

SCALANCE XR502-32; managed layer 3 IE switch, 19" rack; 2x 1G/2.5G/5G/10 Gbps RJ45 port 24x 100M/1G SFP port; 8x 1G/10G SFP+ port; LED diagnostics; error signaling contact; select/ set button; PROFINET I/O device; network management; integrated redundancy manager; office; features (RSTP, VLAN, IGMP,..); CLP included in scope of supply; power supply 2x 230 V AC



product type designation	
product brand name	SCALANCE
transfer rate	
transfer rate	100, 1000 Mbit/s
transfer rate	2.5, 5, 10 Gbit/s
interfaces / for communication / integrated	
number of electrical connections	
• for network components or terminal equipment	2; RJ45 with securing collar
number of 1000/2500/5000/10000 Mbps RJ45 ports / with securing collar	2
number of electrical connections	
• for SFP	24; 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	2
design of the removable storage	
• CLP	Yes
operating voltage / of the signaling contacts	
• 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	Yes
type of voltage / 1 / of the supply voltage	
• supply voltage / 1 / rated value	100V ... 250V DC
• power loss [W] / 1 / rated value	99 W
• supply voltage / 1 / rated value	77 ... 300 V
• consumed current / 1 / maximum	1.2 A
• product component / 1 / fusing at power supply input	Yes
type of voltage / 2 / of the supply voltage	
• supply voltage / 2 / rated value	240 V; 100V ... 240V AC
• power loss [W] / 2 / rated value	99 W
• supply voltage / 2 / rated value	85 ... 264 V
• consumed current / 2 / maximum	1.2 A
ambient conditions	
ambient temperature / in horizontal mounting position / during	-25 ... +55 °C; Starting at -25 °C; The maximum ambient temperature during

operation	operation depends on the operating height and the plug-in transceivers, see also manual.
installation altitude / at height above sea level / maximum	3000 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-inch 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	8.4 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 $\leq 0.3\text{ s}$	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 web-based management MIB support TRAPs via email configuration with STEP 7 RMON port mirroring multiport mirroring CoS PROFINET IO diagnosis switch-managed 	Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes
PROFINET conformity class	B
network load class / according to PROFINET	III
telegram length / for Ethernet / maximum	9194 byte
protocol / is supported <ul style="list-style-type: none"> Telnet HTTP HTTPS TFTP FTP SFTP BOOTP NETCONF GMRP DCP LLDP EtherNet/IP SNMP v1 SNMP v2 SNMP v3 IGMP (snooping/querier) 	Yes Yes Yes Yes Yes Yes Yes No Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes

identification & maintenance function	
<ul style="list-style-type: none"> • I&M0 - device-specific information • I&M1 - higher level designation/location designation 	Yes Yes
product functions / diagnostics	
product function	
<ul style="list-style-type: none"> • port diagnostics • statistics Packet Size • statistics packet type • error statistics • SysLog 	Yes Yes Yes Yes Yes
product functions / VLAN	
product function	
<ul style="list-style-type: none"> • VLAN - port based • VLAN - protocol-based • VLAN - IP-based • VLAN dynamic 	Yes No No Yes
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	
<ul style="list-style-type: none"> • DHCP server • DHCP client • DHCP Option 82 • DHCP Option 66 • DHCP Option 67 	Yes Yes Yes Yes Yes
product functions / routing	
service / routing / note	IP routing integrated
product function	
<ul style="list-style-type: none"> • static IP routing • static IP routing IPv6 • dynamic IP routing • dynamic IP routing IPv6 	Yes No Yes No
protocol / is supported	
<ul style="list-style-type: none"> • RIPv2 • RIPnG for IPv6 • OSPFv2 • OSPFv3 for IPv6 • VRRP • VRRP for IPv6 	Yes No Yes No Yes No
product functions / redundancy	
protocol / is supported / Media Redundancy Protocol (MRP)	Yes
product function	
<ul style="list-style-type: none"> • media redundancy protocol (MRP) with redundancy manager • Media Redundancy Protocol Interconnection (MRP-I) • of the PROFINET IO device / is supported / PROFINET system redundancy • ring redundancy • high speed redundancy protocol (HRP) with redundancy manager • high speed redundancy protocol (HRP) with standby redundancy • redundancy procedure STP • redundancy procedure RSTP • redundancy procedure RSTP+ • redundancy procedure MSTP • High-availability Seamless Redundancy (HSR) • Parallel Redundancy Protocol (PRP)/operation in the PRP-network • Parallel Redundancy Protocol (PRP)/Redundant Network 	Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes

Access (RNA)	
• passive listening	Yes
protocol / is supported	
• LACP	Yes
system modification during operation	
product function / configuration in RUN via CiR/H-CiR	Yes
product functions / security	
product function	
• IEEE 802.1x (radius)	Yes
• broadcast/multicast/unicast limiter	Yes
• broadcast blocking	Yes
protocol / is supported	
• SSH	Yes
• SSL	Yes
product functions / time	
product function	
• SICLOCK support	Yes
• NTP-client	Yes
• SNTP client	Yes
• IEEE 1588 v2 transparent forwarding	Yes
protocol / is supported	
• NTP	Yes
• SNTP	Yes
accuracy / at IEEE 1588 v2	
• not less than	100 µs
• typical	50 ns
standards, specifications, approvals	
certificate of suitability	
• CE marking	Yes
• UKCA marking	Yes
• KC approval	Yes
• Regulatory Compliance Mark (RCM)	Yes
product conformity / according to EMC-guideline	2014/30/EU
standard	
• for EMC interference emission	EN 61000-6-4, EN 50121-9
• for immunity to EMC	EN 61000-6-2, EN 50121-4
• for safety / from CSA and UL	UL 62368-1, UL 61010
standards, specifications, approvals / other	
certificate of suitability	
• RoHS conformity	Yes
resistance to air pollution / conformity according to ANSI/ISA-71.04	Yes; G3
IT security for industrial automation systems / according to IEC 62443-4-2:2019	Yes
standards, specifications, approvals / marine classification	
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	No
• French marine classification society (BV)	No
• Chinese Classification Society (CCS)	No
• Det Norske Veritas (DNV)	No
• Korean Register of Shipping (KRS)	No
• Lloyds Register of Shipping (LRS)	No
• Nippon Kaiji Kyokai (NK)	No
• Polski Rejestr Statkow (PRS)	No
• Royal Institution of Naval Architects (RINA)	No
standards, specifications, approvals / Environmental Product Declaration	
Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
• total	1274.81 kg
• during manufacturing	225.96 kg
• during operation	1048 kg

<ul style="list-style-type: none"> • after end of life 	0.85 kg
product functions / general	
MTBF	12.7 a
reference temperature / for MTBF determination	40 °C
reference code	
<ul style="list-style-type: none"> • according to IEC 81346-2 • according to IEC 81346-2:2019 	KF KFE
Warranty period	5 a
product function / is supported / identification link	Yes; acc. to IEC 61406-1:2022

further information / internet links	
internet link	
<ul style="list-style-type: none"> • to website: Selection guide for cables and connectors • to web page: selection aid TIA Selection Tool • to website: Industrial communication • to web page: SiePortal • to website: Image database • to website: CAx-Download-Manager • to website: Industry Online Support 	https://support.industry.siemens.com/cs/ww/en/view/109766358 https://www.siemens.com/tstcloud https://www.siemens.com/simatic-net https://sieportal.siemens.com/ https://www.automation.siemens.com/bilddb https://www.siemens.com/cax https://support.industry.siemens.com

security information	
security information	<p>Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. 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 cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under https://www.siemens.com/cert. (V4.7)</p>

Approvals / Certificates

General Product Approval	Test Certificates	Environment
 EG-Konf.		
	TUEV	Type Test Certificates/Test Report
		

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