SIEMENS

Data sheet

product type designation



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 54 V DC infeed; 300 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; Etherne(*)

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 mo	odular 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	54 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	
• total / maximum	338 W

SCALANCE

type of voltage / 1 / of the supply voltage	DC
 supply voltage / 1 / rated value 	54 V
power loss [W] / 1 / rated value	28 W
supply voltage / 1 / rated value	52 57 V
consumed current / 1 / maximum	6.5 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	IDOS
protection class IP	IP20
design, dimensions and weights	
design	compact
width	140 mm
height	147 mm
depth	125 mm
net weight	1.14 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	
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 / QoS according to DSCP	Yes
product fariotion? Quo according to book	165
product feature	
product feature	No
Cut Through switching method	No Yes
Cut Through switching method Store & Forward switching method	No Yes
Cut Through switching method Store & Forward switching method product functions / management, configuration, engineering	
Cut Through switching method Store & Forward switching method product functions / management, configuration, engineering product function	Yes
Cut Through switching method Store & Forward switching method product functions / management, configuration, engineering product function CLI	Yes
Cut Through switching method Store & Forward switching method product functions / management, configuration, engineering product function CLI web-based management	Yes Yes Yes
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
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
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
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	Yes Yes Yes Yes Yes Yes Yes Yes Yes
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
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
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
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
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
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
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
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
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
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	Yes
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
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
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 functions / diagnostics	
product function	
	Voo
port diagnostics Activities Regulat Oire	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
number of VLANs / maximum	257
number of VLANs - dynamic / maximum	257
number of VLANs / at ring redundancy (HRP; MRP; standby	257
link)	
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
	res
product functions / redundancy	
product function	
 of the PROFINET IO device / is supported / PROFINET system redundancy 	Yes
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
Media Redundancy Protocol Interconnection (MRP-I)	Yes
of the PROFINET IO device / is supported / H-Sync forwarding	Yes
redundancy procedure STP	Yes
redundancy procedure STP redundancy procedure RSTP	Yes
• •	Yes
redundancy procedure RSTP+ redundancy procedure MSTP	
redundancy procedure MSTP Parallel Redundancy Partners (RRR) (acception in the	Yes
 Parallel Redundancy Protocol (PRP)/operation in the PRP-network 	Yes
 Parallel Redundancy Protocol (PRP)/Redundant Network Access (RNA) 	No
passive listening	Yes
protocol / is supported	

• LACP	Yes
product functions / security	
product function	
• IEEE 802.1x (radius)	Yes
broadcast/multicast/unicast limiter	Yes
broadcast blocking	Yes
protocol / is supported	165
SSH	Yes
• SSL	Yes
product functions / time	165
product function	Voc
SICLOCK support	Yes
NTP-client ONTP allows	Yes
SNTP client	Yes
protocol / is supported	V
• NTP	Yes
SNTP IFFE 4500 profile default	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 62443-4-2:2019	Yes
MTBF	23 a
	23 d
reference code	WF.
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	5N 51000 5 4 5N 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
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	Ex nA IIC T4 Gc
marking	CL1 DIV2 Croup A P C D T4 CL1 Topo 2 Croup IIC T4
• 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	V
KC approval The second area with EN 50404.4.	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)
for UL 61010-2-201 / as File Nr.EAC approval	E85972 (NRAQ, NRAQ7) Yes
 for UL 61010-2-201 / as File Nr. EAC approval standards, specifications, approvals / Environmental Product De 	E85972 (NRAQ, NRAQ7) Yes eclaration
for UL 61010-2-201 / as File Nr.EAC approval	E85972 (NRAQ, NRAQ7) Yes
for UL 61010-2-201 / as File Nr. EAC approval standards, specifications, approvals / Environmental Product De Environmental Product Declaration	E85972 (NRAQ, NRAQ7) Yes eclaration Yes
for UL 61010-2-201 / as File Nr. EAC approval standards, specifications, approvals / Environmental Product De Environmental Product Declaration Global Warming Potential [CO2 eq] / total	E85972 (NRAQ, NRAQ7) Yes eclaration Yes 491.2 kg
for UL 61010-2-201 / as File Nr. EAC approval standards, specifications, approvals / Environmental Product De Environmental Product Declaration	E85972 (NRAQ, NRAQ7) Yes eclaration Yes

• Global Warming Potential [CO2 eq] / during operation 438.3 kg • global warming potential [CO2 eq] / after end of life 0.62 kg 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 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 ecurity information security information Siemens provides products and solutions with industrial security functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-ofthe-art industrial security concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial security measures that may be implemented, please visit https://www.siemens.com/industrialsecurity. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Security RSS Feed under https://www.siemens.com/cert. (V4.6) Approvals / Certificates For use in hazardous locations **Declaration of Conformity** ATEX-Zone 2-Declara-<u>FM</u> CCC-Ex tion IECEx other PROFINET-Certification 10/27/2023 last modified: