

SCALANCE XR324-4M EEC; Managed IE switch, 19" rack; 16x 10/100/1000 Mbit/s for RJ45 ports electrical; 4x 100/1000 Mbit/s for 2-port media modules, electrical or optical; LED diagnostics; error signaling Contact; Select/set pushbutton, PROFINET IO device, network management, Integrated redundancy manager; Power supply 2x 24 V DC; Ports in the front



Product type designation	SCALANCE XR324-4M EEC	
Transfer rate		
Transfer rate	10 Mbit/s, 100 Mbit/s, 1000 Mbit/s	
Interfaces / for communication / Integrated		
Number of electrical connections • for network components or terminal equipment	16; RJ45	
Number of 100 Mbit/s ST(BFOC) ports • for multimode	8	
Number of 100 Mbit/s SC ports • for multimode	8	
Number of 1000 Mbit/s LC ports • for multimode • for single mode (LD)	8 8	
Interfaces / other		
Number of electrical connections • for operator console • for signaling contact • for media module	1 1 4	

• for power supply	2
• for redundant voltage supply	1
Type of electrical connection	
• for operator console	RJ11
• for signaling contact	2 x 2-pole terminal block
• for power supply	2 x 4-pole terminal block
design of the removable storage	
• C-PLUG	Yes

Signal inputs/outputs

Operating voltage / of the signaling contacts	
• at DC / Rated value	24 V
Operating current / of the signaling contacts	
• at DC / maximum	0.1 A

Supply voltage, current consumption, power loss

Type of voltage supply / redundant power supply unit	Yes
Type of voltage / of the supply voltage	DC
Supply voltage	
• external	24 V
• external / minimum	19.2 V
• external / maximum	57.6 V
Supply voltage / 2 / Rated value	
• Type of voltage / 2 / of the supply voltage	DC
Supply voltage / at DC	24 V
• rated value	19.2 ... 57.6 V
Product component / fusing at power supply input	Yes
Fuse protection type / at input for supply voltage	T2H / 250 V
Consumed current / maximum	1.6 A
Power loss [W]	
• at DC / at 24 V	40 W

Ambient conditions

Ambient temperature	
• during operation	-40 ... +70 °C
• during storage	-40 ... +85 °C
• during transport	-40 ... +85 °C
• Note	Extended temperature upper limit of +85° C permitted for 16 hours. Reduced operating temperature through the use of media modules (-40 °C to +70 °C) or SFP plug-in transceivers (-40 °C to +60 °C)
Relative humidity	
• at 25 °C / without condensation / during operation / maximum	95 %
Protection class IP	IP20

Design	19" rack
Number of modular height units / relating to 19-inch cabinet	1
Width	483 mm
Height	44 mm
Depth	305 mm
Net weight	6.8 kg
Mounting type	When used in shipbuilding, the device must be secured in the 19" rack at four points
• 19-inch installation	Yes
• 35 mm DIN rail mounting	No
• wall mounting	No
• S7-300 rail mounting	No
• S7-1500 rail mounting	No

Product features, product functions, product components / general

Cascading in the case of a redundant ring / at reconfiguration time of $< \sim 0.3 \text{ s}$	100
Cascading in cases of star topology	any (depending only on signal propagation time)

Product functions / management, configuration, engineering

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
• multiport mirroring	Yes
• CoS	Yes
• PROFINET IO diagnosis	Yes
PROFINET conformity class	B
Product function / switch-managed	Yes
Protocol / is supported	
• Telnet	Yes
• HTTP	Yes
• HTTPS	Yes
• TFTP	Yes
• FTP	Yes
• BOOTP	Yes
• GMRP	Yes
• DCP	Yes
• LLDP	Yes

• SNMP v1	Yes
• SNMP v2	Yes
• SNMP v3	Yes
• IGMP (snooping/querier)	Yes
Identification & maintenance function	
• I&M0 - device-specific information	Yes
• I&M1 – higher-level designation/location designation	Yes

Product functions / Diagnostics

Product function	
• Port diagnostics	Yes
• Statistics Packet Size	Yes
• Statistics packet type	Yes
• Error statistics	Yes
• SysLog	Yes

Product functions / VLAN

Product function	
• VLAN - port based	Yes
• VLAN - protocol-based	No
• VLAN - IP-based	No
• VLAN dynamic	Yes
Number of VLANs / maximum	255
Number of VLANs - dynamic / maximum	255
Protocol / is supported / GVRP	Yes

Product functions / DHCP

Product function	
• DHCP client	Yes
• DHCP Option 82	Yes
• DHCP Option 66	Yes
• DHCP Option 67	Yes

Product functions / redundancy

Product function	
• Ring redundancy	Yes
• High Speed Redundancy Protocol (HRP)	Yes
• high speed redundancy protocol (HRP) with redundancy manager	Yes
• high speed redundancy protocol (HRP) with standby redundancy	Yes
Protocol / is supported / Media Redundancy Protocol (MRP)	Yes
Product function	

• media redundancy protocol (MRP) with redundancy manager	Yes
• redundancy procedure STP	Yes
• redundancy procedure RSTP	Yes
• redundancy procedure MSTP	Yes
• Parallel Redundancy Protocol (PRP)/operation in the PRP-network	Yes
• Parallel Redundancy Protocol (PRP)/Redundant Network Access (RNA)	No
• Passive listening	Yes
Protocol / is supported	
• STP/RSTP	Yes
• STP	Yes
• RSTP	Yes
• MSTP	Yes
• RSTP big network support	Yes
• LACP	Yes

Product functions / Security

Product function	
• ACL - MAC-based	Yes
• ACL - port/MAC-based	Yes
• IEEE 802.1x (radius)	Yes
• Broadcast/Multicast/Unicast Limiter	Yes
• broadcast blocking	Yes
Protocol / is supported	
• SSH	Yes

Product functions / time

Product function	
• SICLOCK support	Yes
Protocol / is supported	
• NTP	Yes
• SNTP	Yes
• IEEE 1588 profile default	Yes

Standards, specifications, approvals

Standard	
• for 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 / from CSA and UL	UL 60950-1, CSA C22.2 No. 60950-1-03
• for hazardous zone / from CSA and UL	ANSI / ISA 12.12.01, CSA C22.2 No. 142-M1987, CL. 1 / Div. 2 / GP. A, B, C, D T4, CL. 1 / Zone 2 / GP. IIC, T4

- for emitted interference
- for interference immunity

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

EN 61000-6-2:2005

Standards, specifications, approvals / CE

Certificate of suitability / CE marking	Yes
Standard	
• for EMC	IEC 61850, IEEE 1613

Standards, specifications, approvals / other

Certificate of suitability	EN 61000-6-2:2005, EN 61000-6-4:2007
• C-Tick	Yes
• IEC 61850-3	Yes
• KC approval	Yes

Standards, specifications, approvals / marine classification

Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	Yes
• Bureau Veritas (BV)	Yes
• Det Norske Veritas (DNV)	No
• Germanische Lloyd (GL)	No
• DNV GL	Yes
• Lloyds Register of Shipping (LRS)	Yes
• Nippon Kaiji Kyokai (NK)	Yes
• Polski Rejestr Statkow (PRS)	No
• Royal Institution of Naval Architects (RINA)	Yes

Standards, specifications, approvals / Product conformity

MTBF	20 y
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Further information / Internet-Links

Internet-Link	
• to website: Selector SIMATIC NET SELECTION TOOL	http://www.siemens.com/snst
• to website: Industrial communication	http://www.siemens.com/simatic-net
• to website: Industry Mall	https://mall.industry.siemens.com
• to website: Information and Download Center	http://www.siemens.com/industry/infocenter
• to website: Image database	http://automation.siemens.com/bilddb
• to website: CAX Download Manager	http://www.siemens.com/cax
• to website: Industry Online Support	https://support.industry.siemens.com

Security information

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