



SCALANCE X310FE, managed plus IE switch, 10x 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 delivery .

product type designation	SCALANCE X310FE
transfer rate	
transfer rate	10 Mbit/s, 100 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	10
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
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	
• 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 • during storage • during transport	-40 ... +60 °C -40 ... +70 °C -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 	No
<ul style="list-style-type: none"> 35 mm top hat DIN rail mounting 	Yes
<ul style="list-style-type: none"> wall mounting 	Yes
<ul style="list-style-type: none"> S7-300 rail mounting 	Yes
<ul style="list-style-type: none"> S7-1500 rail mounting 	No
product features, product functions, product components / general	
cascading in the case of a redundant ring / at reconfiguration time of $\sim 0.3\text{ s}$	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 	Yes
<ul style="list-style-type: none"> web-based management 	Yes
<ul style="list-style-type: none"> MIB support 	Yes
<ul style="list-style-type: none"> TRAPs via email 	Yes
<ul style="list-style-type: none"> configuration with STEP 7 	Yes
<ul style="list-style-type: none"> RMON 	Yes
<ul style="list-style-type: none"> port mirroring 	Yes
<ul style="list-style-type: none"> multiport mirroring 	Yes
<ul style="list-style-type: none"> CoS 	Yes
<ul style="list-style-type: none"> PROFINET IO diagnosis 	Yes
PROFINET conformity class	B
product function / switch-managed	Yes
protocol / is supported	
<ul style="list-style-type: none"> Telnet 	Yes
<ul style="list-style-type: none"> HTTP 	Yes
<ul style="list-style-type: none"> HTTPS 	Yes
<ul style="list-style-type: none"> TFTP 	Yes
<ul style="list-style-type: none"> FTP 	Yes
<ul style="list-style-type: none"> BOOTP 	Yes
<ul style="list-style-type: none"> GMRP 	Yes
<ul style="list-style-type: none"> DCP 	Yes
<ul style="list-style-type: none"> LLDP 	Yes
<ul style="list-style-type: none"> SNMP v1 	Yes
<ul style="list-style-type: none"> SNMP v2 	Yes
<ul style="list-style-type: none"> SNMP v3 	Yes
<ul style="list-style-type: none"> IGMP (snooping/querier) 	Yes
identification & maintenance function	
<ul style="list-style-type: none"> I&M0 - device-specific information 	Yes
<ul style="list-style-type: none"> I&M1 – higher level designation/location designation 	Yes
product functions / diagnostics	
product function	
<ul style="list-style-type: none"> port diagnostics 	Yes
<ul style="list-style-type: none"> statistics Packet Size 	Yes
<ul style="list-style-type: none"> statistics packet type 	Yes
<ul style="list-style-type: none"> error statistics 	Yes
<ul style="list-style-type: none"> SysLog 	Yes
product functions / VLAN	
product function	

<ul style="list-style-type: none"> • VLAN - port based 	Yes
<ul style="list-style-type: none"> • VLAN - protocol-based 	No
<ul style="list-style-type: none"> • VLAN - IP-based 	No
<ul style="list-style-type: none"> • VLAN dynamic 	Yes
number of VLANs / maximum	255
number of VLANs - dynamic / maximum	255
protocol / is supported / GVRP	Yes
product functions / DHCP	
product function	
<ul style="list-style-type: none"> • DHCP client 	Yes
<ul style="list-style-type: none"> • DHCP Option 82 	Yes
<ul style="list-style-type: none"> • DHCP Option 66 	Yes
<ul style="list-style-type: none"> • DHCP Option 67 	Yes
product functions / redundancy	
product function	
<ul style="list-style-type: none"> • ring redundancy 	Yes
<ul style="list-style-type: none"> • High Speed Redundancy Protocol (HRP) 	Yes
<ul style="list-style-type: none"> • high speed redundancy protocol (HRP) with redundancy manager 	Yes
<ul style="list-style-type: none"> • high speed redundancy protocol (HRP) with standby redundancy 	Yes
protocol / is supported / Media Redundancy Protocol (MRP)	Yes
product function	
<ul style="list-style-type: none"> • media redundancy protocol (MRP) with redundancy manager 	Yes
<ul style="list-style-type: none"> • redundancy procedure STP 	Yes
<ul style="list-style-type: none"> • redundancy procedure RSTP 	Yes
<ul style="list-style-type: none"> • redundancy procedure MSTP 	Yes
<ul style="list-style-type: none"> • passive listening 	Yes
protocol / is supported	
<ul style="list-style-type: none"> • STP/RSTP 	Yes
<ul style="list-style-type: none"> • STP 	Yes
<ul style="list-style-type: none"> • RSTP 	Yes
<ul style="list-style-type: none"> • MSTP 	Yes
<ul style="list-style-type: none"> • RSTP big network support 	Yes
<ul style="list-style-type: none"> • LACP 	Yes
product functions / security	
product function	
<ul style="list-style-type: none"> • ACL - MAC-based 	Yes
<ul style="list-style-type: none"> • ACL - port/MAC-based 	Yes
<ul style="list-style-type: none"> • IEEE 802.1x (radius) 	Yes
<ul style="list-style-type: none"> • broadcast/multicast/unicast limiter 	Yes
<ul style="list-style-type: none"> • broadcast blocking 	Yes
protocol / is supported	
<ul style="list-style-type: none"> • SSH 	Yes
product functions / time	
product function	
<ul style="list-style-type: none"> • SICLOCK support 	Yes
protocol / is supported	
<ul style="list-style-type: none"> • NTP 	Yes
<ul style="list-style-type: none"> • SNTP 	Yes
<ul style="list-style-type: none"> • IEEE 1588 profile default 	No
standards, specifications, approvals	
standard	
<ul style="list-style-type: none"> • for FM 	FM3611: Class 1, Divison 2, Group A, B, C, D / T4, Class 1, Zone 2, Group IIC, T4
<ul style="list-style-type: none"> • for safety / from CSA and UL 	UL 60950-1, CSA C22.2 No. 60950-1
<ul style="list-style-type: none"> • for emitted interference 	EN 61000-6-4:2007 (Class A)
<ul style="list-style-type: none"> • for interference immunity 	EN 61000-6-2:2005
MTBF	40 y

reference code	
<ul style="list-style-type: none"> • according to IEC 81346-2 • according to IEC 81346-2:2019 	<p>KF</p> <p>KFE</p>
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	
<ul style="list-style-type: none"> • 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
<ul style="list-style-type: none"> • C-Tick • KC approval • railway application in accordance with EN 50155 	<p>Yes</p> <p>Yes</p> <p>No</p>
standards, specifications, approvals / marine classification	
Marine classification association	
<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) 	<p>Yes</p> <p>Yes</p> <p>No</p> <p>No</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>No</p>
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 	<p>http://www.siemens.com/tia-selection-tool</p> <p>http://www.siemens.com/simatic-net</p> <p>https://mall.industry.siemens.com</p> <p>http://www.siemens.com/industry/infocenter</p> <p>http://automation.siemens.com/bilddb</p> <p>http://www.siemens.com/cax</p> <p>https://support.industry.siemens.com</p>
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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