## SIEMENS

## Data sheet

## 6GK5216-0BA00-2AC2



SCALANCE XC216 managed Layer 2 IE switch; IEC 62443-4-2 certified; 16x 10/100 Mbps RJ45 ports; 1x console port, diagnostics LED; redundant power supply; temp. range -40 °C to +70 °C; mounting: DIN rail/S7 mounting rail/wall Office redundancy functions features (RSTP, VLAN,...); PROFINET IO device; Ethernet/IP-compliant; C-plug slot;

| product type designation   | SCALANCE XC216        |
|--|-----------------------|
| transfer rate  |                       |
| transfer rate  | 10 Mbit/s, 100 Mbit/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 Mbit/s RJ45 ports / integrated                                  |                       |
| <ul> <li>with securing collar</li> </ul>   | 16                    |
| interfaces / other   |                       |
| number of electrical connections   |                       |
| <ul> <li>for operator console</li> </ul>   | 1                     |
| <ul> <li>for signaling contact</li> </ul>  | 1                     |
| <ul> <li>for power supply</li> </ul>   | 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                                    |                       |
| <ul> <li>at DC / rated value</li> </ul>  | 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<br>supply                   | 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>                             | 6.6 W                 |
| <ul> <li>consumed current / 1 / at rated supply voltage /<br/>maximum</li> </ul> | 0.275 A               |
| <ul> <li>supply voltage / 1 / rated value</li> </ul>                             | 9.6 31.2 V            |
| <ul> <li>consumed current / 1 / maximum</li> </ul>                               | 0.55 A                |
| <ul> <li>type of electrical connection / 1 / for power supply</li> </ul>         | 4-pole terminal block |
| <ul> <li>product component / 1 / fusing at power supply input</li> </ul>         | Yes                   |
| ambient conditions   |                       |
| ambient temperature  |                       |
| <ul> <li>during operation</li> </ul>   | -40 +70 °C            |

| during storage   | -40 +85 °C  |
|--|---|
| during transport   | -40 +85 °C  |
| relative humidity  |   |
| <ul> <li>at 25 °C / without condensation / during operation /<br/>maximum</li> </ul> | 95 %  |
| protection class IP  | IP20  |
| design, dimensions and weights   |   |
| design   | compact   |
| width  | 120 mm  |
| height   | 147 mm  |
| depth  | 125 mm  |
| net weight   | 0.8 kg  |
| material / of the enclosure  | Polycarbonate (PC-GF10) / pressure die cast aluminum    |
| fastening method   | r olycarbonate (r C-Or 10) / pressure die cast aluminum |
| 35 mm top hat DIN rail mounting  | Yes   |
|  | Yes   |
| wall mounting  |   |
| S7-300 rail mounting   | Yes   |
| • S7-1500 rail mounting  | Yes   |
| product features, product functions, product components                              |   |
| 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 feature  |   |
| <ul> <li>Cut Through switching method</li> </ul>                                     | 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  |
| <ul> <li>port mirroring</li> </ul>   | Yes   |
| multiport mirroring  | Yes   |
| • CoS  | Yes   |
| PROFINET IO diagnosis  | Yes   |
| PROFINET conformity class  | В   |
| product function / switch-managed  | Yes   |
| telegram length / for Ethernet / maximum   | 1632 byte   |
| protocol / is supported  | 1002 5/10   |
| Telnet   | Yes   |
| • HTTP   | Yes   |
| • HTTPS  | Yes   |
| • TFTP   | Yes   |
| • IFTP<br>• BOOTP  | No  |
| • GMRP   | Yes   |
| • GMRP<br>• 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   |
| <ul> <li>I&amp;M1 – higher level designation/location designation</li> </ul>         | Yes   |
| product functions / diagnostics  |   |

| product function  |     |
|---|-----|
| port diagnostics  | Yes |
| <ul> <li>statistics Packet Size</li> </ul>  | Yes |
| <ul> <li>statistics packet type</li> </ul>  | Yes |
| error statistics  | Yes |
| • SysLog  | Yes |
| product functions / VLAN  |     |
| product function  |     |
| <ul> <li>VLAN - port based</li> </ul>   | 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 |
| DHCP Option 82  | Yes |
| DHCP Option 66  | Yes |
| DHCP Option 67  | Yes |
| product functions / redundancy  |     |
|   |     |
| product function  | Ver |
| <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<br>(MRP)                                  | Yes |
| product function  |     |
| <ul> <li>media redundancy protocol (MRP) with redundancy<br/>manager</li> </ul>               | Yes |
| <ul> <li>Media Redundancy Protocol Interconnection (MRP-<br/>I)</li> </ul>                    | Yes |
| <ul> <li>of the PROFINET IO device / is supported / H-Sync<br/>forwarding</li> </ul>          | Yes |
| <ul> <li>redundancy procedure STP</li> </ul>  | 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<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 |
| broadcast/multicast/unicast limiter   | Yes |
| broadcast blocking  | Yes |
| protocol / is supported   |     |
| • SSH   | Yes |
| • SSL   | Yes |
| product functions / time  |     |
| product functions / time  |     |

| and the strength of   |  |
|---|--|
| product function  |  |
| SICLOCK support   | Yes  |
| NTP-client  | Yes  |
| SNTP client   | Yes  |
| protocol / is supported   |  |
| • NTP   | Yes  |
| • SNTP  | Yes  |
| system modification during operation                                  |  |
| product function / configuration in RUN via CiR/H-CiR                 | Yes  |
| standards, specifications, approvals                                  |  |
| IT security for industrial automation systems / according to          | Yes  |
| IEC 62443-4-2:2019  |  |
| MTBF  | 48 y   |
| reference code  |  |
| • acc. to IEC 81346-2   | 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 50121-4   |
| for immunity to EMC   | EN 61000-6-2, EN 50121-4   |
| certificate of suitability / RoHS conformity                          | Yes; 2011/65/EU  |
|   |  |
| standards, specifications, approvals / hazardous environn             | lents  |
| certificate of suitability  |  |
| • ATEX  | Yes; EN 60079-0, EN 60079-15                                       |
| <ul> <li>for ATEX / as marking</li> </ul>                             | II 3 G Ex nA II T4 Gc  |
| <ul> <li>for ATEX / as certificate</li> </ul>                         | KEMA 07ATEX0145 X  |
| • IECEx   | Yes; IEC 60079-0, IEC 60079-15                                     |
| <ul> <li>for IECEx / as marking</li> </ul>                            | Ex nA II T4 Gc   |
| <ul> <li>for IECEx / as certificate</li> </ul>                        | IECEX DEK 14.0025X   |
| <ul> <li>CCC / for hazardous zone according to GB standard</li> </ul> | Yes  |
| <ul> <li>for cULus HazLoc / as marking</li> </ul>                     | CL1, DIV2, Group A,B,C,D T4, CL1, Zone 2, Group IIC, T4            |
| <ul> <li>for cULus HazLoc / as File Nr.</li> </ul>                    | E240480 (NWHP, NWHP7)  |
| <ul> <li>FM registration</li> </ul>                                   | Yes; FM class 3600:2011, FM class 3611:2004, FM class 3810:2005,   |
|   | ANSI/ISA-61010-1:2004  |
| <ul> <li>for FM / as marking</li> </ul>                               | CL1, DIV2, group A,B,C,D T4, CL1, Zone 2, group IIC, T4 Ta: -40 °C |
|   | +70 °C   |
| for FM / as certificate   | FM16US0205X  |
| standards, specifications, approvals / other                          |  |
| certificate of suitability  |  |
| <ul> <li>railway application in accordance with EN 50121-4</li> </ul> | Yes  |
| <ul> <li>Regulatory Compliance Mark (RCM)</li> </ul>                  | Yes  |
| <ul> <li>for UL 61010-2-201 / as File Nr.</li> </ul>                  | E85972 (NRAQ, NRAQ7)   |
| • for UL 60950-1 / as File Nr.  | E115352 (NWGQ, NWGQ7)  |
| <ul> <li>EAC approval</li> </ul>                                      | Yes  |
| standards, specifications, approvals / marine classification          | n  |
| Marine classification association                                     |  |
| <ul> <li>American Bureau of Shipping Europe Ltd. (ABS)</li> </ul>     | Yes  |
| French marine classification society (BV)                             | Yes  |
| • DNV GL  | Yes  |
| Korean Register of Shipping (KRS)                                     | Yes  |
| Lloyds Register of Shipping (LRS)                                     | Yes  |
| Nippon Kaiji Kyokai (NK)  | Yes  |
| Polski Rejestr Statkow (PRS)  | Yes  |
| Royal Institution of Naval Architects (RINA)                          | Yes  |
|   |  |
| accessories   | V  |
| product extension / optional / C-PLUG                                 | Yes  |
| further information / internet-Links                                  |  |
| Internet-Link   |  |

| <ul> <li>to web page: selection aid TIA Selection Tool</li> </ul> | http://www.siemens.com/tia-selection-tool   |
|---|---|
| <ul> <li>to website: Industrial communication</li> </ul>          | 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  |
| <ul> <li>to website: Industry Online Support</li> </ul>           | https://support.industry.siemens.com  |
| security information  |   |
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