



SCALANCE X216, managed IE switch, 16x 10/100 Mbit/s RJ45 ports, 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 X216</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	16
number of 10/100 Mbit/s RJ45 ports / integrated	
• with securing collar	16
<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	5.76 W
• supply voltage / 1 / rated value	18 ... 32 V
• consumed current / 1 / maximum	0.24 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
• during transport	-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>	
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
<b>product features, product functions, product components / general</b>	
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)
<b>product functions / management, configuration, engineering</b>	
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
<b>product functions / diagnostics</b>	
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
<b>product functions / DHCP</b>	
product function	
<ul style="list-style-type: none"> <li>DHCP client</li> </ul>	Yes
<b>product functions / redundancy</b>	
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</li> </ul>	Yes

redundancy manager	
<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, Division 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	52.07 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, EN 60079-15: 2005, II 3 G Ex nA II T4 KEMA 07 ATEX 0145X
<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
<b>further information / internet-Links</b>	
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

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