

Product type designation



SCALANCE X212-2

SCALANCE X212-2, MANAGED IE SWITCH, 12 X 10/100MBIT/S RJ45 PORTS, 2 X 100MBIT/S MULTIMODE BFOC, LED-DIAGNOSTICS, FAULT SIGNAL. CONTACT WITH SET BUTTON, REDUNDANT POWER SUPPLY PROFINET-IO DEVICE, NETWORK- MANAGEMENT, INTEGRATED REDUNDANCY MANAGER, INCL. ELECTRONIC MANUAL ON CD, C-PLUG OPTIONAL

Transmission rate

Transfer rate	10 Mbit/s, 100 Mbit/s
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Interfaces

Number of electrical/optical connections	
<ul style="list-style-type: none"> for network components or terminal equipment / maximum 	14
Number of electrical connections	
<ul style="list-style-type: none"> for network components or terminal equipment 	12
Type of electrical connection	
<ul style="list-style-type: none"> for network components or terminal equipment 	RJ45 port
Number of optical interfaces	
<ul style="list-style-type: none"> for fiber optic cable / at 100 Mbit/s 	2
Design of the optical interface	
<ul style="list-style-type: none"> for fiber optic cable / at 100 Mbit/s 	BFOC port (multimode up to 5 km)
Connectable optical power relative to 1 mW	
<ul style="list-style-type: none"> of the transmitter output 	-19 ... -14
Optical sensitivity relating to 1 mW / of the receiver input / minimum	-34 dB
Damping ratio / of the FOC transmission link / minimum necessary	0 dB
Range / at the optical interface / depending on the optical fiber used	0 ... 5 km

Interfaces / for communication / integrated

Number of 100 Mbit/s ST(BFOC) ports / for multimode	2
Number of 100 Mbit/s SC ports / for multimode	0
Number of 1000 Mbit/s LC ports / for multimode	0

Interfaces / others

Number of electrical connections	
<ul style="list-style-type: none"> • for signaling contact • for power supply • for redundant voltage supply 	1 1 1
Type of electrical connection	
<ul style="list-style-type: none"> • for signaling contact • for power supply 	2-pole terminal block 4-pole terminal block
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"> • for DC / Rated value 	24 V
Operating current / of the signaling contacts	
<ul style="list-style-type: none"> • for 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 • external 	24 V 18 ... 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
Active power loss	
<ul style="list-style-type: none"> • for DC / at 24 V 	7.92 W

Permitted ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> • 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 weight

Design	compact
Width	120 mm

Height	125 mm
Depth	124 mm
Net weight	1.2 kg
Mounting type	
• 35 mm DIN rail mounting	Yes
• wall mounting	Yes
• S7-300 rail mounting	Yes
• S7-1500 rail mounting	No

Product properties, functions, 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

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
• switch-managed	Yes
Protocol / is supported	
• Telnet	Yes
• HTTP	Yes
• HTTPS	Yes
• TFTP	Yes
• FTP	Yes
• BOOTP	No
• DCP	Yes
• LLDP	Yes
Identification & maintenance function	
• I&M0 - device-specific information	Yes
• I&M1 – higher-level designation/location designation	Yes
Protocol / is supported	
• SNMP v1	Yes
• SNMP v2	Yes
• SNMP v3	Yes

Product functions / Diagnosis

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

Product functions / DHCP

Product function	
• DHCP client	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	No
Protocol / is supported / Media Redundancy Protocol (MRP)	Yes
Product function	
• media redundancy protocol (MRP) with redundancy manager	Yes
• Passive listening	Yes

Product functions / Security

Protocol / is supported	
• SSH	Yes

Product functions / Time

Product function	
• SICLOCK support	Yes
Protocol / is supported	
• NTP	No
• SNTP	Yes

Standards, specifications, approvals

Standard	
• for FM	FM3611: Class 1, Divison 2, Group A, B, C, D / T4, CL.1, Zone 2, GP. IIC, T4
• for hazardous zone	EN 60079-0: 2006, EN60079-15: 2005, II 3 (2) G Ex nA [op is] IIC T4, KEMA 07 ATEX 0145 X
• for safety / from CSA and UL	UL 60950-1, CSA C22.2 No. 60950-1
• 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 • for interference immunity 	EN 61000-6-4:2001 (Class A) EN 61000-6-2:2001
Certificate of suitability <ul style="list-style-type: none"> • CE marking • C-Tick • KC approval • Railway application in accordance with EN 50155 • Railway application in accordance with EN 50124-1 	EN 61000-6-2:2001, EN 61000-6-4:2001 Yes Yes Yes No No
Marine classification association <ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) • Bureau Veritas (BV) • Det Norske Veritas (DNV) • Germanische Lloyd (GL) • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (NK) • Polski Rejestr Statkow (PRS) 	Yes Yes Yes Yes Yes Yes No
MTBF / at 40 °C	51.18 y

Further Information / Internet Links

Internet-Link <ul style="list-style-type: none"> • to website: Selector SIMATIC NET 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/snst http://www.siemens.com/simatic-net https://mall.industry.siemens.com http://www.siemens.com/automation/net/catalog http://automation.siemens.com/bilddb http://www.siemens.com/cax https://support.industry.siemens.com
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Security information

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