



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

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| 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 | -40 ... +60 °C -40 ... +70 °C |

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| <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 $\lt;0.3\text{s}$ | 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 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 | Yes Yes Yes |

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| <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 | |

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| standard | |
| <ul style="list-style-type: none"> • for FM • for safety / from CSA and UL • for emitted interference • for interference immunity | FM3611: Class 1, Divison 2, Group A, B, C, D / T4, Class 1, Zone 2, Group IIC, T4 UL 60950-1, CSA C22.2 No. 60950-1 EN 61000-6-4:2007 (Class A) 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 |
| <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 | Yes Yes No |
| 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) | 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 | |
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