

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 230 V AC; 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	8
• for single mode (LD)	8
Interfaces / other	
Number of electrical connections	
• for operator console	1
• for signaling contact	1
• for media module	4

<ul style="list-style-type: none"> • for power supply • for redundant voltage supply 	<p>2</p> <p>0</p>
Type of electrical connection	
<ul style="list-style-type: none"> • for operator console • for signaling contact • for power supply 	<p>RJ11</p> <p>2 x 3-pole terminal block</p> <p>2 x 3-pole terminal block</p>
design of the removable storage	
<ul style="list-style-type: none"> • C-PLUG 	Yes

Signal inputs/outputs

Operating voltage / of the signaling contacts	
<ul style="list-style-type: none"> • at AC / Rated value • at DC / Rated value 	<p>276 V</p> <p>230 V</p>
Operating current / of the signaling contacts	
<ul style="list-style-type: none"> • at AC / maximum • at DC / maximum 	<p>5 A</p> <p>0.1 A</p>

Supply voltage, current consumption, power loss

Type of voltage supply / redundant power supply unit	Yes
Type of voltage / of the supply voltage	AC
Supply voltage	
<ul style="list-style-type: none"> • at AC • at AC / rated value 	<p>230 V</p> <p>80 ... 276 V</p>
Supply voltage / 2 / Rated value	
<ul style="list-style-type: none"> • Type of voltage / 2 / of the supply voltage 	DC
Supply voltage / at DC	220 V
<ul style="list-style-type: none"> • rated value 	48 ... 300 V
Product component / fusing at power supply input	Yes
Fuse protection type / at input for supply voltage	3.15 A / 250 V
Consumed current / maximum	0.7 A
Power loss [W]	
<ul style="list-style-type: none"> • at AC / at 230 V • at DC / at 250 V 	<p>42 W</p> <p>42 W</p>

Ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> • during operation • during storage • during transport • Note 	<p>-40 ... +70 °C</p> <p>-40 ... +85 °C</p> <p>-40 ... +85 °C</p> <p>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)</p>
Relative humidity	

<ul style="list-style-type: none"> • at 25 °C / without condensation / during operation / maximum 	95 %
Protection class IP	IP20

Design, dimensions and weights

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	7 kg
Mounting type	When used in shipbuilding, the device must be secured in the 19" rack at four points
<ul style="list-style-type: none"> • 19-inch installation 	Yes
<ul style="list-style-type: none"> • 35 mm DIN rail mounting 	No
<ul style="list-style-type: none"> • wall mounting 	No
<ul style="list-style-type: none"> • S7-300 rail mounting 	No
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • CLI 	Yes
<ul style="list-style-type: none"> • web-based management 	Yes
<ul style="list-style-type: none"> • MIB support 	Yes
<ul style="list-style-type: none"> • TRAPs via email 	Yes
<ul style="list-style-type: none"> • Configuration with STEP 7 	Yes
<ul style="list-style-type: none"> • RMON 	Yes
<ul style="list-style-type: none"> • Port mirroring 	Yes
<ul style="list-style-type: none"> • multiport mirroring 	Yes
<ul style="list-style-type: none"> • CoS 	Yes
<ul style="list-style-type: none"> • PROFINET IO diagnosis 	Yes
PROFINET conformity class	B
Product function / switch-managed	Yes
Protocol / is supported	
<ul style="list-style-type: none"> • Telnet 	Yes
<ul style="list-style-type: none"> • HTTP 	Yes
<ul style="list-style-type: none"> • HTTPS 	Yes
<ul style="list-style-type: none"> • 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

<ul style="list-style-type: none"> • high speed redundancy protocol (HRP) with redundancy manager 	Yes
<ul style="list-style-type: none"> • high speed redundancy protocol (HRP) with standby redundancy 	Yes
Protocol / is supported / Media Redundancy Protocol (MRP)	Yes
Product function	
<ul style="list-style-type: none"> • media redundancy protocol (MRP) with redundancy manager 	Yes
<ul style="list-style-type: none"> • redundancy procedure STP 	Yes
<ul style="list-style-type: none"> • redundancy procedure RSTP 	Yes
<ul style="list-style-type: none"> • redundancy procedure MSTP 	Yes
<ul style="list-style-type: none"> • Passive listening 	Yes
Protocol / is supported	
<ul style="list-style-type: none"> • STP/RSTP 	Yes
<ul style="list-style-type: none"> • STP 	Yes
<ul style="list-style-type: none"> • RSTP 	Yes
<ul style="list-style-type: none"> • MSTP 	Yes
<ul style="list-style-type: none"> • RSTP big network support 	Yes
<ul style="list-style-type: none"> • LACP 	Yes

Product functions / Security

Product function	
<ul style="list-style-type: none"> • ACL - MAC-based 	Yes
<ul style="list-style-type: none"> • ACL - port/MAC-based 	Yes
<ul style="list-style-type: none"> • IEEE 802.1x (radius) 	Yes
<ul style="list-style-type: none"> • Broadcast/Multicast/Unicast Limiter 	Yes
<ul style="list-style-type: none"> • broadcast blocking 	Yes
Protocol / is supported	
<ul style="list-style-type: none"> • SSH 	Yes

Product functions / time

Product function	
<ul style="list-style-type: none"> • SICLOCK support 	Yes
Protocol / is supported	
<ul style="list-style-type: none"> • NTP 	Yes
<ul style="list-style-type: none"> • SNTP 	Yes
<ul style="list-style-type: none"> • IEEE 1588 profile default 	Yes

Standards, specifications, approvals

Standard	
<ul style="list-style-type: none"> • for hazardous zone 	-
<ul style="list-style-type: none"> • for safety / from CSA and UL 	UL 508, CSA C22.2 No. 142-M1987
<ul style="list-style-type: none"> • for hazardous zone / from CSA and UL 	No

<ul style="list-style-type: none"> • for emitted interference • for interference immunity 	EN 61000-6-4:2007 (Class A) EN 61000-6-2:2005
MTBF	20 y

Standards, specifications, approvals / CE

Certificate of suitability / CE marking	Yes
Standard	
<ul style="list-style-type: none"> • for EMC 	IEC 61850, IEEE 1613

Standards, specifications, approvals / other

Certificate of suitability	EN 61000-6-2:2005, EN 61000-6-4:2007
<ul style="list-style-type: none"> • C-Tick • IEC 61850-3 • KC approval 	Yes Yes Yes

Standards, specifications, approvals / marine classification

Marine classification association	
<ul style="list-style-type: none"> • Bureau Veritas (BV) • Korean Register of Shipping (KRS) 	Yes Yes

Further information / Internet-Links

Internet-Link	
<ul style="list-style-type: none"> • to website: Selector SIMATIC NET SELECTION TOOL • to website: Industrial communication • to website: Industry Mall • to website: Information and Download Center • to website: Image database • to website: CAx Download Manager • to website: Industry Online Support 	http://www.siemens.com/snst http://www.siemens.com/simatic-net https://mall.industry.siemens.com http://www.siemens.com/industry/infocenter http://automation.siemens.com/bilddb http://www.siemens.com/cax https://support.industry.siemens.com

Security information

Security information	<p>Siemens provides products and solutions with industrial security functions that support the secure operation of plants, solutions, machines, equipment and/or networks. They are important components in a holistic industrial security concept. With this in mind, Siemens' products and solutions undergo continuous development. Siemens recommends strongly that you regularly check for product updates. For the secure operation of Siemens products and solutions, it is necessary to take suitable preventive action(e.g. cell protection concept) and integrate each component into a holistic, state-of-the-art industrial security concept. Third-party products that may be in use should also be considered. For more information about industrial security, visit http://www.siemens.com/industrialsecurity. To stay informed about product updates as they occur, sign up for a product-specific newsletter. For more information, visit http://support.automation.siemens.com. (V3.4)</p>
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