## **SIEMENS**

## **Data sheet**



SCALANCE XC216-3G PoE manageable Layer 2 IE PoE Switch; 14x 10, 100/1000 Mbps; RJ45 PoE Ports according to IEEE802.3at; 2 ports thereof according to IEEE802.3bt; IEC 62443-4-2 certified 2x 10/100/1,000 Mbps RJ45; 2x 1,000, 10,000 Mbps SFP+; 1x 1,000 Mbps SFP; PoE support for 24 V DC infeed; 120 W PoE power can be distributed among all PoE ports; 1x console port; diagnostics LED; redundant power supply; temperature range -40 °C to +60 °C; mounting on DIN rail/S7 mounting rail /wall; redundancy functions; Office features (RSTP, VLAN, ...); PROFINET device; Ether(\*)

product type designation	SCALANCE	
transfer rate		
transfer rate	10 Mbit/s, 100 Mbit/s, 1000 Mbit/s, 10 Gbit/s	
interfaces / for communication / maximum configuration for mod	dular devices	
number of electrical ports / maximum	16	
number of electrical ports / with PoE / maximum	14	
number of optical ports / maximum	3	
interfaces / for communication / integrated		
number of electrical connections		
<ul> <li>for network components or terminal equipment</li> </ul>	16; RJ45	
number of 10/100/1000 Mbit/s RJ45 ports / integrated		
with securing collar	16; 12 PoE ports according to IEEE 802.3at (30 W), 2 PoE ports according to IEEE 802.3bt (60 W)	
with securing collar / with PoE	14	
number of electrical connections		
• for SFP	3	
interfaces / for communication / plug-in		
number of electrical connections		
• for SFP	1; SFPs with 1000 Mbit/s, 100 Mbit/s with SFP991-1(LD) A possible	
• for SFP+	2; SFPs with 1000 Mbit/s or 10,000 Mbit/s possible; 100 Mbit/s with SFP991-1(LD) A possible	
interfaces / other		
number of electrical connections		
<ul> <li>for operator console</li> </ul>	1	
for signaling contact	1	
type of electrical connection		
<ul> <li>for operator console</li> </ul>	RJ11	
<ul> <li>for signaling contact</li> </ul>	2-pole terminal block	
<ul><li>for power supply</li></ul>	4-pole terminal block	
design of the removable storage		
• C-PLUG	Yes	
signal inputs/outputs		
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		
· · · · · · · · · · · · · · · · · · ·	V	
product component / connection for redundant voltage supply	Yes	
product component / connection for redundant voltage supply supplied active power / of PSE / with PoE	Yes	

type of voltage / 1 / of the supply voltage	DC
<ul> <li>supply voltage / 1 / rated value</li> </ul>	24 V
<ul><li>power loss [W] / 1 / rated value</li></ul>	28 W
<ul><li>supply voltage / 1 / rated value</li></ul>	19.2 31.2 V
<ul><li>consumed current / 1 / maximum</li></ul>	7.8 A
<ul> <li>product component / 1 / fusing at power supply input</li> </ul>	Yes
<ul> <li>fuse protection type / 1 / at input for supply voltage</li> </ul>	15 A / 125 V
ambient conditions	
ambient temperature	
during operation	-40 +60 °C
during storage	-40 +85 °C
during transport	-40 +85 °C
• note	installation position and SFPs used during the operation have to be considered
	(see manual)
relative humidity	
<ul> <li>at 25 °C / without condensation / during operation /</li> </ul>	95 %
maximum	
protection class IP	IP20
design, dimensions and weights	
design	compact
width	180 mm
height	147 mm
depth	125 mm
net weight	1.56 kg
product feature / conformal coating	No
material / of the enclosure	Polycarbonate (PC-GF10) / pressure die cast aluminum
fastening method	
<ul> <li>35 mm top hat DIN rail mounting</li> </ul>	Yes
wall mounting	No
S7-300 rail mounting	Yes
S7-1500 rail mounting	Yes
product features, product functions, product components / gen	eral
cascading in the case of a redundant ring / at reconfiguration time of <\ $0.3$ \~s	50
cascading in cases of star topology	any (depending only on signal propagation time)
product function / Ook according to DCCD	Yes
product function / QoS according to DSCP	
product function / QoS according to DSCP product feature	
	No
product feature	No Yes
product feature  • Cut Through switching method	
product feature  Cut Through switching method  Store & Forward switching method	
product feature  • Cut Through switching method  • Store & Forward switching method  product functions / management, configuration, engineering	
product feature  • Cut Through switching method  • Store & Forward switching method  product functions / management, configuration, engineering  product function	Yes
product feature  • Cut Through switching method  • Store & Forward switching method  product functions / management, configuration, engineering  product function  • CLI	Yes
product feature  • Cut Through switching method  • Store & Forward switching method  product functions / management, configuration, engineering  product function  • CLI  • web-based management	Yes Yes Yes
product feature  • Cut Through switching method • Store & Forward switching method  product functions / management, configuration, engineering  product function • CLI • web-based management • MIB support	Yes Yes Yes Yes Yes
product feature  • Cut Through switching method • Store & Forward switching method  product functions / management, configuration, engineering  product function • CLI • web-based management • MIB support • TRAPs via email	Yes Yes Yes Yes Yes Yes
product feature  • Cut Through switching method • Store & Forward switching method  product functions / management, configuration, engineering  product function • CLI • web-based management • MIB support • TRAPs via email • configuration with STEP 7	Yes Yes Yes Yes Yes Yes Yes Yes
product feature  • Cut Through switching method • Store & Forward switching method  product functions / management, configuration, engineering  product function  • CLI • web-based management • MIB support • TRAPs via email • configuration with STEP 7 • RMON • SMTP server	Yes Yes Yes Yes Yes Yes Yes Yes Yes
product feature  • Cut Through switching method • Store & Forward switching method  product functions / management, configuration, engineering  product function • CLI • web-based management • MIB support • TRAPs via email • configuration with STEP 7 • RMON • SMTP server • port mirroring	Yes
product feature  • Cut Through switching method • Store & Forward switching method  product functions / management, configuration, engineering  product function • CLI • web-based management • MIB support • TRAPs via email • configuration with STEP 7 • RMON • SMTP server • port mirroring • multiport mirroring	Yes
product feature  • Cut Through switching method • Store & Forward switching method  product functions / management, configuration, engineering  product function  • CLI • web-based management • MIB support • TRAPs via email • configuration with STEP 7 • RMON • SMTP server • port mirroring • multiport mirroring • CoS	Yes
product feature  • Cut Through switching method • Store & Forward switching method  product functions / management, configuration, engineering product function  • CLI • web-based management • MIB support • TRAPs via email • configuration with STEP 7 • RMON • SMTP server • port mirroring • multiport mirroring • CoS • PROFINET IO diagnosis	Yes
product feature  • Cut Through switching method • Store & Forward switching method  product functions / management, configuration, engineering product function  • CLI • web-based management • MIB support • TRAPs via email • configuration with STEP 7 • RMON • SMTP server • port mirroring • multiport mirroring • CoS • PROFINET IO diagnosis  PROFINET conformity class	Yes
product feature  • Cut Through switching method • Store & Forward switching method  product functions / management, configuration, engineering  product function  • CLI • web-based management • MIB support • TRAPs via email • configuration with STEP 7 • RMON • SMTP server • port mirroring • multiport mirroring • CoS • PROFINET IO diagnosis  PROFINET conformity class network load class / according to PROFINET	Yes
product feature  • Cut Through switching method • Store & Forward switching method  product functions / management, configuration, engineering  product function  • CLI • web-based management • MIB support • TRAPs via email • configuration with STEP 7 • RMON • SMTP server • port mirroring • multiport mirroring • CoS • PROFINET IO diagnosis  PROFINET conformity class network load class / according to PROFINET product function / switch-managed	Yes
product feature  • Cut Through switching method • Store & Forward switching method  product functions / management, configuration, engineering  product function  • CLI • web-based management • MIB support • TRAPs via email • configuration with STEP 7 • RMON • SMTP server • port mirroring • multiport mirroring • CoS • PROFINET IO diagnosis  PROFINET conformity class network load class / according to PROFINET product function / switch-managed telegram length / for Ethernet / maximum	Yes
product feature  • Cut Through switching method • Store & Forward switching method  product functions / management, configuration, engineering  product function  • CLI • web-based management • MIB support • TRAPs via email • configuration with STEP 7 • RMON • SMTP server • port mirroring • multiport mirroring • multiport mirroring • CoS • PROFINET IO diagnosis  PROFINET conformity class  network load class / according to PROFINET  product function / switch-managed  telegram length / for Ethernet / maximum  protocol / is supported	Yes
product feature	Yes
product feature  • Cut Through switching method • Store & Forward switching method  product functions / management, configuration, engineering  product function  • CLI • web-based management • MIB support • TRAPs via email • configuration with STEP 7 • RMON • SMTP server • port mirroring • multiport mirroring • CoS • PROFINET IO diagnosis  PROFINET conformity class network load class / according to PROFINET  product function / switch-managed  telegram length / for Ethernet / maximum  protocol / is supported • Telnet • HTTP	Yes
product feature  • Cut Through switching method • Store & Forward switching method  product functions / management, configuration, engineering product function  • CLI • web-based management • MIB support • TRAPs via email • configuration with STEP 7 • RMON • SMTP server • port mirroring • multiport mirroring • CoS • PROFINET IO diagnosis  PROFINET conformity class network load class / according to PROFINET product function / switch-managed telegram length / for Ethernet / maximum protocol / is supported • Telnet	Yes

• BOOTP	No
• GMRP	Yes
• DCP	Yes
• LLDP	Yes
EtherNet/IP	Yes
• SNMP v1	Yes
• SNMP v2	Yes
• SNMP v3	Yes
IGMP (snooping/querier)	Yes
identification & maintenance function	
<ul> <li>I&amp;M0 - device-specific information</li> </ul>	Yes
I&M1 - higher level designation/location designation	Yes
product functions / diagnostics	
product function	
<ul> <li>port diagnostics</li> </ul>	Yes
<ul> <li>statistics Packet Size</li> </ul>	Yes
statistics packet type	Yes
error statistics	Yes
• SysLog	Yes
product functions / VLAN	
product function	Voc
VLAN - port based	Yes
<ul> <li>VLAN - protocol-based</li> </ul>	No
VLAN - IP-based	No
number of VLANs / maximum	257
number of VLANs - dynamic / maximum	257
number of VLANs / at ring redundancy (HRP; MRP; standby link)	257
protocol / is supported / GVRP	Yes
product functions / DHCP	
product function	
DHCP server	Yes
DHCP client	Yes
DHCP Option 82	Yes
• DHCP Option 66	Yes
DHCP Option 67	Yes
product functions / redundancy	165
<ul><li>product function</li><li>of the PROFINET IO device / is supported / PROFINET</li></ul>	Yes
system redundancy  • ring redundancy	Yes
High Speed Redundancy Protocol (HRP)	Yes
high speed redundancy protocol (HRP) with redundancy	Yes
<ul> <li>manager</li> <li>high speed redundancy protocol (HRP) with standby</li> </ul>	Yes
redundancy protocol / is supported / Media Redundancy Protocol (MRP)	Voc
	Yes
media redundancy protocol (MRP) with redundancy	Yes
manager	Voc
<ul> <li>Media Redundancy Protocol Interconnection (MRP-I)</li> <li>of the PROFINET IO device / is supported / H-Sync forwarding</li> </ul>	Yes Yes
forwarding	V
redundancy procedure STP	Yes
<ul> <li>redundancy procedure RSTP</li> </ul>	Yes
<ul><li>redundancy procedure RSTP+</li></ul>	Yes
<ul> <li>redundancy procedure MSTP</li> </ul>	Yes
<ul> <li>Parallel Redundancy Protocol (PRP)/operation in the PRP-network</li> </ul>	Yes
<ul> <li>Parallel Redundancy Protocol (PRP)/Redundant Network Access (RNA)</li> </ul>	No
passive listening	Yes
protocol / is supported	
r	

• LACP	Yes
product functions / security	
product functions / security	
• IEEE 802.1x (radius)	Yes
broadcast/multicast/unicast limiter	Yes
broadcast minicast miniter     broadcast blocking	Yes
	165
protocol / is supported	Voo
• SSH	Yes
• SSL	Yes
product functions / time	
product function	
SICLOCK support	Yes
NTP-client	Yes
SNTP client	Yes
protocol / is supported	
• NTP	Yes
• SNTP	Yes
IEEE 1588 profile default	Yes
system modification during operation	
product function / configuration in RUN via CiR/H-CiR	Yes
standards, specifications, approvals	
standard	
• for emitted interference	EN 61000-6-4:2001 (Class A)
• for interference immunity	EN 61000-6-2:2001
IT security for industrial automation systems / according to IEC	Yes
62443-4-2:2019	
MTBF	24.6 a
reference code	
<ul> <li>according to IEC 81346-2</li> </ul>	KF
<ul> <li>according to IEC 81346-2:2019</li> </ul>	KFE
standards, specifications, approvals / CE	
certificate of suitability / CE marking	Yes
product conformity / according to EMC-guideline	2014/30/EU
standard	
<ul> <li>for EMC interference emission</li> </ul>	EN 61000-6-4, EN 50121-15
for immunity to EMC	EN 61000-6-2, EN 50121-4
certificate of suitability / RoHS conformity	Yes; 2011/65/EU
standards, specifications, approvals / hazardous environments	
certificate of suitability	
• ATEX	Yes
• for ATEX / as marking	II 3 G Ex ec IIC T4 Gc
• IECEx	Yes
• for IECEx / as marking	Ex ec IIC T4 Gc
CCC / for hazardous zone according to GB standard	Yes
CCC / for hazardous zone according to GB standard / as marking	Ex nA IIC T4 Gc
• for cULus HazLoc / as marking	CL1, DIV2, Group A,B,C,D T4, CL1, Zone 2, Group IIC, T4
for FM / as marking	CL1, DIV2, Group A,B,C,D 14, CL1, Zone 2, Group IIC, 14  CL1, DIV2, group A,B,C,D T4, CL1, Zone 2, group IIC, T4 Ta: -40 °C +70 °C
	OE1, D172, group A,D,O,D 14, OE1, Zorie Z, group 110, 14 1a40 C +70 C
standards, specifications, approvals / other	
certificate of suitability	W
KC approval     The state of the state	Yes
railway application in accordance with EN 50121-4	Yes
Regulatory Compliance Mark (RCM)	Yes
• for UL 61010-2-201 / as File Nr.	E85972 (NRAQ, NRAQ7)
EAC approval	Yes
accessories	
product extension / optional / C-PLUG	Yes
further information / internet links	
internet link	
• to web page: selection aid TIA Selection Tool	http://www.siemens.com/tia-selection-tool
to website: Industrial communication	http://www.siemens.com/simatic-net

• to website: Industry Mall

• to website: Information and Download Center

• to website: Image database

to website: CAx-Download-Managerto website: Industry Online Support

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

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