

SCALANCE X212-2LD, managed IE switch, 12x 10/100 Mbit/s RJ45 ports, 2x 100 Mbit/s single-mode BFOC, LED diagnostics, error-signaling contact with set button, redundant power supply, PROFINET IO device, network management, Redundancy Manager integrated, incl. electron. manual on CD-ROM, C-plug optional



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| Product type designation | SCALANCE X212-2LD |
| Transfer rate | |
| Transfer rate | 10 Mbit/s, 100 Mbit/s |
| Interfaces / for communication / Integrated | |
| Number of electrical connections | |
| • for network components or terminal equipment | 12 |
| Number of 10/100 Mbit/s RJ45 ports / Integrated | |
| • with securing collar | 12 |
| Number of 100 Mbit/s ST(BFOC) ports | |
| • for single mode (LD) | 2 |
| Interfaces / other | |
| Number of electrical connections | |
| • for signaling contact | 1 |
| • for power supply | 1 |
| • for redundant voltage supply | 1 |
| Type of electrical connection | |
| • for signaling contact | 2-pole terminal block |
| • for power supply | 4-pole terminal block |

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| design of the removable storage | |
| <ul style="list-style-type: none"> • C-PLUG | Yes |
| Signal inputs/outputs | |
| Operating voltage / of the signaling contacts | |
| <ul style="list-style-type: none"> • at DC / Rated value | 24 V |
| Operating current / of the signaling contacts | |
| <ul style="list-style-type: none"> • at DC / maximum | 0.1 A |
| Supply voltage, current consumption, power loss | |
| Type of voltage / of the supply voltage | DC |
| Supply voltage | |
| <ul style="list-style-type: none"> • external | 24 V |
| <ul style="list-style-type: none"> • external / minimum | 18 V |
| <ul style="list-style-type: none"> • external / maximum | 32 V |
| Product component / fusing at power supply input | Yes |
| Fuse protection type / at input for supply voltage | 1.1 A / 33 V |
| Consumed current / maximum | 0.33 A |
| Power loss [W] | |
| <ul style="list-style-type: none"> • at DC / at 24 V | 7.92 W |
| Ambient conditions | |
| Ambient temperature | |
| <ul style="list-style-type: none"> • during operation | -40 ... +60 °C |
| <ul style="list-style-type: none"> • 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 | compact |
| Width | 120 mm |
| Height | 125 mm |
| Depth | 124 mm |
| Net weight | 1.2 kg |
| Mounting type | |
| <ul style="list-style-type: none"> • 35 mm 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

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| Product function | |
| • CLI | Yes |
| • web-based management | Yes |
| • MIB support | Yes |
| • TRAPs via email | Yes |
| • Configuration with STEP 7 | Yes |
| • Port mirroring | Yes |
| • multiport mirroring | No |
| • with IRT / PROFINET IO switch | No |
| • 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 | No |
| • DCP | Yes |
| • LLDP | Yes |
| • SNMP v1 | Yes |
| • SNMP v2 | Yes |
| • SNMP v3 | Yes |
| Identification & maintenance function | |
| • I&M0 - device-specific information | Yes |
| • I&M1 – higher-level designation/location designation | Yes |

Product functions / Diagnostics

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| Product function | |
| • Port diagnostics | Yes |
| • Statistics Packet Size | Yes |
| • Statistics packet type | Yes |
| • Error statistics | Yes |

Product functions / DHCP

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| Product function | |
| • DHCP client | Yes |

Product functions / redundancy

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| Product function | |
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| <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 | No |
| 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"> • Parallel Redundancy Protocol (PRP)/operation in the PRP-network | Yes |
| <ul style="list-style-type: none"> • Parallel Redundancy Protocol (PRP)/Redundant Network Access (RNA) | No |
| <ul style="list-style-type: none"> • Passive listening | Yes |

Product functions / Security

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| Protocol / is supported | |
| <ul style="list-style-type: none"> • SSH | Yes |

Product functions / time

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| Product function | |
| <ul style="list-style-type: none"> • SICLOCK support | Yes |
| Protocol / is supported | |
| <ul style="list-style-type: none"> • NTP | No |
| <ul style="list-style-type: none"> • SNTP | Yes |

Standards, specifications, approvals

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| Standard | |
| <ul style="list-style-type: none"> • for FM | FM3611: Class 1, Divison 2, Group A, B, C, D / T4, CL.1, Zone 2, GP. IIC, T4 |
| <ul style="list-style-type: none"> • 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"> • for safety / from CSA and UL | UL 60950-1, CSA C22.2 No. 60950-1 |
| <ul style="list-style-type: none"> • for hazardous zone / from CSA and UL | ANSI / ISA 12.12.01, CSA C22.2 No. 213-M1987, CL. 1 / Div. 2 / GP. A, B, C, D T4, CL. 1 / Zone 2 / GP. IIC, T4 |
| <ul style="list-style-type: none"> • for emitted interference | EN 61000-6-4:2001 (Class A) |
| <ul style="list-style-type: none"> • for interference immunity | EN 61000-6-2:2001 |

Standards, specifications, approvals / CE

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

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| Certificate of suitability | EN 61000-6-2:2001, EN 61000-6-4:2001 |
| <ul style="list-style-type: none"> • C-Tick | Yes |

- Railway application in accordance with EN 50155 No
- Railway application in accordance with EN 50124-1 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) Yes
 - Royal Institution of Naval Architects (RINA) Yes

Standards, specifications, approvals / Product conformity

MTBF 51.18 y

Further information / Internet-Links

- Internet-Link
- to website: Selector SIMATIC NET SELECTION TOOL <http://www.siemens.com/snst>
 - 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

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