



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.

<b>product type designation</b>	<b>SCALANCE X212-2</b>
<b>transfer rate</b>	
transfer rate	10 Mbit/s, 100 Mbit/s
<b>interfaces / for communication / integrated</b>	
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
<b>interfaces / other</b>	
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
<b>signal inputs/outputs</b>	
operating voltage / of the signaling contacts	
• at DC / rated value	24 V
operational current / of the signaling contacts	
• at DC / maximum	0.1 A
<b>supply voltage, current consumption, power loss</b>	
product component / connection for redundant voltage supply	Yes
<b>type of voltage / 1 / of the supply voltage</b>	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
<b>ambient conditions</b>	
ambient temperature	
• during operation	-40 ... +60 °C
• during storage	-40 ... +70 °C

<ul style="list-style-type: none"> <li>during transport</li> </ul>	-40 ... +70 °C
relative humidity <ul style="list-style-type: none"> <li>at 25 °C / without condensation / during operation / maximum</li> </ul>	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"> <li>35 mm top hat DIN rail mounting</li> </ul>	Yes
<ul style="list-style-type: none"> <li>wall mounting</li> </ul>	Yes
<ul style="list-style-type: none"> <li>S7-300 rail mounting</li> </ul>	Yes
<ul style="list-style-type: none"> <li>S7-1500 rail mounting</li> </ul>	No

### product features, product functions, product components / general

cascading in the case of a redundant ring / at reconfiguration time of <math>\sim 0.3\text{ s}</math>	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"> <li>CLI</li> </ul>	Yes
<ul style="list-style-type: none"> <li>web-based management</li> </ul>	Yes
<ul style="list-style-type: none"> <li>MIB support</li> </ul>	Yes
<ul style="list-style-type: none"> <li>TRAPs via email</li> </ul>	Yes
<ul style="list-style-type: none"> <li>configuration with STEP 7</li> </ul>	Yes
<ul style="list-style-type: none"> <li>port mirroring</li> </ul>	Yes
<ul style="list-style-type: none"> <li>multiport mirroring</li> </ul>	No
<ul style="list-style-type: none"> <li>with IRT / PROFINET IO switch</li> </ul>	No
<ul style="list-style-type: none"> <li>PROFINET IO diagnosis</li> </ul>	Yes
PROFINET conformity class	B
product function / switch-managed	Yes
protocol / is supported	
<ul style="list-style-type: none"> <li>Telnet</li> </ul>	Yes
<ul style="list-style-type: none"> <li>HTTP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>HTTPS</li> </ul>	Yes
<ul style="list-style-type: none"> <li>TFTP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>FTP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>BOOTP</li> </ul>	No
<ul style="list-style-type: none"> <li>DCP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>LLDP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>SNMP v1</li> </ul>	Yes
<ul style="list-style-type: none"> <li>SNMP v2</li> </ul>	Yes
<ul style="list-style-type: none"> <li>SNMP v3</li> </ul>	Yes
identification & maintenance function	
<ul style="list-style-type: none"> <li>I&amp;M0 - device-specific information</li> </ul>	Yes
<ul style="list-style-type: none"> <li>I&amp;M1 – higher level designation/location designation</li> </ul>	Yes

### product functions / diagnostics

product function	
<ul style="list-style-type: none"> <li>port diagnostics</li> </ul>	Yes
<ul style="list-style-type: none"> <li>statistics Packet Size</li> </ul>	Yes
<ul style="list-style-type: none"> <li>statistics packet type</li> </ul>	Yes
<ul style="list-style-type: none"> <li>error statistics</li> </ul>	Yes

### product functions / DHCP

product function	
<ul style="list-style-type: none"> <li>DHCP client</li> </ul>	Yes

### product functions / redundancy

product function	
<ul style="list-style-type: none"> <li>ring redundancy</li> </ul>	Yes

<ul style="list-style-type: none"> <li>• High Speed Redundancy Protocol (HRP)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• high speed redundancy protocol (HRP) with redundancy manager</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• high speed redundancy protocol (HRP) with standby redundancy</li> </ul>	No
protocol / is supported / Media Redundancy Protocol (MRP)	Yes
product function	
<ul style="list-style-type: none"> <li>• media redundancy protocol (MRP) with redundancy manager</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Parallel Redundancy Protocol (PRP)/operation in the PRP-network</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Parallel Redundancy Protocol (PRP)/Redundant Network Access (RNA)</li> </ul>	No
<ul style="list-style-type: none"> <li>• passive listening</li> </ul>	Yes
<b>product functions / security</b>	
protocol / is supported	
<ul style="list-style-type: none"> <li>• SSH</li> </ul>	Yes
<b>product functions / time</b>	
product function	
<ul style="list-style-type: none"> <li>• SICLOCK support</li> </ul>	Yes
protocol / is supported	
<ul style="list-style-type: none"> <li>• NTP</li> </ul>	No
<ul style="list-style-type: none"> <li>• SNTP</li> </ul>	Yes
<b>standards, specifications, approvals</b>	
standard	
<ul style="list-style-type: none"> <li>• for FM</li> </ul>	FM3611: Class 1, Divison 2, Group A, B, C, D / T4, CL.1, Zone 2, GP. IIC, T4
<ul style="list-style-type: none"> <li>• for safety / from CSA and UL</li> </ul>	UL 60950-1, CSA C22.2 No. 60950-1
<ul style="list-style-type: none"> <li>• for emitted interference</li> </ul>	EN 61000-6-4:2001 (Class A)
<ul style="list-style-type: none"> <li>• for interference immunity</li> </ul>	EN 61000-6-2:2001
MTBF	51.18 y
reference code	
<ul style="list-style-type: none"> <li>• according to IEC 81346-2</li> </ul>	KF
<ul style="list-style-type: none"> <li>• according to IEC 81346-2:2019</li> </ul>	KFE
<b>standards, specifications, approvals / CE</b>	
certificate of suitability / CE marking	Yes
<b>standards, specifications, approvals / hazardous environments</b>	
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"> <li>• from CSA and UL</li> </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"> <li>• CCC / for hazardous zone according to GB standard</li> </ul>	Yes
<b>standards, specifications, approvals / other</b>	
certificate of suitability	EN 61000-6-2:2001, EN 61000-6-4:2001
<ul style="list-style-type: none"> <li>• C-Tick</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• KC approval</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• railway application in accordance with EN 50155</li> </ul>	No
<ul style="list-style-type: none"> <li>• railway application in accordance with EN 50124-1</li> </ul>	No
<b>standards, specifications, approvals / marine classification</b>	
Marine classification association	
<ul style="list-style-type: none"> <li>• American Bureau of Shipping Europe Ltd. (ABS)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• French marine classification society (BV)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Det Norske Veritas (DNV)</li> </ul>	No
<ul style="list-style-type: none"> <li>• Germanische Lloyd (GL)</li> </ul>	No
<ul style="list-style-type: none"> <li>• DNV GL</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Lloyds Register of Shipping (LRS)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Nippon Kaiji Kyokai (NK)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Polski Rejestr Statkow (PRS)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Royal Institution of Naval Architects (RINA)</li> </ul>	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

### 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)

last modified:

2/8/2022 