



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                |                       |
| • for network components or terminal equipment  | 16; RJ45              |
| number of 10/100 Mbit/s RJ45 ports / integrated |                       |
| • with securing collar                          | 16                    |
| interfaces / other                              |                       |
| number of electrical connections                |                       |
| • for operator console                          | 1                     |
| • for signaling contact                         | 1                     |
| • for power supply                              | 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  |
| <b>signal inputs/outputs</b>                                   |  |
| operating voltage / of the signaling contacts                  |  |
| • at DC / rated value  | 24 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  |
| <b>type of voltage / 1 / of the supply voltage</b>             | DC   |
| • supply voltage / 1 / rated value                             | 24 V   |
| • power loss [W] / 1 / rated value                             | 6.6 W  |
| • consumed current / 1 / at rated supply voltage / maximum     | 0.275 A  |
| • supply voltage / 1 / rated value                             | 9.6 ... 31.2 V                                       |
| • consumed current / 1 / maximum                               | 0.55 A   |
| • type of electrical connection / 1 / for power supply         | 4-pole terminal block                                |
| • product component / 1 / fusing at power supply input         | Yes  |
| <b>ambient conditions</b>                                      |  |
| ambient temperature  |  |
| • during operation   | -40 ... +70 °C                                       |
| • during storage   | -40 ... +85 °C                                       |
| • during transport   | -40 ... +85 °C                                       |
| relative humidity  |  |
| • at 25 °C / without condensation / during operation / maximum | 95 %   |
| protection class IP  | IP20   |
| <b>design, dimensions and weights</b>                          |  |
| 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   |  |
| • 35 mm top hat DIN rail mounting                              | Yes  |
| • wall mounting  | Yes  |
| • 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 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  |   |
| • Cut Through switching method   | No  |
| • Store & Forward switching method   | Yes   |

## product functions / management, configuration, engineering

|  |           |
|--|-----------|
| product function                                       |           |
| • CLI  | Yes       |
| • web-based management                                 | Yes       |
| • MIB support  | Yes       |
| • TRAPs via email                                      | Yes       |
| • configuration with STEP 7                            | Yes       |
| • RMON   | Yes       |
| • SMTP server  | No        |
| • port mirroring                                       | Yes       |
| • multiport mirroring                                  | Yes       |
| • CoS  | Yes       |
| • PROFINET IO diagnosis                                | Yes       |
| PROFINET conformity class                              | B         |
| product function / switch-managed                      | Yes       |
| telegram length / for Ethernet / maximum               | 1632 byte |
| protocol / is supported                                |           |
| • Telnet   | Yes       |
| • HTTP   | Yes       |
| • HTTPS  | Yes       |
| • TFTP   | 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         |     |
| • port diagnostics       | 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 |
| 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  |     |
| • 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   |     |
| • 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 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

|   |      |
|---|------|
| Security for industrial automation and control systems / acc. to IEC 62443-4-2:2019 | Yes  |
| MTBF  | 48 y |

#### 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 environments

### certificate of suitability

- |                                  |  |
|----------------------------------|--|
| • ATEX                           | Yes; EN 60079-0, EN 60079-15   |
| • for ATEX / as marking          | II 3 G Ex nA II T4 Gc  |
| • for ATEX / as certificate      | KEMA 07ATEX0145 X  |
| • IECEx                          | Yes; IEC 60079-0, IEC 60079-15   |
| • for IECEx / as marking         | Ex nA II T4 Gc   |
| • for IECEx / as certificate     | IECEx DEK 14.0025X   |
| • for cULus HazLoc / as marking  | CL1, DIV2, Group A,B,C,D T4, CL1, Zone 2, Group IIC, T4                                |
| • for cULus HazLoc / as File Nr. | E240480 (NWHP, NWHP7)  |
| • FM registration                | Yes; FM class 3600:2011, FM class 3611:2004, FM class 3810:2005, ANSI/ISA-61010-1:2004 |
| • for FM / as marking            | 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

- |   |                       |
|---|-----------------------|
| • 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 60950-1 / as File Nr.                      | E115352 (NWGQ, NWGQ7) |
| • EAC approval                                      | Yes                   |

## standards, specifications, approvals / marine classification

### Marine classification association

- |   |     |
|---|-----|
| • American Bureau of Shipping Europe Ltd. (ABS) | 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

### product extension / optional / C-PLUG

Yes

## further information / internet-Links

### Internet-Link

- |   |   |
|---|---|
| • to website: Selector TIA Selection Tool | <a href="http://www.siemens.com/snst">http://www.siemens.com/snst</a>               |
| • to website: Industrial communication    | <a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a> |
| • to website: Industry Mall               | <a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>   |

- 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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