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

product type designation	SCALANCE X310
transfer rate	
transfer rate	10 Mbit/s, 100 Mbit/s, 1000 Mbit/s
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	

8.23.2021

● during operation	-40 ... +60 °C
● during storage	-40 ... +70 °C
● during transport	-40 ... +70 °C
relative humidity	
● 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.
● 19-inch installation	No
● 35 mm top hat DIN rail mounting	Yes
● wall mounting	Yes
● S7-300 rail mounting	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 <\~0.3\~s	100
cascading in cases of star topology	any (depending only on signal propagation time)

product functions / management, configuration, engineering	
product function	
● CLI	Yes
● web-based management	Yes
● MIB support	Yes
● TRAPs via email	Yes
● configuration with STEP 7	Yes
● RMON	Yes
● port mirroring	Yes
● multiport mirroring	Yes
● CoS	Yes
● PROFINET IO diagnosis	Yes
PROFINET conformity class	B
product function / switch-managed	Yes
protocol / is supported	
● Telnet	Yes
● HTTP	Yes
● HTTPS	Yes
● TFTP	Yes
● FTP	Yes
● BOOTP	Yes
● GMRP	Yes
● DCP	Yes
● LLDP	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	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
● 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 y

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
● 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	
● CCC / for hazardous zone according to GB standard	Yes

standards, specifications, approvals / other	
certificate of suitability	EN 61000-6-2:2005, EN 61000-6-4:2007
● C-Tick	Yes
● KC approval	Yes
● railway application in accordance with EN 50155	No

standards, specifications, approvals / marine classification	
Marine classification association	
● American Bureau of Shipping Europe Ltd. (ABS)	Yes
● French marine classification society (BV)	Yes
● Det Norske Veritas (DNV)	No
● Germanische Lloyd (GL)	No
● DNV GL	Yes
● Korean Register of Shipping (KRS)	Yes
● Polski Rejestr Statkow (PRS)	Yes
● Royal Institution of Naval Architects (RINA)	No

further information / internet-Links	
Internet-Link	
● to web page: selection aid TIA Selection Tool	http://www.siemens.com/tia-selection-tool
● to website: Industrial communication	http://www.siemens.com/simatic-net
● to website: Industry Mall	https://mall.industry.siemens.com
● to website: Information and Download Center	http://www.siemens.com/industry/infocenter
● to website: Image database	http://automation.siemens.com/bilddb
● to website: CAx-Download-Manager	http://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 security functions that support the secure operation of plants, solutions, machines, equipment and/or networks. They are important components in a holistic industrial security concept. With this in mind, Siemens' products and solutions undergo continuous development. Siemens recommends strongly that you regularly check for product updates. For the secure operation of Siemens products and solutions, it is necessary to take suitable preventive action(e.g. cell protection concept) and integrate each component into a holistic, state-of-the-art industrial security concept. Third-party products that may be in use should also be considered. For more information about industrial security, visit http://www.siemens.com/industrialsecurity. To stay informed about product updates as they occur, sign up for a product-specific newsletter. For more information, visit http://support.automation.siemens.com. (V3.4)
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