



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(\*)

<b>product type designation</b>	<b>SCALANCE</b>
<b>transfer rate</b>	
transfer rate	10 Mbit/s, 100 Mbit/s, 1000 Mbit/s, 10 Gbit/s
<b>interfaces / for communication / integrated</b>	
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  • with securing collar / with PoE	16; 12 PoE ports according to IEEE 802.3at (30 W), 2 PoE ports according to IEEE 802.3bt (60 W)  14
number of electrical connections • for SFP	3
<b>interfaces / for communication / plug-in</b>	
number of electrical connections • for SFP • for SFP+	1; SFPs with 1000 Mbit/s, 100 Mbit/s with SFP991-1(LD) A possible 2; SFPs with 1000 Mbit/s or 10,000 Mbit/s possible; 100 Mbit/s with SFP991-1(LD) A possible
<b>interfaces / other</b>	
number of electrical connections • for operator console • for signaling contact	1 1
type of electrical connection • for operator console • for signaling contact • for power supply	RJ11 2-pole terminal block 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	54 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
supplied active power / of PSE / with PoE • total / maximum	338 W
<b>type of voltage / 1 / of the supply voltage</b> • supply voltage / 1 / rated value • power loss [W] / 1 / rated value	DC 54 V 28 W

<ul style="list-style-type: none"> <li>• supply voltage / 1 / rated value</li> <li>• consumed current / 1 / maximum</li> <li>• product component / 1 / fusing at power supply input</li> <li>• fuse protection type / 1 / at input for supply voltage</li> </ul>	<p>52 ... 57 V</p> <p>6.5 A</p> <p>Yes</p> <p>15 A / 125 V</p>
<b>ambient conditions</b>	
ambient temperature <ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> <li>• during transport</li> <li>• note</li> </ul>	<p>-40 ... +60 °C</p> <p>-40 ... +85 °C</p> <p>-40 ... +85 °C</p> <p>installation position and SFPs used during the operation have to be considered (see manual)</p>
relative humidity <ul style="list-style-type: none"> <li>• at 25 °C / without condensation / during operation / maximum</li> </ul>	95 %
protection class IP	IP20
<b>design, dimensions and weights</b>	
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 <ul style="list-style-type: none"> <li>• 35 mm top hat DIN rail mounting</li> <li>• wall mounting</li> <li>• S7-300 rail mounting</li> <li>• S7-1500 rail mounting</li> </ul>	<p>Yes</p> <p>No</p> <p>Yes</p> <p>Yes</p>
<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>	50
cascading in cases of star topology	any (depending only on signal propagation time)
product function / QoS according to DSCP	Yes
product feature <ul style="list-style-type: none"> <li>• Cut Through switching method</li> <li>• Store &amp; Forward switching method</li> </ul>	<p>No</p> <p>Yes</p>
<b>product functions / management, configuration, engineering</b>	
product function <ul style="list-style-type: none"> <li>• CLI</li> <li>• web-based management</li> <li>• MIB support</li> <li>• TRAPs via email</li> <li>• configuration with STEP 7</li> <li>• RMON</li> <li>• SMTP server</li> <li>• port mirroring</li> <li>• multiport mirroring</li> <li>• CoS</li> <li>• PROFINET IO diagnosis</li> </ul>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>No</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
PROFINET conformity class	B
network load class / according to PROFINET	3
product function / switch-managed	Yes
telegram length / for Ethernet / maximum	10240 byte
protocol / is supported <ul style="list-style-type: none"> <li>• Telnet</li> <li>• HTTP</li> <li>• HTTPS</li> <li>• TFTP</li> <li>• BOOTP</li> <li>• GMRP</li> </ul>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>No</p> <p>Yes</p>

• 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
<b>product functions / diagnostics</b>	
product function	
• port diagnostics	Yes
• statistics Packet Size	Yes
• statistics packet type	Yes
• error statistics	Yes
• SysLog	Yes
<b>product functions / VLAN</b>	
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 link)	35
protocol / is supported / GVRP	Yes
<b>product functions / DHCP</b>	
product function	
• DHCP server	Yes
• DHCP client	Yes
• DHCP Option 82	Yes
• DHCP Option 66	Yes
• DHCP Option 67	Yes
<b>product functions / redundancy</b>	
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 RSTP	Yes
• redundancy procedure RSTP+	Yes
• redundancy procedure MSTP	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	
<ul style="list-style-type: none"> <li>• LACP</li> </ul>	Yes
<b>product functions / security</b>	
product function	
<ul style="list-style-type: none"> <li>• IEEE 802.1x (radius)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• broadcast/multicast/unicast limiter</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• broadcast blocking</li> </ul>	Yes
protocol / is supported	
<ul style="list-style-type: none"> <li>• SSH</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• SSL</li> </ul>	Yes
<b>product functions / time</b>	
product function	
<ul style="list-style-type: none"> <li>• SICLOCK support</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• NTP-client</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• SNTP client</li> </ul>	Yes
protocol / is supported	
<ul style="list-style-type: none"> <li>• NTP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• SNTP</li> </ul>	Yes
<b>system modification during operation</b>	
product function / configuration in RUN via CiR/H-CiR	Yes
<b>standards, specifications, approvals</b>	
standard	
<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
IT security for industrial automation systems / according to IEC 62443-4-2:2019	Yes
MTBF	23 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
product conformity / according to EMC-guideline	2014/30/EU
standard	
<ul style="list-style-type: none"> <li>• for EMC interference emission</li> </ul>	EN 61000-6-4, EN 50121-15
<ul style="list-style-type: none"> <li>• for immunity to EMC</li> </ul>	EN 61000-6-2, EN 50121-4
certificate of suitability / RoHS conformity	Yes; 2011/65/EU
<b>accessories</b>	
product extension / optional / C-PLUG	Yes
<b>further information / internet-Links</b>	
Internet-Link	
<ul style="list-style-type: none"> <li>• to web page: selection aid TIA Selection Tool</li> </ul>	<a href="http://www.siemens.com/tia-selection-tool">http://www.siemens.com/tia-selection-tool</a>
<ul style="list-style-type: none"> <li>• to website: Industrial communication</li> </ul>	<a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a>
<ul style="list-style-type: none"> <li>• to website: Industry Mall</li> </ul>	<a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>
<ul style="list-style-type: none"> <li>• to website: Information and Download Center</li> </ul>	<a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a>
<ul style="list-style-type: none"> <li>• to website: Image database</li> </ul>	<a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a>
<ul style="list-style-type: none"> <li>• to website: CAx-Download-Manager</li> </ul>	<a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>
<ul style="list-style-type: none"> <li>• to website: Industry Online Support</li> </ul>	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>
<b>security information</b>	
security information	Siemens provides products and solutions with industrial security functions that support the secure operation of plants, solutions, machines, equipment and/or networks. They are important components in a holistic industrial security concept. With this in mind, Siemens' products and solutions undergo continuous development. Siemens recommends strongly that you regularly check for product updates. For the secure operation of Siemens products and solutions, it is necessary to take suitable preventive action(e.g. cell protection concept) and integrate each component into a holistic, state-of-the-art industrial security concept. Third-party products that may be in use should also be considered. For more information about industrial security, visit <a href="http://www.siemens.com/industrialsecurity">http://www.siemens.com/industrialsecurity</a> . To stay informed about product updates as they occur, sign up for a product-specific newsletter.

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