

**Product-type designation** **SCALANCE XR324-12M**

SCALANCE XR324-12M MANAGED IE SWITCH,  
 19" RACK, POWER SUPPLY 24V DC,  
 PORTS FRONT SIDE,  
 12 X 100/1000MBIT/S F. 2-PORT- MEDIA MODULES,  
 ELEKTRICAL ODER OPTICAL,  
 LED-DIAGNOSTICS,  
 FAULT SIGNAL CONTACT WITH SELECT/SET BUTTON,  
 PROFINET-IO DEVICE,  
 NETWORK- MANAGEMENT,  
 INTEGRATED REDUNDANCY MANAGER,  
 OFFICE FEATURES (RSTP, VLAN, IGMP,..);  
 C-PLUG IN THE SCOPE OF SUPPLY



**Transmission rate**

Transfer rate / 1	10 Mbit/s
Transfer rate / 2	100 Mbit/s
Transfer rate / 3	1000 Mbit/s

**Interfaces**

Number of electrical/optical connections / for network components or terminal equipment / maximum	24
Number of electrical connections	
• for operator console	1
• for alarm contact	1
• for media module	12
• for power supply	1
• for redundant power supply	1
Design of electrical connection	
• for network components and terminal equipment	Dependent on selected media modules
• for operator console	RJ11 port
• for signaling contact	2-pole terminal block
• for power supply	4-pole terminal block
Design of optical interface / for optical waveguide	
• at 100 Mbit/s	Dependent on selected media modules

<ul style="list-style-type: none"> <li>• at 1000 Mbit/s</li> </ul>	Dependent on selected media modules
design of the removable storage / C-PLUG	Yes
<b>Inputs/outputs</b>	
Operating voltage / of signaling contacts / at DC / rated value	24 V
Operating current / of signaling contacts / at DC / maximum	0.1 A
<b>Supply voltage, current consumption, power loss</b>	
Type of supply voltage / redundant power supply unit	No
Type of voltage / of supply voltage	DC
Supply voltage	
<ul style="list-style-type: none"> <li>• external</li> </ul>	24 V
<ul style="list-style-type: none"> <li>• external</li> </ul>	19.2 ... 28.8 V
Product component / fusing at power supply input	Yes
Consumed current / maximum	1.8 A
Power loss	
<ul style="list-style-type: none"> <li>• at 24 V / for DC</li> </ul>	44 W
<b>Permitted ambient conditions</b>	
Ambient temperature	
<ul style="list-style-type: none"> <li>• during operating</li> </ul>	-40 ... +70 °C
<ul style="list-style-type: none"> <li>• during storage</li> </ul>	-40 ... +70 °C
<ul style="list-style-type: none"> <li>• during transport</li> </ul>	-40 ... +70 °C
<ul style="list-style-type: none"> <li>• Comment</li> </ul>	Reduced operating temperature through the use of media modules (-40 °C to +70 °C) or SFP plug-in transceivers (-40 °C to +60 °C). If the device is installed in the vertical position, the maximum operating temperature is reduced to +50 °C.
Relative humidity	
<ul style="list-style-type: none"> <li>• at 25 °C / without condensation / during operating / maximum</li> </ul>	95 %
Protection class IP	IP20
<b>Design, dimensions and weight</b>	
Design	19" rack
Width	483 mm
Height	44 mm
Depth	305 mm
Net weight	5.5 kg
Type of mounting	
<ul style="list-style-type: none"> <li>• Installation 19 inch</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• 35 mm DIN rail mounting</li> </ul>	No
<ul style="list-style-type: none"> <li>• wall mounting</li> </ul>	No
<ul style="list-style-type: none"> <li>• S7-300 rail mounting</li> </ul>	No
Type of mounting	When used in shipbuilding, the device must be secured in the 19" rack at four points
<b>Product properties, functions, components / general</b>	

Cascading in the case of a redundant ring / at reconfiguration time of <math>\leq 0.3\text{ s}</math>	50
Cascading in cases of star structuring	Any (depending only on signal propagation time)
Product function	
• CLI	Yes
• web-based management	Yes
• MIB support	Yes
• TRAPs via email	Yes
• Configuration with STEP 7	Yes
• RMON	Yes
• Port mirroring	Yes
• CoS	Yes
• PROFINET IO diagnosis	Yes
• switch-managed	Yes
Protocol / is supported	
• Telnet	Yes
• HTTP	Yes
• HTTPS	Yes
• TFTP	Yes
• FTP	Yes
• BOOTP	Yes
• SNMP v1	Yes
• SNMP v2	Yes
• SNMP v3	Yes
• IGMP (snooping/querier)	Yes
• GMRP	Yes
• DCP	Yes
• LLDP	Yes
Identification & maintenance	
• I&M0 - device-specific information	Yes
• I&M1 - plant identification/location name	Yes
<b>Product functions / Diagnosis</b>	
Product function	
• Port diagnostics	Yes
• Statistics Packet Size	Yes
• Statistics packet type	Yes
• Error statistics	Yes
• SysLog	Yes
<b>Product functions / VLAN</b>	
Product function	

• VLAN - port based	Yes
• VLAN dynamic	Yes
Number of VLANs / maximum	255
Number of VLANs - dynamic / maximum	255
Protocol / is supported / GVRP	Yes
<b>Product functions / DHCP</b>	
Product function	
• DHCP client	Yes
• DHCP Option 82	Yes
• DHCP Option 66	Yes
• DHCP Option 67	Yes
<b>Product functions / Redundancy</b>	
Product function	
• Ring redundancy	Yes
• Redundancy manager	Yes
• Standby redundancy	Yes
• HSR redundancy protocol	Yes
• MRP redundancy protocol	Yes
• redundancy procedure STP	Yes
• RSTP redundancy protocol	Yes
• Passive listening	Yes
Protocol / is supported	
• STP/RSTP	Yes
• STP	Yes
• RSTP	Yes
• RSTP big network support	Yes
• LACP	Yes
<b>Product functions / Security</b>	
Product function	
• ACL - port/MAC-based	Yes
• IEEE 802.1x (radius)	Yes
• Broadcast/Multicast/Unicast Limiter	Yes
• broadcast blocking	Yes
Protocol / is supported / SSH	Yes
<b>Product functions / Time</b>	
Product function / SICLOCK support	Yes
Protocol / is supported	
• NTP	No
• SNTP	Yes

- IEEE 1588 profile default

Yes

## Standards, specifications, approvals

### Standard

- for EMC

- from FM

FM3611: Class 1, Division 2, Group A, B, C, D / T4, Class 1, Zone 2, Group IIC, T4

- for hazardous zone

EN 60079-0 : 2006, EN 60079-15: 2005, II 3 G Ex nA II T4 KEMA 07 ATEX 0145X

- for safety / of CSA and UL

UL 60950-1, CSA C22.2 No. 60950-1-03

- for hazardous area / of CSA and UL

UL 1604 and UL 2279-15 (Hazardous Location), CSA C22.2 No. 213 -M1987, Class 1 / Division 2 / Group A, B, C, D / T4, Class 1 / Zone 2 / Group IIC / T4

- for emitted interference

EN 61000-6-4:2007 (Class A)

- for interference immunity

EN 61000-6-2:2005

### Verification of suitability

EN 61000-6-2:2005, EN 61000-6-4:2007

- CE mark

Yes

- C-Tick

Yes

- KC approval

Yes

- Railway application in accordance with EN 50155

Yes

### letzte Änderung:

May 28, 2012