



SCALANCE X212-2, managed IE switch, 12x 10/100 Mbit/s RJ45 ports, 2x 100 Mbit/s multimode BFOC, LED diagnostics, error-signaling contact with set pushbutton, redundant power supply, PROFINET IO device, network management, redundancy manager integrated, incl. electron. manual on CD-ROM, C-PLUG optional.

product type designation	SCALANCE X212-2
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 multimode	2
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 / 1 / of the supply voltage	DC
• supply voltage / 1 / rated value	24 V
• power loss [W] / 1 / rated value	7.92 W
• supply voltage / 1 / rated value	18 ... 32 V
• consumed current / 1 / maximum	0.33 A
• type of electrical connection / 1 / for power supply	4-pole terminal block
• product component / 1 / fusing at power supply input	Yes
• fuse protection type / 1 / at input for supply voltage	1.1 A / 33 V
ambient conditions	
ambient temperature • during operation	-40 ... +60 °C
• 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, dimensions and weights

design	compact
width	120 mm
height	125 mm
depth	124 mm
net weight	1.2 kg
fastening method	
<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"> port mirroring 	Yes
<ul style="list-style-type: none"> multiport mirroring 	No
<ul style="list-style-type: none"> with IRT / PROFINET IO switch 	No
<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 	No
<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
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

product functions / DHCP

product function	
<ul style="list-style-type: none"> DHCP client 	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 	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	
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 	No
<ul style="list-style-type: none"> • SNTP 	Yes
standards, specifications, approvals	
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 safety / from CSA and UL 	UL 60950-1, CSA C22.2 No. 60950-1
<ul style="list-style-type: none"> • for emitted interference 	EN 61000-6-4:2001 (Class A)
<ul style="list-style-type: none"> • for interference immunity 	EN 61000-6-2:2001
MTBF	51.18 y
reference code	
<ul style="list-style-type: none"> • according to IEC 81346-2 	KF
<ul style="list-style-type: none"> • according to IEC 81346-2:2019 	KFE
standards, specifications, approvals / CE	
certificate of suitability / CE marking	Yes
standards, specifications, approvals / hazardous environments	
standard / 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
<ul style="list-style-type: none"> • 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
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 61000-6-2:2001, EN 61000-6-4:2001
<ul style="list-style-type: none"> • C-Tick 	Yes
<ul style="list-style-type: none"> • KC approval 	Yes
<ul style="list-style-type: none"> • railway application in accordance with EN 50155 	No
<ul style="list-style-type: none"> • railway application in accordance with EN 50124-1 	No
standards, specifications, approvals / marine classification	
Marine classification association	
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) 	Yes
<ul style="list-style-type: none"> • French marine classification society (BV) 	Yes
<ul style="list-style-type: none"> • Det Norske Veritas (DNV) 	No
<ul style="list-style-type: none"> • Germanische Lloyd (GL) 	No
<ul style="list-style-type: none"> • DNV GL 	Yes
<ul style="list-style-type: none"> • Lloyds Register of Shipping (LRS) 	Yes
<ul style="list-style-type: none"> • Nippon Kaiji Kyokai (NK) 	Yes
<ul style="list-style-type: none"> • Polski Rejestr Statkow (PRS) 	Yes
<ul style="list-style-type: none"> • Royal Institution of Naval Architects (RINA) 	Yes

further information / internet-Links

Internet-Link

- 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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