

SCALANCE XR522-12; managed layer 3 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
product type designation	XR522-12
Technical Product Detail Page	https://i.siemens.com/1P6GK5534-3TR00-2AR3
transfer rate	
transfer rate	10, 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	22; RJ45 with securing collar
number of 10/100/1000 Mbit/s RJ45 ports	
• with securing collar	20
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	2
type of electrical connection	
• for operator console	USB (2.0 type B, USB-to-serial adapter)
• for signaling contact	2-pole terminal block
• for power supply	2 x 2-pole terminal block
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	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
• power loss [W] / at DC / at 24 V / typical	43.2 W

• supply voltage / 1 / voltage range • consumed current / 1 / maximum • consumed current / at DC / at 24 V / typical • type of electrical connection / 1 / for power supply • product component / 1 / fusing at power supply input • fuse protection type / 1 / at input for supply voltage	19.2 ... 31.2 3 A 1.8 A 2 x 2-pole terminal block Yes F 10 A / 250 V
type of voltage / 2 / of the supply voltage • supply voltage / 2 / rated value • power loss [W] / 2 / rated value • supply voltage / 2 / voltage range • consumed current / 2 / maximum • type of electrical connection / 2 / for power supply • fuse protection type / 2 / at input for supply voltage	AC (50 / 60 Hz) 24 V 72 W 19.2 ... 30 3 A 2 x 2-pole terminal block 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 • 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 kg
material / of the enclosure	metal
fastening method • 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 • QoS according to IEEE 802.1Q	Yes
product feature • Store & Forward switching method	Yes
product functions / management, configuration, engineering	
product function • 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
PROFINET conformity class	B
network load class / according to PROFINET	III
telegram length / for Ethernet / maximum	9194 byte
protocol / is supported	

• Telnet	Yes
• HTTP	Yes
• HTTPS	Yes
• TFTP	Yes
• FTP	Yes
• SFTP	Yes
• BOOTP	Yes
• NETCONF	No
• 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
• VLAN dynamic	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	
• DHCP server	Yes
• DHCP client	Yes
• DHCP Option 82	Yes
• DHCP Option 66	Yes
• DHCP Option 67	Yes
product functions / routing	
service / routing / note	IP routing integrated
product function	
• static IP routing	Yes
• static IP routing IPv6	No
• dynamic IP routing	Yes
• dynamic IP routing IPv6	No
protocol / is supported	
• RIPv2	Yes
• RIPv6 for IPv6	No
• OSPFv2	Yes
• OSPFv3 for IPv6	No
• VRRP	Yes
• VRRP for IPv6	No
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 / 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	
• 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
• EC Declaration of Conformity EN 61010, IEC 61010-1, UL 61010A-1	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 - 2
standards, specifications, approvals / hazardous environments	
certificate of suitability	
• ATEX	Yes

• UKEX • IECEx • ULhazloc approval • CCC / for hazardous zone according to GB standard • FM registration	Yes Yes Yes Yes Yes
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	
certificate of suitability / shipbuilding approval / note	Certifications marked 'No' are currently under renewal.
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Chinese Classification Society (CCS) • Det Norske Veritas (DNV) • Korean Register of Shipping (KRS) • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (NK) • Polski Rejestr Statkow (PRS) • Royal Institution of Naval Architects (RINA)	No No No Yes No No No No No
standards, specifications, approvals / Environmental Product Declaration	
Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
• 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	13.2 a
reference temperature / for MTBF determination	40 °C
warranty period	5 a
product function / is supported / identification link	Yes; acc. to IEC 61406-1:2022
further information / internet links	
internet link	
• 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	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,

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General Product Approval



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