As active network components, Ethernet switches permit the structuring of an industrial communication network into electrical or optical line and star topologies. These distribute data to defined addressees, thereby structuring the data traffic, which in turn significantly increases the data throughput and network performance.

The various versions of the unmanaged Industrial Ethernet switches (SCALANCE X and Compact Switch Modules (CSM)) ensure an optimized solution, whatever the requirement.

Siemens can always offer the right switch – whether for space-saving installation in the control cabinet, a low-cost, industry-compatible design, or demanding requirements for EMC, shock and vibration resistance or cabling.

The benefits at a glance

- Cost-effective construction of small networks
- Comprehensive product portfolio
- Simple operation
- Space-saving design
- Data transfer rates from 10/100 Mbit/s or 1 Gbit/s
- Distances up to 26 km
- Auto-crossover/auto-negotiation
- 5 year warranty on all SCALANCE products

siemens.com/switches
Compact Switch Modules (CSM)

Low-cost modules specially for LOGO! and SIMATIC S7. With these Compact Switch Modules, up to three stations can be connected quickly and easily to LOGO!, SIMATIC S7-1200 or SIMATIC S7-300/ET 200M devices. The CSMs are also ideal for space-saving installation in the control box or small control cabinets.

- Inexpensive
- Fast commissioning, as no configuration is necessary
- Simple and fast status display via LEDs on the device
- Industry-compatible, space-saving plastic enclosure

Selection tools

Convenient selection tools are available to help you in selecting these unmanaged Industrial Ethernet switches.

They also assist with selection from the complete portfolio and with configuration of the modular Industrial Ethernet switches:

**SIMATIC NET Selection Tool:**
[siemens.com/snst-standalone](http://siemens.com/snst-standalone)

**TIA Selection Tool:**
[siemens.com/tia-selection-tool](http://siemens.com/tia-selection-tool)

siemens.com/csm
SCALANCE X-000 / SCALANCE XB-000

Simple, space-saving, industry-compatible:
The SCALANCE XB-000 range enables the cost-effective setup of networks in a compact format. The devices achieve gigabit data transmission over distances up to 26 km with fiber-optic cables.

The SCALANCE X-000 has a rugged metal enclosure and enables the cost-effective creation of line and star topologies for simple machine networks.

- Easy handling
- Space-saving installation in control boxes, cabinets or for wall mounting
- Data transmission rates up to 1 Gbit/s
- Industry-standard plastic enclosure
- Creation of line topologies with two fiber-optic interfaces (SCALANCE XB004-2)
- Variants with 24 V AC (50/60 Hz) for building automation
- Use in railway and road traffic applications (SCALANCE X005TS)
- Wide temperature range from -40 °C to +70 °C (SCALANCE X005 and X005TS)
- PROFINET CC-A-compliant

siemens.com/x-000
## SCALANCE XC-100

The SCALANCE XC-100 and X108PoE feature different port characteristics which enables small networks to be constructed with the right switch for the respective application, e.g. for hazardous areas (IECEx, ATEX Zone 2). The available port density helps to save costs. And with SCALANCE X108PoE, it is possible to supply up to two terminal devices via Power-over-Ethernet (PoE) with data and power simultaneously.

<table>
<thead>
<tr>
<th>Applications</th>
<th>Machine networking and networks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interfaces</td>
<td>8x RJ45</td>
</tr>
<tr>
<td>Transfer rate, max.</td>
<td>10/100 Mbit/s</td>
</tr>
<tr>
<td>Special features</td>
<td>Power-over-Ethernet (PoE)</td>
</tr>
<tr>
<td>Dimensions (WxHxD) in mm</td>
<td>60x125x124</td>
</tr>
<tr>
<td>Degree of protection</td>
<td>IP30</td>
</tr>
<tr>
<td>Temperature range</td>
<td>-20 °C to +60 °C</td>
</tr>
</tbody>
</table>

The SCALANCE XC-100 and X108PoE feature different port characteristics which enables small networks to be constructed with the right switch for the respective application, e.g. for hazardous areas (IECEx, ATEX Zone 2). The available port density helps to save costs. And with SCALANCE X108PoE, it is possible to supply up to two terminal devices via Power-over-Ethernet (PoE) with data and power simultaneously.

**SCALANCE XC-100**

- Rugged plastic/metal enclosure with retaining collar
- Redundant power supply via 4-pole terminal block (2x 24 V DC)
- Clearly positioned interfaces and diagnostics LEDs
- Motor vehicle approval for SCALANCE XC108
- Wide temperature range from -40 °C to +70 °C
- Multitude of mounting options, including on walls, SIMATIC S7-1500 controllers and 35 mm DIN rails
- Use in railway and road traffic applications (SCALANCE X108PoE)
- Supports Power-over-Ethernet (SCALANCE X108PoE)

siemens.com/xc-100
**SCALANCE XB-100**

<table>
<thead>
<tr>
<th>Model</th>
<th>Applications</th>
<th>Interfaces</th>
<th>Transfer rate, max.</th>
<th>Special features</th>
<th>Dimensions (WxHxD) in mm</th>
<th>Degree of protection</th>
<th>Temperature range</th>
</tr>
</thead>
<tbody>
<tr>
<td>XB108-2</td>
<td>Machine networking and building automation</td>
<td>8x RJ45 / 2x ST/BFOC or 2x SC</td>
<td>10/100 Mbit/s</td>
<td>PROFINET CC-A</td>
<td>80x117x109</td>
<td>IP20</td>
<td>0 °C to +60 °C</td>
</tr>
<tr>
<td>XB112</td>
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<td>12x RJ45</td>
<td></td>
<td></td>
<td>120x117x109</td>
<td>IP30</td>
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<tr>
<td>XB116</td>
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<td>16x RJ45</td>
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<tr>
<td>XB124</td>
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<td>24x RJ45</td>
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<td></td>
</tr>
<tr>
<td>XR124WG</td>
<td>Data centers</td>
<td>24x RJ45</td>
<td></td>
<td>Work group switch</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SCALANCE XR-100WG**

The SCALANCE XB-100 product line is designed for setting up electrical or optical networks with direct current (24 V DC) and alternating current (24 V AC, 50/60 Hz) for the easy connection of Ethernet nodes in buildings and for industrial purposes. The unmanaged Industrial Ethernet media converters of the SCALANCE X-100 product line facilitate flexible and straightforward media conversion from copper to fiber-optic cables.

- Can be used in buildings and for industrial purposes with 24 V DC or 24 V AC (50/60 Hz)
- For simple machine networking where an high port density is required (up to 24 ports)
- Redundant power supply
- PROFINET CC-A-compliant
- Suitable for Zone 2 hazardous areas (ATEX, IECEx)
- Signaling contact: signaling mask can be set locally using buttons (media converter)

The low overall depth of the cost-optimized, unmanaged SCALANCE XR-100WG 19” rack switches (work group) mean that two of them can be mounted on both sides of the control cabinet, thus saving space: this makes them ideal for a wide range of industry-related applications and control rooms.

- Can also be used in hazardous areas due to approvals such as ATEX Ex Zone 2
- Work group switch for use in 19” racks, e.g. in industrial data centers
- Versions with 24 V DC and 100–240 V AC (50/60 Hz) available
- High port density (up to 24 ports)
- Redundant power supply at 24 V DC

siemens.com/xb-100
siemens.com/x-100

siemens.com/xr-100wg
SCALANCE X Industrial Ethernet switches

With a graded portfolio, Siemens is able to offer the right switch for any industrial communication network requirements.

Security information

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. For more information about industrial security, please visit www.siemens.com/industrialsecurity