# SIEMENS

**Data sheet**                                                          **6GK5324-8TS00-2AC2**

SCALANCE XC316-8 managed layer 2 IE switch, 16x 10/100/1000 Mbit/s RJ45, 8x 1/10 Gbit/s SFP+ port, LED diagnostics,error signaling contact with select/set pushbutton, PROFINET IO device, network management, redundancy functions, office features (RSTP, VLAN, IGMP,..) CLP included in scope of supply assembly: DIN rail/S7 mounting rail .

| product type designation | |
|---|---|
| product brand name | 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 | |
| ● for network components or terminal equipment | 16; RJ45 |
| number of 10/100/1000 Mbit/s RJ45 ports | |
| ● with securing collar | 16 |
| number of electrical connections | |
| ● for SFP+ | 8; 1000 Mbps and 10000 Mbps SFP usable |
| **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 | USB (2.0 Port, Type B, serial via USB) |
| ● for signaling contact | 2-pole terminal block |
| ● for power supply | 2 x 2-pin terminal block |
| design of the removable storage | |
| ● CLP | Yes |
| operating voltage / of the signaling contacts | |
| ● at DC / rated value | 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 supply | Yes |
| **type of voltage / 1 / of the supply voltage** | DC |
| ● supply voltage / 1 / rated value | 24 V |
| ● power loss [W] / 1 / rated value | 43.2 W |
| ● supply voltage / 1 / rated value | 19.2 ... 28.8 V |
| ● consumed current / 1 / maximum | 1.8 A |
| ● type of electrical connection / 1 / for power supply | 2 x 2-pole terminal block |
| ● product component / 1 / fusing at power supply input | Yes |
| ● fuse protection type / 1 / at input for supply voltage | F 10 A / 250V |
| **ambient conditions** | |
| ambient temperature | |
| ● during operation | -40 ... +60 °C |
| ● during storage | -40 ... +85 °C |

9/20/2024

| | |
|---|---|
| ● during transport | -40 ... +85 °C |
| relative humidity | |
| ● at 25 °C / without condensation / during operation / maximum | 95 % |
| operating condition / fanless operation | Yes |
| protection class IP | IP20 |
| **design, dimensions and weights** | |
| design | compact |
| width | 210 mm |
| height | 147 mm |
| depth | 125 mm |
| net weight | 1.8 kg |
| fastening method | |
| ● 19-inch installation | No |
| ● 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 |
| number of automatically learnable MAC addresses | 16382 |
| number of QoS queues / per port | 8 |
| product function | |
| ● QoS according to IEEE 802.1Q | Yes |
| product feature | |
| ● 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 |
| ● port mirroring | Yes |
| ● multiport mirroring | Yes |
| ● CoS | Yes |
| ● PROFINET IO diagnosis | Yes |
| ● switch-managed | Yes |
| PROFINET conformity class | B |
| network load class / according to PROFINET | 3 |
| telegram length / for Ethernet / maximum | 2048 byte |
| protocol / is supported | |
| ● Telnet | Yes |
| ● HTTP | Yes |
| ● HTTPS | Yes |
| ● TFTP | Yes |
| ● FTP | Yes |
| ● SFTP | Yes |
| ● BOOTP | No |
| ● NETCONF | Yes |
| ● 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 | |

9/20/2024

| | |
|---|---|
| ● 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 |
| ● VLAN dynamic | Yes |
| number of VLANs / maximum | 257 |
| number of VLANs - dynamic / maximum | 257 |
| number of VLANs / at ring redundancy (HRP; MRP; standby link) | 257 |
| **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** | |
| 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 |
| ● of the PROFINET IO device / is supported / PROFINET system redundancy | Yes |
| ● ring redundancy | Yes |
| ● high speed redundancy protocol (HRP) with redundancy manager | Yes |
| ● high speed redundancy protocol (HRP) with standby redundancy | Yes |
| ● redundancy procedure STP | Yes |
| ● redundancy procedure RSTP | Yes |
| ● redundancy procedure RSTP+ | Yes |
| ● redundancy procedure MSTP | Yes |
| ● High-availability Seamless Redundancy (HSR) | Yes |
| ● Parallel Redundancy Protocol (PRP)/operation in the PRP-network | Yes |
| ● Parallel Redundancy Protocol (PRP)/Redundant Network Access (RNA) | Yes |
| ● passive listening | Yes |
| ● eRSTP | Yes |
| protocol / is supported | |
| ● STP/RSTP | Yes |
| ● STP | Yes |
| ● RSTP | Yes |
| ● MSTP | No |
| ● RSTP big network support | Yes |
| ● LACP | Yes |
| **system modification during operation** | |
| product function / configuration in RUN via CiR/H-CiR | Yes |
| **product functions / security** | |
| product function | |

9/20/2024

| | |
|---|---|
| ● 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 |
| ● IEEE 1588 v2 transparent forwarding | Yes |
| protocol / is supported | |
| ● NTP | Yes |
| ● SNTP | Yes |
| ● IEEE 1588 profile default | No |
| accuracy / at IEEE 1588 v2 | |
| ● not less than | 100 µs |
| ● typical | 50 ns |

## standards, specifications, approvals

| | |
|---|---|
| certificate of suitability | |
| ● CE marking | Yes |
| ● UKCA marking | Yes |
| ● cULus approval | Yes |
| ● KC approval | Yes |
| ● Regulatory Compliance Mark (RCM) | Yes |
| product conformity / according to EMC-guideline | 2014/30/EU |
| standard | |
| ● for EMC interference emission | EN 61000-6-4 |
| ● for immunity to EMC | EN 61000-6-2 |
| ● for safety / from CSA and UL | UL 60950-1 E115352, UL-61010-2 E85972 |

## standards, specifications, approvals / hazardous environments

| | |
|---|---|
| certificate of suitability | |
| ● ATEX | Yes |
| ● UKEX | Yes |
| ● IECEx | Yes |
| ● ULhazloc approval | Yes |
| ● CCC / for hazardous zone according to GB standard | Yes |
| ● FM registration | Yes |

## standards, specifications, approvals / other

| | |
|---|---|
| certificate of suitability | |
| ● railway application in accordance with EN 50121-4 | Yes; use only in areas not accessible to the public |
| ● railway application in accordance with EN 50125-3 | Yes |
| IT security for industrial automation systems / according to IEC 62443-4-2:2019 | Yes |

## standards, specifications, approvals / Environmental Product Declaration

| | |
|---|---|
| Environmental Product Declaration | Yes |
| Global Warming Potential [CO2 eq] | |
| ● total | 1244.3 kg |
| ● during manufacturing | 122.74 kg |
| ● during operation | 1120.64 kg |
| ● after end of life | 0.91 kg |

## product functions / general

| | |
|---|---|
| MTBF | 13.4 a |
| reference code | |
| ● according to IEC 81346-2 | KF |
| ● according to IEC 81346-2:2019 | KFE |
| Warranty period | 5 a |

## further information / internet links

| | |
|---|---|
| internet link | |
| ● to website: Selection guide for cables and connectors | https://support.industry.siemens.com/cs/ww/en/view/109766358 |

9/20/2024

| | |
|---|---|
| ● to web page: selection aid TIA Selection Tool | https://www.siemens.com/tstcloud |
| ● to website: Industrial communication | https://www.siemens.com/simatic-net |
| ● to web page: SiePortal | https://sieportal.siemens.com/ |
| ● to website: Image database | https://www.automation.siemens.com/bilddb |
| ● to website: CAx-Download-Manager | https://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 cybersecurity 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-of-the-art industrial cybersecurity 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 cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. 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 Cybersecurity RSS Feed under https://www.siemens.com/cert. (V4.7) |

## Approvals / Certificates

| General Product Approval | | | | For use in hazardous locations |
|---|---|---|---|---|
| [Declaration of Conformity](#) | CE EG-Konf. | UK CA | [Miscellaneous](#) TÜV | [FM](#) |

| For use in hazardous locations | Test Certificates | Environment | Industrial Communication |
|---|---|---|---|
| UL | [Type Test Certificates/Test Report](#) | EPD | [PROFINET](#) |

| | |
|---|---|
| **last modified:** | 8/16/2024 |

9/20/2024