SIEMENS

## Data sheet 6GK5642-2GS00-2AC2

| | |
|---|---|
| **product type designation** | **SC642-2C** |



SCALANCE SC642-2C Industrial Security Appliance; For protection of devices and networks in discrete manufacturing and the process industry for protection of the industrial communication with firewall and VPN; Further functions: address conversion (NAT/NAPT); Connection to SINEMA RC; 2x combo port electrical or optical; 10/100/1000 Mbit/s RJ45 or 100 Mbit/s SFP or 1000 Mbit/s SFP.

| | |
|---|---|
| Technical Product Detail Page | https://i.siemens.com/1P6GK5642-2GS00-2AC2 |
| **transfer rate** | |
| transfer rate | 10, 100, 1000 Mbit/s |
| **interfaces** | |
| number of electrical/optical connections / for network components or terminal equipment / maximum | 2 |
| number of electrical connections | |
| ● for signaling contact | 1 |
| ● for power supply | 1 |
| ● for redundant voltage supply | 1 |
| design of the removable storage / C-PLUG | Yes |
| **signal inputs/outputs** | |
| number of electrical connections | |
| ● for digital input signals | 1 |
| type of electrical connection | |
| ● for digital input signals | 2-pole terminal block |
| ● for digital output signals | 2-pole terminal block |
| 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** | |
| supply voltage / 1 / rated value | 24 V; (with plugged-in SFPs) |
| power loss [W] / 1 / rated value | 9.12 W |
| supply voltage / 1 / rated value | 9.6 ... 31.2 V |
| consumed current | |
| ● 1 / maximum | 0.38 A |
| **ambient conditions** | |
| 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 |
| **design, dimensions and weights** | |
| design | compact |
| width | 60 mm |
| height | 145 mm |
| depth | 125 mm |


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|---|---|
| net weight | 0.58 kg |
| fastening method | Fixing bolt with additional screw protection |
| fastening method | |
| ● 35 mm DIN-rail mounting | Yes |
| ● S7-300 rail mounting | Yes |
| ● S7-1500 rail mounting | Yes |
| ● wall mounting | Yes |
| **product features, product functions, product components / general** | |
| product function / DynDNS client | Yes |
| **product functions / management, configuration, engineering** | |
| product function | |
| ● CLI | Yes |
| ● web-based management | Yes |
| ● MIB support | Yes |
| protocol / is supported | |
| ● Telnet | No |
| ● HTTP | No |
| ● HTTPS | Yes |
| ● TFTP | Yes |
| ● FTP | Yes |
| ● SFTP | Yes |
| ● DCP | Yes |
| ● LLDP | Yes |
| ● SNMP v1 | Yes |
| ● SNMP v2 | Yes |
| ● SNMP v3 | Yes |
| **product function** | |
| ● RMON | Yes |
| ● port mirroring | Yes |
| ● multiport mirroring | Yes |
| ● CoS | Yes |
| type of configuration | WBM, CLI, SNMP |
| PROFINET conformity class | A |
| **product functions / diagnostics** | |
| product function | |
| ● SysLog | Yes |
| ● packet filter log | Yes |
| ● audit log | Yes |
| ● system log | Yes |
| ● port diagnostics | Yes |
| ● statistics Packet Size | Yes |
| ● statistics packet type | Yes |
| ● error statistics | Yes |
| **product functions / DHCP** | |
| product function | |
| ● DHCP client | Yes |
| ● DHCP server - internal network | Yes |
| ● DHCP Option 66 | Yes |
| ● DHCP Option 67 | Yes |
| **product functions / routing** | |
| product function / static IP routing | Yes |
| protocol / is supported / VRRP | Yes |
| product function / static IP routing IPv6 | Yes |
| protocol / is supported / OSPFv2 | Yes |
| **product functions / security** | |
| firewall version | stateful inspection |
| product function / with VPN connection | IPsec, OpenVPN |
| type of encryption algorithms / with VPN connection | AES-256, AES-192, AES-128, 3DES-168, DES-56 |
| type of authentication procedure / with VPN connection | Preshared key (PSK), X.509v3 certificates |


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| type of hashing algorithms / with VPN connection | MD5, SHA-1, SHA-256, SHA-384, SHA-512 |
| number of possible connections / with VPN connection | 200 |
| product function | |
| ● password protection | Yes |
| ● bandwidth limitation | No |
| ● NAT/NAPT | Yes |
| ● IEEE 802.1x (radius) | Yes |
| ● broadcast/multicast/unicast limiter | Yes |
| ● broadcast blocking | Yes |
| protocol / is supported / SSH | Yes |
| **product functions / redundancy** | |
| product function | |
| ● standby redundancy | Yes |
| product function | |
| ● redundancy procedure STP | Yes |
| ● redundancy procedure RSTP | Yes |
| ● passive listening | Yes |
| **product functions / time** | |
| protocol / is supported | |
| ● NTP | Yes |
| ● SNTP | Yes |
| product feature / hardware real time clock w. battery backup | Yes |
| **standards, specifications, approvals** | |
| standard | |
| ● for FM | FM19US0167X |
| ● for safety / from CSA and UL | UL 60950 E115352 / CSA C22.2 no. 60950-1-03, CSA C22.2 no. 213-M1987 (available soon) |
| ● for emitted interference | EN 61000-6-4: 2007 |
| ● for interference immunity | EN 61000-6-2: 2005 |
| certificate of suitability | AS/NZS 2064 (Class A), EN 61000-6-2, EN 61000-6-4 |
| ● CE marking | Yes |
| ● C-Tick | Yes |
| ● CCC | Yes |
| MTBF | 37.83 a |
| | |
| ● standard | EN/IEC 61709 |
| ● reference temperature | 40 °C |
| product function / is supported / identification link | Yes; acc. to IEC 61406-1:2022 |
| **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 |
| **standards, specifications, approvals / hazardous environments** | |
| standard / for hazardous zone | EN 60079-0: 2006, EN60079-15: 2005, II 3 G Ex nA IIC T4 Gc, KEMA 07ATEX0145 X |
| certificate of suitability / CCC / for hazardous zone according to GB standard | Yes; GB3836.1, GB3836.8 |
| certificate of suitability / CCC / for hazardous zone according to GB standard / as marking | Ex nA IIC T4 Gc |
| **standards, specifications, approvals / Environmental Product Declaration** | |
| Environmental Product Declaration | Yes |
| global warming potential [CO2 eq] | |
| ● total | 360.23 kg |
| ● during manufacturing | 31.33 kg |


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| | |
|---|---|
| ● during operation | 328.43 kg |
| ● after end of life | 0.47 kg |

| accessories | |
|---|---|
| product extension / optional | |
| ● C-PLUG | Yes |

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

| | | | | | |
|---|---|---|---|---|---|
| EG-Konf. | Declaration of Conformity | EAC | China RoHS | UL | RCM |

| General Product Approval | EMV | For use in hazardous locations | | | |
|---|---|---|---|---|---|
| TUEV | KC | ATEX | IECEx | FM | CCC-Ex |

| Test Certificates | Maritime application | | | | |
|---|---|---|---|---|---|
| Type Test Certificates/Test Report | ABS | BUREAU VERITAS | DNV | LRS | NK / Nippon Kaiji Kyokai |

| Maritime application | | Dangerous goods | Environment |
|---|---|---|---|
| PRS | RINA | Dangerous goods information | EPD |


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