



SIPLUS NET SCALANCE X212-2 for medial exposure with conformal coating based on 6GK5212-2BB00-2AA3 . Managed IE switch, 12x 10/100Mbit/s RJ45 ports, 2x 100 Mbit/s multimode BFOC, LED diagnostics, error signaling contact with set button, Redundant power supply, PROFINET IO device, network management, integr. redundancy manager, incl. electron. Manual on CD-ROM, C-plug optional

<b>Product type designation</b>	<b>SIPLUS NET 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	12
<ul style="list-style-type: none"> <li>for network components or terminal equipment</li> </ul>	
<b>Interfaces / other</b>	
Number of electrical connections	1
<ul style="list-style-type: none"> <li>for signaling contact</li> </ul>	
<ul style="list-style-type: none"> <li>for power supply</li> </ul>	
<ul style="list-style-type: none"> <li>for redundant voltage supply</li> </ul>	1
Type of electrical connection	2-pole terminal block
<ul style="list-style-type: none"> <li>for signaling contact</li> </ul>	
<ul style="list-style-type: none"> <li>for power supply</li> </ul>	4-pole terminal block
design of the removable storage	Yes
<ul style="list-style-type: none"> <li>C-PLUG</li> </ul>	
<b>Signal inputs/outputs</b>	

Operating voltage / of the signaling contacts	
<ul style="list-style-type: none"> <li>• at DC / Rated value</li> </ul>	24 V
Operating current / of the signaling contacts	
<ul style="list-style-type: none"> <li>• at DC / maximum</li> </ul>	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"> <li>• external</li> </ul>	24 V
<ul style="list-style-type: none"> <li>• external / minimum</li> </ul>	18 V
<ul style="list-style-type: none"> <li>• external / maximum</li> </ul>	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"> <li>• at DC / at 24 V</li> </ul>	7.92 W

#### Ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> </ul>	-40 ... +60 °C
<ul style="list-style-type: none"> <li>• during storage</li> </ul>	-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>	100 %
<ul style="list-style-type: none"> <li>• with condensation / maximum</li> </ul>	100 %; rel. humidity, incl. condensation/frost permissible (no commissioning in condensed state)
Ambient condition / relating to ambient temperature - air pressure - installation altitude	-40 ... +60 °C at 1080 hPa ... 795 hPa (-1000 m ... +2000 m) // -40 ... +50 °C at 795 hPa ... 658 hPa (+2000 m ... +3500 m) // -40 ... +40 °C at 658 hPa ... 540 hPa (+3500 m ... +5000 m)
Resistance to biologically active substances	
<ul style="list-style-type: none"> <li>• conformity acc. to EN 60721-3-3</li> </ul>	Yes; Compliance with EN 60721-3-3, Class 3B2 mold, fungus, and sponge spores (except fauna). The supplied plug covers must remain in place over the unused interfaces during operation!
Resistance to chemically active substances	
<ul style="list-style-type: none"> <li>• conformity acc. to EN 60721-3-3</li> </ul>	Yes; Compliance with EN 60721-3-3, class 3C4 incl. salt spray according to EN 60068-2-52 (severity 3). The supplied plug covers must remain in place over the unused interfaces during operation!
Resistance to mechanically active substances	
<ul style="list-style-type: none"> <li>• conformity acc. to EN 60721-3-3</li> </ul>	Yes; Compliance with EN 60721-3-3, Class 3S4 including sand, dust. The supplied plug covers must remain in place over the unused interfaces during operation!
Protection class IP	IP30
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

#### 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>	50
Cascading in cases of star topology	any (depending only on signal propagation time)

#### Product functions / management, configuration, engineering

Product function	
• CLI	Yes
• web-based management	Yes
• MIB support	Yes
• TRAPs via email	Yes
• Configuration with STEP 7	Yes
• SMTP server	Yes
• Port mirroring	Yes
• with IRT / PROFINET IO switch	No
• PROFINET IO diagnosis	Yes
Product function / switch-managed	Yes
Protocol / is supported	
• Telnet	Yes
• HTTP	Yes
• HTTPS	Yes
• TFTP	Yes
• FTP	Yes
• BOOTP	No
• GMRP	No
• DCP	Yes
• LLDP	Yes
• SNMP v1	Yes
• SNMP v2	Yes
• SNMP v3	Yes
• IGMP (snooping/querier)	No

#### Product functions / Diagnostics

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 hazardous zone EN 60079-0 : 2006, EN 60079-15: 2005, II 3 G Ex nA II T4 KEMA 07 ATEX 0145X
  - for emitted interference EN 61000-6-4 (Class A)
  - for interference immunity EN 61000-6-2

#### Standards, specifications, approvals / CE

Certificate of suitability / CE marking Yes

#### Standards, specifications, approvals / other

- Certificate of suitability
- Railway application in accordance with EN 50155 No
- EN 61000-6-2, EN 61000-6-4

- Railway application in accordance with EN 50124-1
- KC approval

No

Yes

### Standards, specifications, approvals / marine classification

#### Marine classification association

- 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)

No

No

No

No

No

No

No

### Further information / Internet-Links

#### Internet-Link

- 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/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:**

11/11/2019