



SCALANCE X320-1FE managed IE switch, 20x 10/100 Mbit/s RJ45 ports, 1x 100 Mbit/s SC Port multimode LED-diagnostics, error-signaling contact with Select/set pushbutton, PROFINET IO Device, network management, integrated redundancy manager, Office features (RSTP, VLAN, IGMP,...) C-plug in scope of delivery .

product type designation	
product brand name	SCALANCE
product type designation	X320-1FE
transfer rate	
transfer rate	10 Mbit/s, 100 Mbit/s
interfaces / for communication / integrated	
number of electrical connections • for network components or terminal equipment	20
number of 10/100 Mbit/s RJ45 ports • with securing collar	20
number of 100 Mbit/s SC ports • for multimode	1
transmission method / of the optical interface	100BaseFX
interfaces / other	
number of electrical connections • for signaling contact • for power supply	1 1
type of electrical connection • for signaling contact • for power supply	2-pole terminal block 4-pole terminal block
design of the removable storage • C-PLUG	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 • supply voltage / 1 / rated value • power loss [W] / 1 / rated value • supply voltage / 1 / rated value • consumed current / 1 / maximum • 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	DC 24 V 9.6 W 18 ... 32 V 0.4 A 4-pole terminal block Yes F 3 A / 32 V
ambient conditions	
ambient temperature • during operation	-40 ... +60 °C

<ul style="list-style-type: none"> during storage during transport 	-40 ... +70 °C
relative humidity	
<ul style="list-style-type: none"> at 25 °C / without condensation / during operation / maximum 	95 %
protection class IP	IP30
design, dimensions and weights	
design	compact
width	180 mm
height	125 mm
depth	123 mm
net weight	1.65 kg
fastening method	When used in shipbuilding, installation on a 35 mm standard mounting rail is not permitted.
<ul style="list-style-type: none"> 19-inch installation 35 mm top hat DIN rail mounting wall mounting S7-300 rail mounting S7-1500 rail mounting 	No Yes Yes Yes No
product features, product functions, product components / general	
cascading in the case of a redundant ring / at reconfiguration time of $\lt; 0.3 \text{ s}$	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 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
protocol / is supported	
<ul style="list-style-type: none"> Telnet HTTP HTTPS TFTP FTP BOOTP GMRP DCP LLDP SNMP v1 SNMP v2 SNMP v3 IGMP (snooping/querier) 	Yes Yes Yes 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	
• 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

product functions / DHCP

product function	
• 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
• 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 MSTP	Yes
• Parallel Redundancy Protocol (PRP)/operation in the PRP-network	Yes
• Parallel Redundancy Protocol (PRP)/Redundant Network Access (RNA)	No
• passive listening	Yes
protocol / is supported	
• STP/RSTP	Yes
• STP	Yes
• RSTP	Yes
• MSTP	Yes
• RSTP big network support	Yes
• LACP	Yes

product functions / security

product function	
• IEEE 802.1x (radius)	Yes
• broadcast/multicast/unicast limiter	Yes
• broadcast blocking	Yes
protocol / is supported	
• SSH	Yes

product functions / time

product function	
• SICLOCK support	Yes
protocol / is supported	
• NTP	Yes
• SNTP	Yes
• IEEE 1588 profile default	No

standards, specifications, approvals

certificate of suitability	
• CE marking	Yes
• KC approval	Yes
• Regulatory Compliance Mark (RCM)	Yes
standard	
• for EMC interference emission	EN 61000-6-4:2007 (Class A)
• for immunity to EMC	EN 61000-6-2:2005
• for safety / from CSA and UL	UL 60950-1, CSA C22.2 No. 60950-1

standards, specifications, approvals / hazardous environments

certificate of suitability	
• ATEX	Yes
• UKEX	Yes
• IECEX	Yes
• ULhazloc approval	Yes
• CCC / for hazardous zone according to GB standard	Yes
• FM registration	Yes

standards, specifications, approvals / other

certificate of suitability	
• railway application in accordance with EN 50155	No
• RoHS conformity	Yes

standards, specifications, approvals / marine classification

Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	Yes
• French marine classification society (BV)	Yes
• DNV GL	Yes
• Lloyds Register of Shipping (LRS)	Yes
• Nippon Kaiji Kyokai (NK)	Yes
• Polski Rejestr Statkow (PRS)	Yes
• Royal Institution of Naval Architects (RINA)	Yes

product functions / general

MTBF	25 a
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

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, subscribe to the Siemens Industrial Cybersecurity RSS Feed under https://www.siemens.com/cert . (V4.7)
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Approvals / Certificates

General Product Approval



[Declaration of Conformity](#)



General Product Approval	EMV	For use in hazardous locations
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[Miscellaneous](#)



[KC](#)



[EM](#)

For use in hazardous locations

Marine / Shipping

[CCC-Ex](#)



[NK / Nippon Kaiji Kyokai](#)

Marine / Shipping

Environment

Industrial Communication



[Confirmation](#)

[PROFINET](#)

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