



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

product type designation	
product brand name	SCALANCE
product type designation	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	
• with securing collar	12
number of 100 Mbit/s ST(BFOC) ports	
• for multimode	2
transmission method / of the optical interface	100BaseFX
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
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
<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
ambient conditions	
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
<b>design, dimensions and weights</b>	
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> <li>wall mounting</li> <li>S7-300 rail mounting</li> <li>S7-1500 rail mounting</li> </ul>	Yes Yes Yes No
<b>product features, product functions, product components / general</b>	
cascading in the case of a redundant ring / at reconfiguration time of <math>\leq 0.3\text{s}</math>	100
cascading in cases of star topology	any (depending only on signal propagation time)
<b>product functions / management, configuration, engineering</b>	
product function <ul style="list-style-type: none"> <li>CLI</li> <li>web-based management</li> <li>MIB support</li> <li>TRAPs via email</li> <li>configuration with STEP 7</li> <li>port mirroring</li> <li>multiport mirroring</li> <li>with IRT / PROFINET IO switch</li> <li>PROFINET IO diagnosis</li> <li>switch-managed</li> </ul>	Yes Yes Yes Yes Yes Yes No No Yes Yes
PROFINET conformity class	B
protocol / is supported <ul style="list-style-type: none"> <li>Telnet</li> <li>HTTP</li> <li>HTTPS</li> <li>TFTP</li> <li>FTP</li> <li>BOOTP</li> <li>DCP</li> <li>LLDP</li> <li>SNMP v1</li> <li>SNMP v2</li> <li>SNMP v3</li> </ul>	Yes Yes Yes Yes Yes No Yes Yes Yes Yes Yes
identification & maintenance function <ul style="list-style-type: none"> <li>I&amp;M0 - device-specific information</li> <li>I&amp;M1 - higher level designation/location designation</li> </ul>	Yes Yes
<b>product functions / diagnostics</b>	
product function <ul style="list-style-type: none"> <li>port diagnostics</li> <li>statistics Packet Size</li> <li>statistics packet type</li> <li>error statistics</li> </ul>	Yes Yes Yes Yes
<b>product functions / DHCP</b>	
product function <ul style="list-style-type: none"> <li>DHCP client</li> </ul>	Yes
<b>product functions / redundancy</b>	
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>ring redundancy</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
<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>	
certificate of suitability	
<ul style="list-style-type: none"> <li>CE marking</li> </ul>	Yes
<ul style="list-style-type: none"> <li>KC approval</li> </ul>	Yes
<ul style="list-style-type: none"> <li>Regulatory Compliance Mark (RCM)</li> </ul>	Yes
standard	
<ul style="list-style-type: none"> <li>for EMC interference emission</li> </ul>	EN 61000-6-4:2001 (Class A)
<ul style="list-style-type: none"> <li>for immunity to EMC</li> </ul>	EN 61000-6-2:2001
<ul style="list-style-type: none"> <li>for safety / from CSA and UL</li> </ul>	UL 60950-1 E115352, CSA C22.2 No. 60950-1
<b>standards, specifications, approvals / hazardous environments</b>	
certificate of suitability	
<ul style="list-style-type: none"> <li>ATEX</li> </ul>	Yes
<ul style="list-style-type: none"> <li>IECEX</li> </ul>	Yes
<ul style="list-style-type: none"> <li>ULhazloc approval</li> </ul>	Yes
<ul style="list-style-type: none"> <li>CCC / for hazardous zone according to GB standard</li> </ul>	Yes
<ul style="list-style-type: none"> <li>FM registration</li> </ul>	Yes
<b>standards, specifications, approvals / other</b>	
certificate of suitability	
<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
<ul style="list-style-type: none"> <li>RoHS conformity</li> </ul>	Yes
<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>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
<b>product functions / general</b>	
MTBF	51.18 a
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
Warranty period	5 a
<b>further information / internet links</b>	
internet link	
<ul style="list-style-type: none"> <li>to website: Selection guide for cables and connectors</li> </ul>	<a href="https://support.industry.siemens.com/cs/ww/en/view/109766358">https://support.industry.siemens.com/cs/ww/en/view/109766358</a>
<ul style="list-style-type: none"> <li>to web page: selection aid TIA Selection Tool</li> </ul>	<a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a>
<ul style="list-style-type: none"> <li>to website: Industrial communication</li> </ul>	<a href="https://www.siemens.com/simatic-net">https://www.siemens.com/simatic-net</a>
<ul style="list-style-type: none"> <li>to web page: SiePortal</li> </ul>	<a href="https://sieportal.siemens.com/">https://sieportal.siemens.com/</a>

- to website: Image database
- to website: CAx-Download-Manager
- to website: Industry Online Support

<https://www.automation.siemens.com/bilddb>

<https://www.siemens.com/cax>

<https://support.industry.siemens.com>

## security information

security information

Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit [www.siemens.com/cybersecurity-industry](http://www.siemens.com/cybersecurity-industry). Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under <https://www.siemens.com/cert>. (V4.7)

## Approvals / Certificates

### General Product Approval



EG-Konf.

[Declaration of Conformity](#)



CCC



UL

General Product Approval

EMV

For use in hazardous locations

Test Certificates

Marine / Shipping



RCM

[KC](#)

[FM](#)

[CCC-Ex](#)

[Type Test Certificates/Test Report](#)



ABS

### Marine / Shipping



BUREAU VERITAS



DNV



LRS

[NK / Nippon Kaiji Kyokai](#)



PRS



RINA

Environment

Industrial Communication

[Confirmation](#)

[PROFINET](#)

last modified:

12/13/2024