



SCALANCE X308-2M TS; 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; PROFINET IO device; network management; integrated redundancy manager; Office features (RSTP, VLAN, IGMP,...); C-plug in scope of delivery extended temperature range with railway approval EN 50155;

Product type designation	SCALANCE X308-2M TS
Transmission rate	
Transfer rate	10 Mbit/s, 100 Mbit/s, 1000 Mbit/s
Interfaces / for communication / integrated	
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
Interfaces / others	
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"> • for signaling contact 	2-pole terminal block
<ul style="list-style-type: none"> • for power supply 	4-pole terminal block
design of the removable storage	
<ul style="list-style-type: none"> • C-PLUG 	Yes

Signal-Inputs/outputs

Operating voltage / of the signaling contacts	
<ul style="list-style-type: none"> • at DC / Rated value 	24 V
Operating current / of the signaling contacts	
<ul style="list-style-type: none"> • at DC / maximum 	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"> • external 	12 V
<ul style="list-style-type: none"> • external / minimum 	20 V
<ul style="list-style-type: none"> • external / maximum 	30 V
Supply voltage / at DC	24 V
<ul style="list-style-type: none"> • rated value 	20 ... 30 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"> • at DC / at 24 V 	16.6 W

Permitted ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> • during operation 	-40 ... +70 °C
<ul style="list-style-type: none"> • during storage 	-40 ... +70 °C
<ul style="list-style-type: none"> • during transport 	-40 ... +70 °C
<ul style="list-style-type: none"> • Note 	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"> • at 25 °C / without condensation / during operation / maximum 	95 %
Protection class IP	IP20

Design, dimensions and weight

Design	compact
Width	120 mm
Height	125 mm
Depth	124 mm

Net weight	1.4 kg
Product feature / conformal coating	Yes
Mounting type	When used in shipbuilding, installation on a 35 mm standard mounting rail is not permitted.
<ul style="list-style-type: none"> • 19-inch installation • 35 mm DIN rail mounting • wall mounting • S7-300 rail mounting • S7-1500 rail mounting 	<p>No</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>No</p>

Product properties, functions, components / general

Cascading in the case of a redundant ring / at reconfiguration time of $\leq 0.3\text{ s}$	100
Cascading in cases of star topology	any (depending only on signal propagation time)

Product functions / management, configuration

Product function	
<ul style="list-style-type: none"> • CLI • web-based management • MIB support • TRAPs via email • Configuration with STEP 7 • RMON • Port mirroring • multiport mirroring • CoS • PROFINET IO diagnosis 	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
PROFINET conformity class	B
Product function / switch-managed	Yes
Protocol / is supported	
<ul style="list-style-type: none"> • Telnet • HTTP • HTTPS • TFTP • FTP • BOOTP • GMRP • DCP • LLDP • SNMP v1 • SNMP v2 • SNMP v3 • IGMP (snooping/querier) 	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>

Identification & maintenance function	
• I&M0 - device-specific information	Yes
• I&M1 – higher-level designation/location designation	Yes

Product functions / Diagnosis

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

<ul style="list-style-type: none"> • redundancy procedure MSTP 	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
Protocol / is supported	
<ul style="list-style-type: none"> • STP/RSTP 	Yes
<ul style="list-style-type: none"> • STP 	Yes
<ul style="list-style-type: none"> • RSTP 	Yes
<ul style="list-style-type: none"> • MSTP 	Yes
<ul style="list-style-type: none"> • RSTP big network support 	Yes
<ul style="list-style-type: none"> • LACP 	Yes

Product functions / Security

Product function	
<ul style="list-style-type: none"> • ACL - MAC-based 	Yes
<ul style="list-style-type: none"> • ACL - port/MAC-based 	Yes
<ul style="list-style-type: none"> • IEEE 802.1x (radius) 	Yes
<ul style="list-style-type: none"> • Broadcast/Multicast/Unicast Limiter 	Yes
<ul style="list-style-type: none"> • broadcast blocking 	Yes
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 	Yes
<ul style="list-style-type: none"> • SNTP 	Yes
<ul style="list-style-type: none"> • IEEE 1588 profile default 	Yes

Standards, specifications, approvals

Standard	
<ul style="list-style-type: none"> • for FM 	FM3611: Class 1, Divison 2, Group A, B, C, D / T4, Class 1, Zone 2, Group IIC, T4
<ul style="list-style-type: none"> • for hazardous zone 	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"> • for safety / from CSA and UL 	UL 60950-1, CSA C22.2 No. 60950-1
<ul style="list-style-type: none"> • for hazardous zone / from CSA and 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"> • for emitted interference 	EN 61000-6-4
<ul style="list-style-type: none"> • for interference immunity 	EN 61000-6-2

Standards, specifications, approvals / CE

Certificate of suitability / CE marking Yes

Standards, specifications, approvals / miscellaneous

Certificate of suitability EN 61000-6-2, EN 61000-6-4

- C-Tick Yes
- Railway application in accordance with EN 50155 Yes
- Railway application in accordance with EN 50121-4 Yes
- Fire protection in accordance with EN 45545-2 Yes
- KC approval Yes

Standards, specifications, approvals / ship classification

Marine classification association

- Bureau Veritas (BV) Yes

Standards, specifications, approvals / product conformity

MTBF 40 y

Further Information / Internet Links

Internet-Link

- to website: Selector SIMATIC NET SELECTION TOOL <http://www.siemens.com/snst>
- to website: Industrial communication <http://www.siemens.com/simatic-net>
- to website: Industry Mall <https://mall.industry.siemens.com>
- to website: Information and Download Center <http://www.siemens.com/industry/infocenter>
- to website: Image database <http://automation.siemens.com/bilddb>
- to website: CAx Download Manager <http://www.siemens.com/cax>
- to website: Industry Online Support <https://support.industry.siemens.com>

Security information

Security information

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