

SCALANCE X320-3LDFE managed IE switch, 20x 10/100 Mbit/s RJ45 ports, 1x 100 Mbit/s SC Port MM 2x 100 Mbit/s SC Port SM LED diagnostics, error signaling Contact with select/set button, PROFINET IO device, network management, Integrated redundancy manager, office features (RSTP, VLAN, IGMP,..) C-plug in scope of delivery



<b>Product type designation</b>	<b>SCALANCE X320-3LD FE</b>
<b>Transfer rate</b>	
Transfer rate	10 Mbit/s, 100 Mbit/s
<b>Interfaces / for communication / Integrated</b>	
Number of electrical connections	
• for network components or terminal equipment	20
Number of 10/100 Mbit/s RJ45 ports / Integrated	
• with securing collar	20
Number of 100 Mbit/s SC ports	
• for multimode	1
• for single mode (LD)	2
<b>Interfaces / other</b>	
Number of electrical connections	
• for signaling contact	1
• for power supply	1
• for redundant voltage supply	2
Type of electrical connection	
• for signaling contact	2-pole terminal block

<ul style="list-style-type: none"> <li>• for power supply</li> </ul>	4-pole terminal block
design of the removable storage	
<ul style="list-style-type: none"> <li>• C-PLUG</li> </ul>	Yes

### Signal inputs/outputs

Operating voltage / of the signaling contacts	
<ul style="list-style-type: none"> <li>• at DC / Rated value</li> </ul>	24 V
Operating current / of the signaling contacts	
<ul style="list-style-type: none"> <li>• at DC / maximum</li> </ul>	0.1 A

### Supply voltage, current consumption, power loss

Type of voltage supply / redundant power supply unit	No
Type of voltage / of the supply voltage	DC
Supply voltage	
<ul style="list-style-type: none"> <li>• external</li> </ul>	24 V
<ul style="list-style-type: none"> <li>• external / minimum</li> </ul>	18 V
<ul style="list-style-type: none"> <li>• external / maximum</li> </ul>	32 V
Product component / fusing at power supply input	Yes
Fuse protection type / at input for supply voltage	F 3 A / 32 V
Consumed current / maximum	0.5 A
Power loss [W]	
<ul style="list-style-type: none"> <li>• at DC / at 24 V</li> </ul>	12 W

### Ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> </ul>	-40 ... +60 °C
<ul style="list-style-type: none"> <li>• during storage</li> </ul>	-40 ... +70 °C
<ul style="list-style-type: none"> <li>• during transport</li> </ul>	-40 ... +70 °C
Relative humidity	
<ul style="list-style-type: none"> <li>• at 25 °C / without condensation / during operation / maximum</li> </ul>	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
Mounting type	When used in shipbuilding, installation on a 35 mm standard mounting rail is not permitted.
<ul style="list-style-type: none"> <li>• 19-inch installation</li> </ul>	No
<ul style="list-style-type: none"> <li>• 35 mm DIN rail mounting</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• wall mounting</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• S7-300 rail mounting</li> </ul>	Yes

- S7-1500 rail mounting

No

### Product features, product functions, product components / general

Cascading in the case of a redundant ring / at reconfiguration time of <math>\sim 0.3\text{ s}</math>

100

Cascading in cases of star topology

any (depending only on signal propagation time)

### 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

Yes  
Yes  
Yes  
Yes  
Yes  
Yes  
Yes  
Yes  
Yes  
Yes

PROFINET conformity class

B

Product function / switch-managed

Yes

Protocol / is supported

- 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

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

Yes  
Yes

### Product functions / Diagnostics

Product function

- Port diagnostics
- Statistics Packet Size

Yes  
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	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
• High Speed Redundancy Protocol (HRP)	Yes
• high speed redundancy protocol (HRP) with redundancy manager	Yes
• high speed redundancy protocol (HRP) with standby redundancy	Yes
Protocol / is supported / Media Redundancy Protocol (MRP)	Yes
Product function	
• media redundancy protocol (MRP) with redundancy manager	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	
• ACL - MAC-based	Yes
• 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
• IEEE 1588 profile default	No

### Standards, specifications, approvals

Standard	
• for FM	FM3611: Class 1, Divison 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 / from CSA and UL	UL 60950-1, CSA C22.2 No. 60950-1
• for hazardous zone / from 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
MTBF	15 y

### Standards, specifications, approvals / CE

Certificate of suitability / CE marking	Yes
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### Standards, specifications, approvals / other

Certificate of suitability	EN 61000-6-2:2005, EN 61000-6-4:2007
• C-Tick	Yes
• Railway application in accordance with EN 50155	No
• KC approval	Yes

## Standards, specifications, approvals / marine classification

### Marine classification association

• American Bureau of Shipping Europe Ltd. (ABS)	Yes
• Bureau Veritas (BV)	Yes
• Det Norske Veritas (DNV)	No
• Germanische Lloyd (GL)	No
• DNV GL	Yes
• Lloyds Register of Shipping (LRS)	Yes
• Nippon Kaiji Kyokai (NK)	Yes
• Polski Rejestr Statkow (PRS)	No
• Royal Institution of Naval Architects (RINA)	Yes

## Further information / Internet-Links

### Internet-Link

• to website: Selector SIMATIC NET SELECTION TOOL	<a href="http://www.siemens.com/snst">http://www.siemens.com/snst</a>
• to website: Industrial communication	<a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a>
• to website: Industry Mall	<a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>
• to website: Information and Download Center	<a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a>
• to website: Image database	<a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a>
• to website: CAx Download Manager	<a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>
• to website: Industry Online Support	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>

## Security information

### Security information

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