including connectivity to the enterprise network.

Reliable, compact design for high availability.

Exceptional performance thanks to high network availability. Modular and powerful.

Extendable with PE408PoE port extenders and plug-in transceivers for full system expansion with up to 24 ports.

SCALANCE X for building automation

Well connected in buildings, thanks to a reliable communication infrastructure. A high-performance and highly available network is often required to enable many single-room control solutions, for example, along with security functions such as intrusion detection, surveillance cameras, or card readers and the integration into fire detection technology. SCALANCE X Industrial Ethernet switches are perfectly suited to meet these specific demands in building automation, including 24 V AC (50/60 Hz) voltage supply, simple configuration, and fanless operation.

Model with plastic enclosure for fanless operation in the control cabinet or suspended ceiling from –10°C to +60°C.

For configuration of line or star structures with switching functionality. Can be used in the control cabinet.

Fiber-optic connection for trouble-free networking between different floor levels, for redundant network design with MRP or RSTR.

Layer 3 switch for segmentation of larger networks. Can be expanded with port extenders and plug-in transceivers to up to 24 ports.

Security information
Siemens provides products and solutions with industrial security functions that support the secure operation of plants, systems, machines, and networks.

In order to protect plants, systems, machines, and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Siemens' products and solutions constitute one element of such a concept.

Customers are responsible for preventing unauthorized access to their plants, systems, machines, and networks. Such systems, machines, and components should only be connected to the enterprise network or the Internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g., firewalls and/or network segmentation) are in place.

For additional information on industrial security measures that may be implemented, please visit: **https://www.siemens.com/industrialsecurity**.

Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates, may increase customers' exposure to cyber threats.

To stay informed about product updates, subscribe to the Siemens Industrial Security RSS Feed at: **https://www.siemens.com/industrialsecurity.**