

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 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	XR502-32
Technical Product Detail Page	https://i.siemens.com/1P6GK5534-5TR00-2AR3
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
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	19.2 ... 31.2
• consumed current / 1 / maximum	3 A

<ul style="list-style-type: none"> consumed current / at DC / at 24 V / typical 	1.8 A
<ul style="list-style-type: none"> type of electrical connection / 1 / for power supply 	2 x 2-pole terminal block
<ul style="list-style-type: none"> 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 / 60 Hz)
<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 / voltage range 	19.2 ... 30
<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 ... +55 °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-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	
<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 	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
<ul style="list-style-type: none"> switch-managed 	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 	Yes
<ul style="list-style-type: none"> 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
• RIPnG 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	Yes

manager	
• 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
• 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 / hazardous environments	
certificate of suitability	
• ATEX	Yes
• UKEX	Yes
• IECEx	Yes
• ULhazloc approval	Yes

<ul style="list-style-type: none"> • CCC / for hazardous zone according to GB standard • FM registration 	<p>Yes</p> <p>Yes</p>
standards, specifications, approvals / other	
certificate of suitability	
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • 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) 	<p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p>
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 	<p>2239.67 kg</p> <p>138 kg</p> <p>2101 kg</p> <p>0.67 kg</p>
product functions / general	
MTBF	16.7 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	
<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 	<p>https://support.industry.siemens.com/cs/ww/en/view/109766358</p> <p>https://www.siemens.com/tstcloud</p> <p>https://www.siemens.com/simatic-net</p> <p>https://sieportal.siemens.com/</p> <p>https://www.automation.siemens.com/bilddb</p> <p>https://www.siemens.com/cax</p> <p>https://support.industry.siemens.com</p>
security information	
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Approvals / Certificates	



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