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 modular 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		
 for network components or terminal equipment 	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		
 for operator console 	1	
for signaling contact	1	
type of electrical connection		
 for operator console 	RJ11	
 for signaling contact 	2-pole terminal block	
for power supply	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		
product component / connection for redundant voltage supply	Yes	
supplied active power / of PSE / with PoE		
	150 W	

type of voltage / 1 / of the supply voltage	DC
 supply voltage / 1 / rated value 	24 V
power loss [W] / 1 / rated value	28 W
supply voltage / 1 / rated value	19.2 31.2 V
consumed current / 1 / maximum	7.8 A
 product component / 1 / fusing at power supply input 	Yes
 fuse protection type / 1 / at input for supply voltage 	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	
 at 25 °C / without condensation / during operation / 	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	
 35 mm top hat DIN rail mounting 	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	
 I&M0 - device-specific information 	Yes
 I&M1 - higher level designation/location designation 	Yes
product function	
• is supported / identification link	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	100
product function	Van
VLAN - port based	Yes
VLAN - protocol-based	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
process to compress to the	
product functions / DHCP	
product functions / DHCP	Yes
product functions / DHCP product function	
product functions / DHCP product function • DHCP server • DHCP client	Yes Yes
product functions / DHCP product function • DHCP server • DHCP client • DHCP Option 82	Yes Yes Yes
product functions / DHCP product function • DHCP server • DHCP client • DHCP Option 82 • DHCP Option 66	Yes Yes Yes
product functions / DHCP product function • DHCP server • DHCP client • DHCP Option 82 • DHCP Option 66 • DHCP Option 67	Yes Yes Yes
product functions / DHCP product function • DHCP server • DHCP client • DHCP Option 82 • DHCP Option 66 • DHCP Option 67 product functions / redundancy	Yes Yes Yes
product functions / DHCP product function • DHCP server • DHCP client • DHCP Option 82 • DHCP Option 66 • DHCP Option 67	Yes Yes Yes
product functions / DHCP product function • DHCP server • DHCP client • DHCP Option 82 • DHCP Option 66 • DHCP Option 67 product functions / redundancy product function	Yes Yes Yes Yes Yes Yes
product functions / DHCP product function • DHCP server • DHCP client • DHCP Option 82 • DHCP Option 66 • DHCP Option 67 product functions / redundancy product function • of the PROFINET IO device / is supported / PROFINET	Yes Yes Yes Yes Yes Yes
product functions / DHCP product function • DHCP server • DHCP client • DHCP Option 82 • DHCP Option 66 • DHCP Option 67 product functions / redundancy product function • of the PROFINET IO device / is supported / PROFINET system redundancy	Yes Yes Yes Yes Yes Yes
product functions / DHCP product function • DHCP server • DHCP client • DHCP Option 82 • DHCP Option 66 • DHCP Option 67 product functions / redundancy product function • of the PROFINET IO device / is supported / PROFINET system redundancy • ring redundancy • High Speed Redundancy Protocol (HRP) • high speed redundancy protocol (HRP) with redundancy	Yes Yes Yes Yes Yes Yes Yes
product functions / DHCP product function • DHCP server • DHCP client • DHCP Option 82 • DHCP Option 66 • DHCP Option 67 product functions / redundancy product function • of the PROFINET IO device / is supported / PROFINET system redundancy • ring redundancy • high Speed Redundancy protocol (HRP) • high speed redundancy protocol (HRP) with redundancy manager • high speed redundancy protocol (HRP) with standby	Yes Yes Yes Yes Yes Yes Yes
product functions / DHCP product function • DHCP server • DHCP client • DHCP Option 82 • DHCP Option 66 • DHCP Option 67 product functions / redundancy product function • of the PROFINET IO device / is supported / PROFINET system redundancy • ring redundancy • ring redundancy • high Speed Redundancy Protocol (HRP) • high speed redundancy protocol (HRP) with redundancy manager • high speed redundancy protocol (HRP) with standby redundancy	Yes
product functions / DHCP product function • DHCP server • DHCP client • DHCP Option 82 • DHCP Option 66 • DHCP Option 67 product functions / redundancy product function • of the PROFINET IO device / is supported / PROFINET system redundancy • ring redundancy • ring redundancy • high Speed Redundancy Protocol (HRP) • high speed redundancy protocol (HRP) with redundancy manager • high speed redundancy protocol (HRP) with standby redundancy protocol / is supported / Media Redundancy Protocol (MRP)	Yes Yes Yes Yes Yes Yes Yes Yes Yes
product functions / DHCP product function • DHCP server • DHCP client • DHCP Option 82 • DHCP Option 66 • DHCP Option 67 product functions / redundancy product function • of the PROFINET IO device / is supported / PROFINET system redundancy • ring redundancy • High Speed Redundancy Protocol (HRP) • high speed redundancy protocol (HRP) with redundancy manager • high speed redundancy protocol (HRP) with standby redundancy protocol / is supported / Media Redundancy Protocol (MRP) product function	Yes
product functions / DHCP product function • DHCP server • DHCP client • DHCP Option 82 • DHCP Option 66 • DHCP Option 67 product functions / redundancy product function • of the PROFINET IO device / is supported / PROFINET system redundancy • ring redundancy • ring redundancy • high Speed Redundancy Protocol (HRP) • high speed redundancy protocol (HRP) with redundancy manager • high speed redundancy protocol (HRP) with standby redundancy protocol / is supported / Media Redundancy Protocol (MRP)	Yes
product functions / DHCP product function • DHCP server • DHCP client • DHCP Option 82 • DHCP Option 66 • DHCP Option 67 product functions / redundancy product function • of the PROFINET IO device / is supported / PROFINET system redundancy • ring redundancy • high Speed Redundancy Protocol (HRP) • high speed redundancy protocol (HRP) with redundancy manager • high speed redundancy protocol (HRP) with standby redundancy protocol / is supported / Media Redundancy Protocol (MRP) product function • media redundancy protocol (MRP) with redundancy	Yes
product functions / DHCP product function • DHCP server • DHCP client • DHCP Option 82 • DHCP Option 66 • DHCP Option 67 product functions / redundancy product function • of the PROFINET IO device / is supported / PROFINET system redundancy • ring redundancy • High Speed Redundancy Protocol (HRP) • high speed redundancy protocol (HRP) with redundancy manager • high speed redundancy protocol (HRP) with standby redundancy protocol / is supported / Media Redundancy Protocol (MRP) product function • media redundancy protocol (MRP) with redundancy manager	Yes
product functions / DHCP product function • DHCP server • DHCP Option 82 • DHCP Option 66 • DHCP Option 67 product functions / redundancy product function • of the PROFINET IO device / is supported / PROFINET system redundancy • ring redundancy • high Speed Redundancy Protocol (HRP) • high speed redundancy protocol (HRP) with redundancy manager • high speed redundancy protocol (HRP) with standby redundancy protocol / is supported / Media Redundancy Protocol (MRP) product function • media redundancy protocol (MRP) with redundancy manager • Media Redundancy Protocol Interconnection (MRP-I) • of the PROFINET IO device / is supported / H-Sync forwarding	Yes
product functions / DHCP product function • DHCP server • DHCP Option 82 • DHCP Option 66 • DHCP Option 67 product functions / redundancy product function • of the PROFINET IO device / is supported / PROFINET system redundancy • ring redundancy • high Speed Redundancy Protocol (HRP) • high speed redundancy protocol (HRP) with redundancy manager • high speed redundancy protocol (HRP) with standby redundancy protocol / is supported / Media Redundancy Protocol (MRP) product function • media redundancy protocol (MRP) with redundancy manager • Media Redundancy Protocol Interconnection (MRP-I) • of the PROFINET IO device / is supported / H-Sync forwarding • redundancy procedure STP	Yes
product functions / DHCP product function • DHCP server • DHCP Option 82 • DHCP Option 66 • DHCP Option 67 product functions / redundancy product function • of the PROFINET IO device / is supported / PROFINET system redundancy • ring redundancy • high Speed Redundancy Protocol (HRP) • high speed redundancy protocol (HRP) with redundancy manager • high speed redundancy protocol (HRP) with standby redundancy protocol / is supported / Media Redundancy Protocol (MRP) product function • media redundancy protocol (MRP) with redundancy manager • Media Redundancy Protocol Interconnection (MRP-I) • of the PROFINET IO device / is supported / H-Sync forwarding • redundancy procedure STP • redundancy procedure RSTP	Yes
product function • DHCP server • DHCP Option 82 • DHCP Option 66 • DHCP Option 67 product functions / redundancy product functions / redundancy product function • of the PROFINET IO device / is supported / PROFINET system redundancy • ring redundancy • ring redundancy • high Speed Redundancy Protocol (HRP) • high speed redundancy protocol (HRP) with redundancy manager • high speed redundancy protocol (HRP) with standby redundancy protocol / is supported / Media Redundancy Protocol (MRP) product function • media redundancy protocol (MRP) with redundancy manager • Media Redundancy Protocol Interconnection (MRP-I) • of the PROFINET IO device / is supported / H-Sync forwarding • redundancy procedure STP • redundancy procedure RSTP • redundancy procedure RSTP	Yes
product functions / DHCP product function DHCP server DHCP Client DHCP Option 82 DHCP Option 66 DHCP Option 67 product functions / redundancy product function of the PROFINET IO device / is supported / PROFINET system redundancy ing redundancy High Speed Redundancy Protocol (HRP) high speed redundancy protocol (HRP) with redundancy manager high speed redundancy protocol (HRP) with standby redundancy protocol / is supported / Media Redundancy Protocol (MRP) product function media redundancy protocol (MRP) with redundancy manager Media Redundancy Protocol Interconnection (MRP-I) of the PROFINET IO device / is supported / H-Sync forwarding redundancy procedure STP redundancy procedure RSTP redundancy procedure RSTP+ redundancy procedure MSTP Parallel Redundancy Protocol (PRP)/operation in the	Yes
product function • DHCP server • DHCP client • DHCP Option 82 • DHCP Option 66 • DHCP Option 67 product functions / redundancy product functions / redundancy product function • of the PROFINET IO device / is supported / PROFINET system redundancy • ring redundancy • High Speed Redundancy Protocol (HRP) • high speed redundancy protocol (HRP) with redundancy manager • high speed redundancy protocol (HRP) with standby redundancy protocol / is supported / Media Redundancy Protocol (MRP) product function • media redundancy protocol (MRP) with redundancy manager • Media Redundancy Protocol Interconnection (MRP-I) • of the PROFINET IO device / is supported / H-Sync forwarding • redundancy procedure STP • redundancy procedure RSTP • redundancy procedure RSTP • redundancy procedure MSTP	Yes

- massive lietering	Voe
passive listening	Yes
protocol / is supported • LACP	Yes
	res
product functions / security	
product function	V
• IEEE 802.1x (radius)	Yes
broadcast/multicast/unicast limiter	Yes
broadcast blocking	Yes
protocol / is supported	
• 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	24.0 a
MTBF	24.6 a
reference code	VE.
• according to IEC 81346-2	KF
• according to IEC 81346-2:2019	KFE
standards, specifications, approvals / CE	V
certificate of suitability / CE marking	Yes
product conformity / according to EMC-guideline	2014/30/EU
standard	EN 04000 0 4 EN 50404 45
• for EMC interference emission	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
• IECEX	Yes
CCC / for hazardous zone according to GB standard	Yes
• 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 T4, CL1, Zone 2, group IIC, T4 Ta: -40 °C +70 °C
standards, specifications, approvals / other	
certificate of suitability	
KC approval	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	https://mall.industry.siemens.com

• to website: Information and Download Center

• to website: Image database

• to website: CAx-Download-Manager

• to website: Industry Online Support

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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