

SCALANCE XR322-12; managed layer 2; IE switch, 19" rack; 20x 100/1000 Mbps RJ45 port; 2x 1G/2.5G/5G/10 Gbps RJ45 port, 4x 100M/1G SFP port; 8x 1G/10G SFP+ port; LED diagnostics; error signaling contact; select/set button; PROFINET IO device; network management; integrated redundancy manager; office features (RSTP, VLAN, IGMP,...); CLP included in scope of supply; power supply 24 V DC;



product type designation	
product brand name	SCALANCE
transfer rate	
transfer rate	10 Mbit/s, 100 Mbit/s, 1000 Mbit/s, 2.5 Gbit/s, 5 Gbit/s, 10 Gbit/s
interfaces / for communication / integrated	
number of electrical connections	
• for network components or terminal equipment	22; RJ45
number of 10/100/1000 Mbit/s RJ45 ports	
• with securing collar	22
number of 1000/2500/5000/10000 Mbps RJ45 ports / with securing collar	2
number of electrical connections	
• for SFP	4; 100 Mbps and 1000 Mbps SFP usable
• for SFP+	8; 1000 Mbps and 10000 Mbps SFP usable
interfaces / other	
number of electrical connections	
• for operator console	1
• for signaling contact	1
• for power supply	1
type of electrical connection	
• for operator console	USB (2.0 Port, Type B, serial via USB)
• for signaling contact	2-pole terminal block
• for power supply	2 x 2-pin terminal block
design of the removable storage	
• CLP	Yes
operating voltage / of the signaling contacts	
• at AC / rated value	24 V
• at DC / rated value	24 V
operational current / of the signaling contacts	
• at DC / maximum	0.1 A
supply voltage, current consumption, power loss	
product component / connection for redundant voltage supply	Yes
type of voltage supply / redundant power supply unit	No
type of voltage / 1 / of the supply voltage	DC
• supply voltage / 1 / rated value	24 V
• power loss [W] / 1 / rated value	72 W
• supply voltage / 1 / rated value	19.2 ... 31.2 V
• consumed current / 1 / maximum	3 A
• type of electrical connection / 1 / for power supply	2 x 2-pole terminal block
• product component / 1 / fusing at power supply input	Yes

<ul style="list-style-type: none"> • fuse protection type / 1 / at input for supply voltage 	F 10 A / 250 V
type of voltage / 2 / of the supply voltage	AC (50 / 60Hz)
<ul style="list-style-type: none"> • supply voltage / 2 / rated value 	24 V
<ul style="list-style-type: none"> • power loss [W] / 2 / rated value 	72 W
<ul style="list-style-type: none"> • supply voltage / 2 / rated value 	19.2 ... 30 V
<ul style="list-style-type: none"> • consumed current / 2 / maximum 	3 A
<ul style="list-style-type: none"> • type of electrical connection / 2 / for power supply 	2 x 2-pole terminal block
<ul style="list-style-type: none"> • fuse protection type / 2 / at input for supply voltage 	F 10 A / 250 V
ambient conditions	
ambient temperature / in horizontal mounting position / during operation	-40 ... +60 °C; Starting at -40 °C; The maximum ambient temperature during operation depends on the operating height and the plug-in transceivers, see also manual.
installation altitude / at height above sea level / maximum	4000 m
relative humidity	
<ul style="list-style-type: none"> • at 25 °C / without condensation / during operation / maximum 	95 %
operating condition / fanless operation	Yes
protection class IP	IP20
design, dimensions and weights	
design	19" rack
number of modular height units / relating to 19-inch cabinet	1
width	446 mm
height	43.6 mm
depth	374.8 mm
net weight	8 kg
material / of the enclosure	metal
fastening method	
<ul style="list-style-type: none"> • 19-inch installation 	Yes
product features, product functions, product components / general	
cascading in the case of a redundant ring / at reconfiguration time of <1~0.31~s	50
cascading in cases of star topology	any (depending only on signal propagation time)
number of automatically learnable MAC addresses	16382
number of QoS queues / per port	8
product function	
<ul style="list-style-type: none"> • QoS according to IEEE 802.1Q 	Yes
product feature	
<ul style="list-style-type: none"> • Store & Forward switching method 	Yes
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"> • SMTP server 	No
<ul style="list-style-type: none"> • port mirroring 	Yes
<ul style="list-style-type: none"> • multiport mirroring 	Yes
<ul style="list-style-type: none"> • Encapsulated Remote Traffic Mirroring (ERTM) 	Yes
<ul style="list-style-type: none"> • CoS 	Yes
<ul style="list-style-type: none"> • PROFINET IO diagnosis 	Yes
<ul style="list-style-type: none"> • switch-managed 	Yes
PROFINET conformity class	B
network load class / according to PROFINET	3
telegram length / for Ethernet / maximum	9194 byte
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
<ul style="list-style-type: none"> • FTP 	Yes

• SFTP	Yes
• BOOTP	Yes
• NETCONF	Yes
• GMRP	Yes
• DCP	Yes
• LLDP	Yes
• EtherNet/IP	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
number of VLANs / maximum	257
number of VLANs - dynamic / maximum	257
number of VLANs / at ring redundancy (HRP; MRP; standby link)	257
product functions / DHCP	
product function	
• DHCP server	Yes
• DHCP client	Yes
• DHCP Option 82	Yes
• DHCP Option 66	Yes
• DHCP Option 67	Yes
product functions / redundancy	
protocol / is supported / Media Redundancy Protocol (MRP)	Yes
product function	
• media redundancy protocol (MRP) with redundancy manager	Yes
• Media Redundancy Protocol Interconnection (MRP-I)	Yes
• of the PROFINET IO device / is supported / H-Sync forwarding	Yes
• of the PROFINET IO device / is supported / PROFINET system redundancy	Yes
• ring redundancy	Yes
• high speed redundancy protocol (HRP) with redundancy manager	Yes
• high speed redundancy protocol (HRP) with standby redundancy	Yes
• redundancy procedure STP	Yes
• redundancy procedure RSTP	Yes
• redundancy procedure RSTP+	Yes
• redundancy procedure MSTP	Yes
• High-availability Seamless Redundancy (HSR)	Yes
• Parallel Redundancy Protocol (PRP)/operation in the PRP-network	Yes
• Parallel Redundancy Protocol (PRP)/Redundant Network Access (RNA)	Yes
• passive listening	Yes
protocol / is supported	

<ul style="list-style-type: none"> • STP/RSTP • STP • RSTP • MSTP • RSTP big network support • LACP 	Yes Yes Yes No Yes Yes
system modification during operation	
product function / configuration in RUN via CiR/H-CiR	Yes
product functions / security	
product function	
<ul style="list-style-type: none"> • IEEE 802.1x (radius) • broadcast/multicast/unicast limiter • broadcast blocking 	Yes Yes Yes
protocol / is supported	
<ul style="list-style-type: none"> • SSH • SSL 	Yes Yes
product functions / time	
product function	
<ul style="list-style-type: none"> • SICLOCK support • NTP-client • SNTP client • IEEE 1588 v2 transparent forwarding 	Yes Yes Yes Yes
protocol / is supported	
<ul style="list-style-type: none"> • NTP • SNTP • IEEE 1588 profile default 	Yes Yes No
accuracy / at IEEE 1588 v2	
<ul style="list-style-type: none"> • not less than • typical 	100 µs 50 ns
standards, specifications, approvals	
certificate of suitability	
<ul style="list-style-type: none"> • CE marking • UKCA marking • cULus approval • KC approval • Regulatory Compliance Mark (RCM) 	Yes Yes Yes Yes Yes
product conformity / according to EMC-guideline	2014/30/EU
standard	
<ul style="list-style-type: none"> • for EMC interference emission • for immunity to EMC 	EN 61000-6-4 EN 61000-6-2
standards, specifications, approvals / hazardous environments	
certificate of suitability	
<ul style="list-style-type: none"> • ATEX • UKEX • IECEx • ULhazloc approval • CCC / for hazardous zone according to GB standard • FM registration 	Yes Yes Yes Yes Yes Yes
standards, specifications, approvals / other	
IT security for industrial automation systems / according to IEC 62443-4-2:2019	Yes
standards, specifications, approvals / Environmental Product Declaration	
Environmental Product Declaration	Yes
Global Warming Potential [CO2 eq]	
<ul style="list-style-type: none"> • total • during manufacturing • during operation • after end of life 	991.85 kg 225.96 kg 765.04 kg 0.85 kg
product functions / general	
MTBF	10 a

reference temperature / for MTBF determination	40 °C
reference code	
• according to IEC 81346-2	KF
• according to IEC 81346-2:2019	KFE
Warranty period	5 a

further information / internet links

internet link	
• to website: Selection guide for cables and connectors	https://support.industry.siemens.com/cs/ww/en/view/109766358
• to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud
• to website: Industrial communication	https://www.siemens.com/simatic-net
• to web page: SiePortal	https://sieportal.siemens.com/
• to website: Image database	https://www.automation.siemens.com/bilddb
• to website: CAX-Download-Manager	https://www.siemens.com/cax
• to website: Industry Online Support	https://support.industry.siemens.com

security information

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Approvals / Certificates

General Product Approval



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For use in hazardous locations	Radio Equipment Type Approval Certificate	Test Certificates	Environment	Industrial Communication
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