



SCALANCE X310, managed plus IE switch, 3x 10/100/1000 Mbit/s and 7x 10/100 Mbit/s RJ45 ports 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 supply.

product type designation	SCALANCE X310
transfer rate	
transfer rate	10 Mbit/s, 100 Mbit/s, 1000 Mbit/s
interfaces / for communication / maximum configuration for modular devices	
number of electrical ports / maximum	10
interfaces / for communication / integrated	
number of electrical connections	
• for network components or terminal equipment	10
number of 10/100 Mbit/s RJ45 ports / integrated	
• with securing collar	7
number of 10/100/1000 Mbit/s RJ45 ports / integrated	
• with securing collar	3
interfaces / other	
number of electrical connections	
• for signaling contact	1
• for power supply	1
type of electrical connection	
• for signaling contact	2-pole terminal block
• for power supply	4-pole terminal block
design of the removable storage	
• C-PLUG	Yes
signal inputs/outputs	
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	9.6 W
• supply voltage / 1 / rated value	18 ... 32 V
• consumed current / 1 / maximum	0.4 A
• type of electrical connection / 1 / for power supply	4-pole terminal block
• product component / 1 / fusing at power supply input	Yes
ambient conditions	
ambient temperature	
• during operation	-40 ... +60 °C
• during storage	-40 ... +70 °C

<ul style="list-style-type: none"> 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	120 mm
height	125 mm
depth	123 mm
net weight	1.4 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 $\leq 0.3\text{s}$	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 	Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes
PROFINET conformity class	B
product function / switch-managed	Yes
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
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
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
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product function	
• media redundancy protocol (MRP) with redundancy manager	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
• 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 safety / from CSA and UL	UL 60950-1, CSA C22.2 No. 60950-1
• for emitted interference	EN 61000-6-4:2007 (Class A)
• for interference immunity	EN 61000-6-2:2005

MTBF	40 a
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reference code	
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<ul style="list-style-type: none"> • according to IEC 81346-2 • according to IEC 81346-2:2019 	KF KFE
standards, specifications, approvals / CE	
certificate of suitability / CE marking	Yes
standards, specifications, approvals / hazardous environments	
standard / for hazardous zone	EN 60079-0 : 2006, EN 60079-15: 2005, II 3 G Ex nA II T4 KEMA 07 ATEX 0145X
<ul style="list-style-type: none"> • 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
certificate of suitability	Yes
<ul style="list-style-type: none"> • CCC / for hazardous zone according to GB standard • CCC / for hazardous zone according to GB standard / as marking 	Ex nA IIC T4 Gc
standards, specifications, approvals / other	
certificate of suitability	EN 61000-6-2:2005, EN 61000-6-4:2007
<ul style="list-style-type: none"> • C-Tick • KC approval • railway application in accordance with EN 50155 	Yes Yes No
standards, specifications, approvals / marine classification	
Marine classification association	Yes
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Det Norske Veritas (DNV) • Germanische Lloyd (GL) • DNV GL • Korean Register of Shipping (KRS) • Polski Rejestr Statkow (PRS) • Royal Institution of Naval Architects (RINA) 	Yes Yes No No Yes Yes Yes No
further information / internet links	
internet link	
<ul style="list-style-type: none"> • to web page: selection aid TIA Selection Tool • to website: Industrial communication • to website: Industry Mall • to website: Information and Download Center • to website: Image database • to website: CAx-Download-Manager • to website: Industry Online Support 	http://www.siemens.com/tia-selection-tool http://www.siemens.com/simatic-net https://mall.industry.siemens.com http://www.siemens.com/industry/infocenter http://automation.siemens.com/bilddb http://www.siemens.com/cax https://support.industry.siemens.com
security information	
security information	Siemens provides products and solutions with industrial security 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 security 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 security measures that may be implemented, please visit https://www.siemens.com/industrialsecurity . 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 Security RSS Feed under https://www.siemens.com/cert . (V4.6)

Approvals / Certificates		
General Product Approval	EMC	For use in hazardous locations

[Manufacturer Declaration](#)

[Miscellaneous](#)



[ATEX-Zone 2-Declaration](#)



[FM](#)

IECEx

For use in hazardous locations	Declaration of Conformity
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[CCC-Ex](#)



[Manufacturer Declaration](#)

Test Certificates

Marine / Shipping

[Type Test Certificates/Test Report](#)



[NK / Nippon Kaiji Kyokai](#)

Marine / Shipping

Environment



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