# SIEMENS

**Data sheet**                                   **6GK5224-0BA00-2AA3**

SCALANCE X224, managed IE switch, 24x 10/100 Mbit/s RJ45 ports, LED diagnostics, error-signaling contact with set pushbutton, redundant power supply, PROFINET IO device, network management, can be operated in red. ring, including electronic manual on CD-ROM, C-PLUG optional.

| product type designation | SCALANCE X224 |
| --- | --- |
| **transfer rate** | |
| transfer rate | 10 Mbit/s, 100 Mbit/s |
| **interfaces / for communication / integrated** | |
| number of electrical connections | |
| ● for network components or terminal equipment | 24 |
| number of 10/100 Mbit/s RJ45 ports / integrated | |
| ● with securing collar | 24 |
| number of 100 Mbit/s SC ports | |
| ● for multimode | 0 |
| **interfaces / other** | |
| number of electrical connections | |
| ● for signaling contact | 1 |
| ● for power supply | 1 |
| type of electrical connection | |
| ● for signaling contact | 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 | 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 | 8.4 W |
| ● supply voltage / 1 / rated value | 18 ... 32 V |
| ● consumed current / 1 / maximum | 0.35 A |
| ● type of electrical connection / 1 / for power supply | 4-pole terminal block |
| ● product component / 1 / fusing at power supply input | Yes |
| ● fuse protection type / 1 / at input for supply voltage | 1.1 A / 33 V |
| **ambient conditions** | |
| ambient temperature | |
| ● during operation | -40 ... +60 °C |
| ● during storage | -40 ... +70 °C |
| ● during transport | -40 ... +70 °C |
| relative humidity | |

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| | |
|---|---|
| ● at 25 °C / without condensation / during operation / maximum | 95 % |
| protection class IP | IP30 |

## design, dimensions and weights

| | |
|---|---|
| design | compact |
| width | 180 mm |
| height | 125 mm |
| depth | 124 mm |
| net weight | 1.6 kg |
| fastening method | |
| ● 35 mm top hat DIN rail mounting | Yes |
| ● wall mounting | Yes |
| ● S7-300 rail mounting | Yes |
| ● S7-1500 rail mounting | No |

## product features, product functions, product components / general

| | |
|---|---|
| cascading in the case of a redundant ring / at reconfiguration time of <\~0.3\~s | 100 |
| cascading in cases of star topology | any (depending only on signal propagation time) |

## 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 |
| ● port mirroring | Yes |
| ● multiport mirroring | No |
| ● with IRT / PROFINET IO switch | No |
| ● PROFINET IO diagnosis | Yes |
| PROFINET conformity class | B |
| product function / switch-managed | Yes |
| protocol / is supported | |
| ● Telnet | Yes |
| ● HTTP | Yes |
| ● HTTPS | Yes |
| ● TFTP | Yes |
| ● FTP | Yes |
| ● BOOTP | No |
| ● DCP | Yes |
| ● LLDP | Yes |
| ● SNMP v1 | Yes |
| ● SNMP v2 | Yes |
| ● SNMP v3 | 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 |

## product functions / DHCP

| | |
|---|---|
| product function | |
| ● DHCP client | Yes |

## product functions / redundancy

| | |
|---|---|
| product function | |
| ● ring redundancy | Yes |
| ● High Speed Redundancy Protocol (HRP) | Yes |
| ● high speed redundancy protocol (HRP) with redundancy manager | Yes |

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| | |
|---|---|
| ● high speed redundancy protocol (HRP) with standby redundancy | No |
| protocol / is supported / Media Redundancy Protocol (MRP) | Yes |
| product function | |
| ● media redundancy protocol (MRP) with redundancy manager | Yes |
| ● Parallel Redundancy Protocol (PRP)/operation in the PRP-network | Yes |
| ● Parallel Redundancy Protocol (PRP)/Redundant Network Access (RNA) | No |
| ● passive listening | Yes |

**product functions / security**

| | |
|---|---|
| protocol / is supported | |
| ● SSH | Yes |

**product functions / time**

| | |
|---|---|
| product function | |
| ● SICLOCK support | Yes |
| protocol / is supported | |
| ● NTP | No |
| ● SNTP | Yes |

**standards, specifications, approvals**

| | |
|---|---|
| standard | |
| ● for FM | FM3611: Class 1, Division 2, Group A, B, C, D / T4, CL.1, Zone 2, GP. IIC, T4, FM16US0205X |
| ● for safety / from CSA and UL | UL 60950-1 E115352, CSA C22.2 No. 60950-1 |
| ● for emitted interference | EN 61000-6-4:2001 (Class A) |
| ● for interference immunity | EN 61000-6-2:2001 |
| MTBF | 45.87 a |
| reference code | |
| ● according to IEC 81346-2 | KF |
| ● according to IEC 81346-2:2019 | KFE |

**standards, specifications, approvals / CE**

| | |
|---|---|
| certificate of suitability / CE marking | Yes |

**standards, specifications, approvals / hazardous environments**

| | |
|---|---|
| standard / for hazardous zone | |
| ● | EN 60079-0 : 2006, EN 60079-15: 2005, II 3 G Ex nA II T4 KEMA 07 ATEX 0145X |
| ● from CSA and UL | ANSI / ISA 12.12.01, CSA C22.2 No. 213-M1987, CL. 1 / Div. 2 / GP. A, B, C, D T4, CL. 1 / Zone 2 / GP. IIC, T4 |
| certificate of suitability | |
| ● CCC / for hazardous zone according to GB standard | Yes; GB3836.1, GB3836.8 |
| ● CCC / for hazardous zone according to GB standard / as marking | Ex nA IIC T4 Gc |

**standards, specifications, approvals / other**

| | |
|---|---|
| certificate of suitability | EN 61000-6-2:2001, EN 61000-6-4:2001 |
| ● C-Tick | Yes |
| ● KC approval | Yes |
| ● railway application in accordance with EN 50155 | No |
| ● railway application in accordance with EN 50124-1 | No |

**standards, specifications, approvals / marine classification**

| | |
|---|---|
| Marine classification association | |
| ● American Bureau of Shipping Europe Ltd. (ABS) | Yes |
| ● French marine classification society (BV) | Yes |
| ● Det Norske Veritas (DNV) | No |
| ● Germanische Lloyd (GL) | No |
| ● DNV GL | Yes |
| ● Lloyds Register of Shipping (LRS) | Yes |
| ● Nippon Kaiji Kyokai (NK) | Yes |
| ● Polski Rejestr Statkow (PRS) | Yes |
| ● Royal Institution of Naval Architects (RINA) | Yes |

**product functions / general**

| | |
|---|---|
| Warranty period | 5 a |

| further information / internet links | |
|---|---|
| internet link | |
| ● to website: Image database | https://www.automation.siemens.com/bilddb |
| ● 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) |

## Approvals / Certificates

### General Product Approval

Manufacturer Declaration | CE EG-Konf. | EAC | Declaration of Conformity | UKCA | UL

| General Product Approval | EMV | For use in hazardous locations | | Test Certificates |
|---|---|---|---|---|
| RCM | KC | FM | CCC-Ex | UL | Type Test Certificates/Test Report |

### Marine / Shipping

ABS | BUREAU VERITAS | DNV | Lloyd's Register LRS | NK / Nippon Kaiji Kyokai | PRS

| Marine / Shipping | Environment | Industrial Communication |
|---|---|---|
| RINA | Confirmation | PROFINET |

last modified:                    2/24/2024 ⬀