



SCALANCE X308-2M; managed IE switch, compact; 4x 10/100/1000 Mbit/s for RJ45 ports electrical; 2x 100/1000 Mbit/s for 2-port media modules, electrical or optical; LED diagnostics; error signaling Contact; Select/set button; PROFINET IO device; network management; Integrated redundancy manager; office features (RSTP, VLAN, IGMP,..); C-plug in scope of delivery

|  |                                    |
|--|------------------------------------|
| <b>Product type designation</b>                      | <b>SCALANCE X308-2M</b>            |
| <b>Transfer rate</b>                                 |                                    |
| Transfer rate  | 10 Mbit/s, 100 Mbit/s, 1000 Mbit/s |
| <b>Interfaces / for communication / Integrated</b>   |                                    |
| Number of electrical connections                     |                                    |
| • for network components or terminal equipment       | 4                                  |
| Number of 10/100/1000 Mbit/s RJ45 ports / Integrated |                                    |
| • with securing collar                               | 4                                  |
| Number of connectable media modules                  |                                    |
| • with 2 ports                                       | 2                                  |
| <b>Interfaces / other</b>                            |                                    |
| Number of electrical connections                     |                                    |
| • for signaling contact                              | 1                                  |
| • for media module                                   | 2                                  |
| • for power supply                                   | 1                                  |
| • for redundant voltage supply                       | 1                                  |
| Type of electrical connection                        |                                    |

|   |                       |
|---|-----------------------|
| <ul style="list-style-type: none"> <li>• for signaling contact</li> </ul> | 2-pole terminal block |
| <ul style="list-style-type: none"> <li>• for power supply</li> </ul>      | 4-pole terminal block |
| design of the removable storage   |                       |
| <ul style="list-style-type: none"> <li>• C-PLUG</li> </ul>                | Yes                   |

#### Signal inputs/outputs

|   |       |
|---|-------|
| 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 supply / redundant power supply unit                   | No           |
| 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                     | F 3 A / 32 V |
| Consumed current / maximum   | 0.7 A        |
| Power loss [W]   |              |
| <ul style="list-style-type: none"> <li>• at DC / at 24 V</li> </ul>    | 16.6 W       |

#### Ambient conditions

|  |  |
|--|--|
| Ambient temperature  |  |
| <ul style="list-style-type: none"> <li>• during operation</li> </ul>   | -40 ... +70 °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   |
| <ul style="list-style-type: none"> <li>• Note</li> </ul>   | Reduced operating temperature through the use of media modules (-40 °C to +70 °C) or SFP plug-in transceivers (-40 °C to +60 °C). If the device is installed in the vertical position, the maximum operating temperature is reduced to +50 °C. |
| Relative humidity  |  |
| <ul style="list-style-type: none"> <li>• at 25 °C / without condensation / during operation / maximum</li> </ul> | 95 %   |
| Protection class IP  | IP20   |

#### Design, dimensions and weights

|               |   |
|---------------|---|
| Design        | compact   |
| Width         | 120 mm  |
| Height        | 125 mm  |
| Depth         | 124 mm  |
| Net weight    | 1.4 kg  |
| Mounting type | When used in shipbuilding, installation on a 35 mm standard mounting rail is not permitted. |

- 19-inch installation
- 35 mm DIN rail mounting
- wall mounting
- S7-300 rail mounting
- S7-1500 rail mounting

No  
Yes  
Yes  
Yes  
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                                       |     |
| • CLI  | Yes |
| • web-based management                                 | Yes |
| • MIB support  | Yes |
| • TRAPs via email                                      | Yes |
| • Configuration with STEP 7                            | Yes |
| • RMON   | Yes |
| • Port mirroring                                       | Yes |
| • multiport mirroring                                  | Yes |
| • CoS  | Yes |
| • PROFINET IO diagnosis                                | Yes |
| PROFINET conformity class                              | B   |
| Product function / switch-managed                      | Yes |
| Protocol / is supported                                |     |
| • Telnet   | Yes |
| • HTTP   | Yes |
| • HTTPS  | Yes |
| • TFTP   | Yes |
| • FTP  | Yes |
| • BOOTP  | Yes |
| • GMRP   | Yes |
| • DCP  | Yes |
| • LLDP   | Yes |
| • SNMP v1  | Yes |
| • SNMP v2  | Yes |
| • SNMP v3  | Yes |
| • IGMP (snooping/querier)                              | Yes |
| Identification & maintenance function                  |     |
| • I&M0 - device-specific information                   | Yes |
| • I&M1 – higher-level designation/location designation | Yes |

### Product functions / Diagnostics

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

### Product functions / VLAN

|                                     |     |
|-------------------------------------|-----|
| Product function                    |     |
| • VLAN - port based                 | Yes |
| • VLAN - protocol-based             | No  |
| • VLAN - IP-based                   | No  |
| • VLAN dynamic                      | Yes |
| Number of VLANs / maximum           | 255 |
| Number of VLANs - dynamic / maximum | 255 |
| Protocol / is supported / GVRP      | Yes |

### Product functions / DHCP

|                  |     |
|------------------|-----|
| Product function |     |
| • DHCP client    | Yes |
| • DHCP Option 82 | Yes |
| • DHCP Option 66 | Yes |
| • DHCP Option 67 | 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    | Yes |
| Protocol / is supported / Media Redundancy Protocol (MRP)         | Yes |
| Product function  |     |
| • media redundancy protocol (MRP) with redundancy manager         | Yes |
| • redundancy procedure STP  | Yes |
| • redundancy procedure RSTP                                       | Yes |
| • redundancy procedure MSTP                                       | Yes |
| • Parallel Redundancy Protocol (PRP)/operation in the PRP-network | 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 |
| Protocol / is supported   |     |
| <ul style="list-style-type: none"> <li>• STP/RSTP</li> </ul>  | Yes |
| <ul style="list-style-type: none"> <li>• STP</li> </ul>   | Yes |
| <ul style="list-style-type: none"> <li>• RSTP</li> </ul>  | Yes |
| <ul style="list-style-type: none"> <li>• MSTP</li> </ul>  | Yes |
| <ul style="list-style-type: none"> <li>• RSTP big network support</li> </ul>  | Yes |
| <ul style="list-style-type: none"> <li>• LACP</li> </ul>  | Yes |

### Product functions / Security

|   |     |
|---|-----|
| Product function  |     |
| <ul style="list-style-type: none"> <li>• ACL - MAC-based</li> </ul>                     | Yes |
| <ul style="list-style-type: none"> <li>• ACL - port/MAC-based</li> </ul>                | Yes |
| <ul style="list-style-type: none"> <li>• IEEE 802.1x (radius)</li> </ul>                | Yes |
| <ul style="list-style-type: none"> <li>• Broadcast/Multicast/Unicast Limiter</li> </ul> | Yes |
| <ul style="list-style-type: none"> <li>• broadcast blocking</li> </ul>                  | Yes |
| Protocol / is supported   |     |
| <ul style="list-style-type: none"> <li>• SSH</li> </ul>                                 | Yes |

### Product functions / time

|   |     |
|---|-----|
| 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>                       | Yes |
| <ul style="list-style-type: none"> <li>• SNTP</li> </ul>                      | Yes |
| <ul style="list-style-type: none"> <li>• IEEE 1588 profile default</li> </ul> | Yes |

### Standards, specifications, approvals

|  |   |
|--|---|
| Standard   |   |
| <ul style="list-style-type: none"> <li>• for FM</li> </ul>                               | FM3611: Class 1, Divison 2, Group A, B, C, D / T4, Class 1, Zone 2, Group IIC, T4   |
| <ul style="list-style-type: none"> <li>• for hazardous zone</li> </ul>                   | EN 60079-0 : 2006, EN 60079-15: 2005, II 3 G Ex nA II T4 KEMA 07 ATEX 0145X   |
| <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 hazardous zone / from CSA and UL</li> </ul> | UL 1604 and UL 2279-15 (Hazardous Location), CSA C22.2 No. 213-M1987, Class 1 / Division 2 / Group A, B, C, D / T4, Class 1 / Zone 2 / Group IIC / T4 |
| <ul style="list-style-type: none"> <li>• for emitted interference</li> </ul>             | EN 61000-6-4:2007 (Class A)   |
| <ul style="list-style-type: none"> <li>• for interference immunity</li> </ul>            | EN 61000-6-2:2005   |

### Standards, specifications, approvals / CE

|   |     |
|---|-----|
| Certificate of suitability / CE marking | Yes |
|---|-----|

### Standards, specifications, approvals / other

|   |                                      |
|---|--------------------------------------|
| Certificate of suitability  | EN 61000-6-2:2005, EN 61000-6-4:2007 |
| <ul style="list-style-type: none"> <li>• C-Tick</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>• KC approval</li> </ul>                                     | Yes                                  |

### Standards, specifications, approvals / marine classification

|   |     |
|---|-----|
| 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>• Bureau Veritas (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>• Korean Register of Shipping (KRS)</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>                  | No  |
| <ul style="list-style-type: none"> <li>• Royal Institution of Naval Architects (RINA)</li> </ul>  | No  |

### Standards, specifications, approvals / Product conformity

|      |      |
|------|------|
| MTBF | 40 y |
|------|------|

### Further information / Internet-Links

|   |   |
|---|---|
| Internet-Link   |   |
| <ul style="list-style-type: none"> <li>• to website: Selector SIMATIC NET SELECTION TOOL</li> </ul> | <a href="http://www.siemens.com/snst">http://www.siemens.com/snst</a>                               |
| <ul style="list-style-type: none"> <li>• to website: Industrial communication</li> </ul>            | <a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a>                 |
| <ul style="list-style-type: none"> <li>• to website: Industry Mall</li> </ul>                       | <a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>                   |
| <ul style="list-style-type: none"> <li>• to website: Information and Download Center</li> </ul>     | <a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a> |
| <ul style="list-style-type: none"> <li>• to website: Image database</li> </ul>                      | <a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a>             |
| <ul style="list-style-type: none"> <li>• to website: CAx Download Manager</li> </ul>                | <a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>                                 |
| <ul style="list-style-type: none"> <li>• to website: Industry Online Support</li> </ul>             | <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>             |

### 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:**

01/23/2020