

Product-type designation

SCALANCE X320-1FE



SCALANCE X320-1FE MANAGED IE SWITCH,
 20 X 10/100 MBIT/S RJ45 PORTS,
 1 X 100MBIT/S SC PORT MULTIMODE LED-
 DIAGNOSTICS,
 FAULT SIGNAL CONTACT WITH SELECT SET BUTTON,
 PROFINET-IO DEVICE,
 NETWORK- MANAGEMENT,
 INTEGRATED REDUNDANCY MANAGER OFFICE
 FEATURES (RSTP, VLAN, IGMP,..) C-PLUG IN THE
 SCOPE OF SUPPLY

Transmission rate

Transfer rate / 1	10 Mbit/s
Transfer rate / 2	100 Mbit/s

Interfaces

Number of electrical/optical connections / for network components or terminal equipment / maximum	21
Number of electrical connections	
• for network components and terminal equipment	20
• for signaling contact	1
• for power supply	1
• for redundant power supply	2
Design of electrical connection	
• for network components and terminal equipment	RJ45 port
• for signaling contact	2-pole terminal block
• for power supply	4-pole terminal block
Number of optical interfaces / for optical waveguide	
• at 100 Mbit/s	1
Design of optical interface / for optical waveguide	
• at 100 Mbit/s	SC port (multimode up to 5 km)
Connectable optical power relative to 1 mW	

• of the transmitter output	-19 ... -14 dB
• of the receiver input / maximum	-3 dB
Optical sensitivity relative to 1 mW / of the receiver input / minimum	-32 dB
Attenuation / of fiber-optic cable transmission link / minimum necessary	0 dB
Range / at the optical interface / depending on the optical fiber used	0 ... 5 km
design of the removable storage / C-PLUG	Yes
Signal-Inputs/outputs	
Operating voltage / of signaling contacts / at DC / rated value	24 V
Operating current / of signaling contacts / at DC / maximum	0.1 A
Supply voltage, current consumption, power loss	
Type of supply voltage / redundant power supply unit	No
Type of / supply voltage	DC
Supply voltage	
• external	24 V
• external	18 ... 32 V
Product component / fusing at power supply input	Yes
Type of fusing / at input for supply voltage	F 3 A / 32 V
Consumed current / maximum	0.4 A
Power loss	
• at 24 V / for DC	9.6 W
Permitted ambient conditions	
Ambient temperature	
• during operating	-40 ... +60 °C
• during storage	-40 ... +70 °C
• during transport	-40 ... +70 °C
Relative humidity	
• at 25 °C / without condensation / during operating / maximum	95 %
Protection class IP	IP30
Design, dimensions and weight	
Design	compact
Width	180 mm
Height	125 mm
Depth	123 mm
Net weight	1.65 kg
Mounting type	
• 19-inch installation	No
• 35 mm DIN rail mounting	Yes
• wall mounting	Yes
• S7-300 rail mounting	Yes

Mounting type

When used in shipbuilding, installation on a 35 mm standard mounting rail is not permitted.

Product properties, functions, components / general

Cascading in the case of a redundant ring / at reconfiguration time of $\leq 0.3\text{ s}$

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Cascading in cases of star structuring

Any (depending only on signal propagation time)

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

Protocol / is supported

- Telnet
- HTTP
- HTTPS
- TFTP
- FTP
- BOOTP
- SNMP v1
- SNMP v2
- SNMP v3
- IGMP (snooping/querier)
- GMRP
- DCP
- LLDP

Yes
Yes
Yes
Yes
Yes
Yes
Yes
Yes
Yes
Yes
Yes
Yes

Identification & maintenance function

- I&M0 - device-specific information
- I&M1 – higher level designation/location designation

Yes
Yes

Product functions / Diagnosis

Product function

- Port diagnostics
- Statistics Packet Size
- Statistics packet type

Yes
Yes
Yes

• Error statistics	Yes
• SysLog	Yes
Product functions / VLAN	
Product function	
• VLAN - port based	Yes
• VLAN dynamic	Yes
Number of VLANs / maximum	255
Number of VLANs - dynamic / maximum	255
Protocol / is supported / GVRP	Yes
Product functions / DHCP	
Product function	
• DHCP client	Yes
• DHCP Option 82	Yes
• DHCP Option 66	Yes
• DHCP Option 67	Yes
Product functions / Redundancy	
Product function	
• Ring redundancy	Yes
• Redundancy manager	Yes
• Standby redundancy	Yes
• High Speed Redundancy Protocol (HRP)	Yes
• Media Redundancy Protocol (MRP)	Yes
• redundancy procedure STP	Yes
• redundancy procedure RSTP	Yes
• redundancy procedure MSTP	Yes
• Passive listening	Yes
Protocol / is supported	
• STP/RSTP	Yes
• STP	Yes
• RSTP	Yes
• RSTP big network support	Yes
• LACP	Yes
Product functions / Security	
Product function	
• ACL - port/MAC-based	Yes
• 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
• MSTP	No
• IEEE 1588 profile default	No
Standards, specifications, approvals	
Standard	
• for EMC	
• from FM	FM3611: Class 1, Division 2, Group A, B, C, D / T4, Class 1, Zone 2, Group IIC, T4
• for hazardous zone	EN 60079-0 : 2006, EN 60079-15: 2005, II 3 G Ex nA II T4 KEMA 07 ATEX 0145X
• for safety / of CSA and UL	UL 60950-1, CSA C22.2 No. 60950-1
• for hazardous area / of CSA and UL	UL 1604 and UL 2279-15 (Hazardous Location), CSA C22.2 No. 213 -M1987, Class 1 / Division 2 / Group A, B, C, D / T4, Class 1 / Zone 2 / Group IIC / T4
• for emitted interference	EN 61000-6-4:2007 (Class A)
• for interference immunity	EN 61000-6-2:2005
Verification of suitability	EN 61000-6-2:2005, EN 61000-6-4:2007
• CE mark	Yes
• C-Tick	Yes
• KC approval	Yes
• Railway application in accordance with EN 50155	No
Further Information / Internet Links	
Internet-Link	
• to website: Industry Mall	http://www.siemens.com/industrial-controls/mall
• to website: Industrial communication	http://www.siemens.com/simatic-net
• to website: Information and Download Center	http://www.siemens.com/automation/net/catalog
• to website: Image database	http://automation.siemens.com/bilddb
• to website: CAx Download Manager	http://www.siemens.com/cax
• to website: Industry Online Support	http://support.automation.siemens.com
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