## **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 / 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   |
| 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   |
| type of voltage / 1 / of the supply voltage                      | DC  |
| <ul><li>supply voltage / 1 / rated value</li></ul>               | 54 V  |
| <ul><li>power loss [W] / 1 / rated value</li></ul>               | 28 W  |

SCALANCE

| - constitution of the second second                                      | F0 F7.V   |
|--|---|
| supply voltage / 1 / rated value   | 52 57 V   |
| consumed current / 1 / maximum   | 6.5 A   |
| <ul> <li>product component / 1 / fusing at power supply input</li> </ul> | Yes   |
| fuse protection type / 1 / at input for supply voltage                   | 15 A / 125 V  |
| ambient conditions   |   |
| ambient temperature  |   |
| <ul><li>during operation</li></ul>                                       | -40 +60 °C  |
| during storage   | -40 +85 °C  |
| <ul> <li>during transport</li> </ul>                                     | -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  | 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                  | / general   |
| cascading in the case of a redundant ring / at                           | 50  |
| reconfiguration time of <\~0.3\~s  |   |
| cascading in cases of star topology                                      | any (depending only on signal propagation time)   |
| product function / QoS according to DSCP                                 | Yes   |
| product feature  |   |
| Cut Through switching method   | No  |
| <ul> <li>Store &amp; Forward switching method</li> </ul>                 | Yes   |
| product functions / management, configuration, engineeri                 | ng  |
| product function   |   |
| • CLI  | Yes   |
| <ul> <li>web-based management</li> </ul>                                 | Yes   |
| MIB support  | Yes   |
| TRAPs via email  | Yes   |
| <ul> <li>configuration with STEP 7</li> </ul>                            | Yes   |
| • RMON   | Yes   |
| SMTP server  | No  |
| • port mirroring   | Yes   |
| multiport mirroring  | Yes   |
| • CoS  | Yes   |
| PROFINET IO diagnosis  | Yes   |
| PROFINET conformity class  | В   |
| network load class / according to PROFINET                               | 3   |
| product function / switch-managed  | Yes   |
| telegram length / for Ethernet / maximum                                 | 10240 byte  |
| protocol / is supported  | 7   |
| • Telnet   | Yes   |
| • HTTP   | Yes   |
| • HTTPS  | Yes   |
| • TFTP   | Yes   |
| • BOOTP  | No  |
| • GMRP   | Yes   |
| - Omiti  | 100   |

| • DCP   | Yes |
|---|-----|
| • LLDP  | Yes |
| • EtherNet/IP   | Yes |
| • SNMP v1   | Yes |
| • SNMP v2   | Yes |
| • SNMP v3   | Yes |
| IGMP (snooping/querier)   | Yes |
| identification & maintenance function   | 100 |
| I&M0 - device-specific information  | Yes |
| I&M1 – higher level designation/location designation  | Yes |
| product functions / diagnostics   |     |
| product function  |     |
| port diagnostics  | Yes |
| statistics Packet Size  | Yes |
| statistics packet type  | Yes |
| error statistics  | Yes |
| <ul> <li>SysLog</li> </ul>  | Yes |
| product functions / VLAN  |     |
| product function  |     |
| VLAN - port based   | Yes |
| <ul> <li>VLAN - protocol-based</li> </ul>   | No  |
| <ul> <li>VLAN - IP-based</li> </ul>   | 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 |
| product functions / DHCP  |     |
| product function  |     |
| DHCP server   | Yes |
| DHCP client   | Yes |
| <ul> <li>DHCP Option 82</li> </ul>  | Yes |
| <ul> <li>DHCP Option 66</li> </ul>  | Yes |
| DHCP Option 67  | Yes |
| product functions / redundancy  |     |
| product function  |     |
| <ul> <li>of the PROFINET IO device / is supported /<br/>PROFINET system redundancy</li> </ul> | Yes |
| <ul><li>ring redundancy</li></ul>   | Yes |
| <ul> <li>High Speed Redundancy Protocol (HRP)</li> </ul>                                      | Yes |
| <ul> <li>high speed redundancy protocol (HRP) with<br/>redundancy manager</li> </ul>          | Yes |
| <ul> <li>high speed redundancy protocol (HRP) with standby<br/>redundancy</li> </ul>          | Yes |
| protocol / is supported / Media Redundancy Protocol (MRP)                                     | Yes |
| product function  |     |
| <ul> <li>media redundancy protocol (MRP) with redundancy manager</li> </ul>                   | Yes |
| <ul> <li>Media Redundancy Protocol Interconnection (MRP-I)</li> </ul>                         | Yes |
| <ul> <li>of the PROFINET IO device / is supported / H-Sync forwarding</li> </ul>              | Yes |
| redundancy procedure STP  | Yes |
| • redundancy procedure RSTP   | 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<br/>the PRP-network</li> </ul>       | Yes |
| <ul> <li>Parallel Redundancy Protocol (PRP)/Redundant<br/>Network Access (RNA)</li> </ul>     | No  |
| passive listening   | Yes |

| protocol / is supported   |   |
|---|---|
| • LACP  | Yes   |
| product functions / security  |   |
| product function  |   |
| • IEEE 802.1x (radius)  | Yes   |
| <ul> <li>broadcast/multicast/unicast limiter</li> </ul>                         | Yes   |
| <ul> <li>broadcast blocking</li> </ul>  | 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   |
| system modification during operation  |   |
|   | Voc   |
| product function / configuration in RUN via CiR/H-CiR                           | Yes   |
| standards, specifications, approvals  |   |
| standard  |   |
| <ul> <li>for emitted interference</li> </ul>                                    | 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 y  |
| 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  |   |
| 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   |
| accessories   |   |
| product extension / optional / C-PLUG   | Yes   |
| further information / internet-Links  | 165   |
|   |   |
| 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  |
| <ul><li>to website: Industry Mall</li></ul>                                     | https://mall.industry.siemens.com   |
| <ul> <li>to website: Information and Download Center</li> </ul>                 | http://www.siemens.com/industry/infocenter  |
| <ul><li>to website: Image database</li></ul>                                    | http://automation.siemens.com/bilddb  |
| <ul><li>to website: CAx-Download-Manager</li></ul>                              | http://www.siemens.com/cax  |
| to website: Industry Online Support   | https://support.industry.siemens.com  |
| security information  |   |
| 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 http://www.siemens.com/industrialsecurity. To stay informed about product updates as they occur, sign up for a product-specific newsletter. |

|                | For more information, visit http://support.automation.siemens.com. (V3.4) |
|----------------|---|
| last modified: | 9/16/2022 🗗   |