SIEMENS

Data sheet

6AG1243-1BX30-2AX0

product type designation



SIPLUS S7-1200 CP 1243-1

SIPLUS S7-1200 CP 1243-1 based on 6GK7243-1BX30-0XE0 with conformal coating, -40...+70 °C, communications processor CP 1243-1 for connection of SIMATIC S7-1200 as additional Ethernet interface and for connection to control centers via telecontrol protocols (DNP3, IEC 60870, TeleControl Basic), security (firewall, VPN)

Figure similar

| transfer rate | |
|--|---|
| transfer rate | |
| at the 1st interface | 10 100 Mbit/s |
| interfaces | |
| number of interfaces / according to Industrial Ethernet | 1 |
| number of electrical connections | |
| • at the 1st interface / according to Industrial Ethernet | 1 |
| for power supply | 0 |
| type of electrical connection | |
| at the 1st interface / according to Industrial Ethernet | RJ45 port |
| supply voltage, current consumption, power loss | |
| type of voltage / of the supply voltage | DC |
| supply voltage / 1 / from backplane bus | 5 V |
| consumed current | |
| from backplane bus / at DC / at 5 V / typical | 0.25 A |
| power loss [W] | 1.25 W |
| ambient conditions | |
| ambient temperature | |
| for vertical installation / during operation | -40 +60 °C |
| for horizontally arranged busbars / during operation | -40 +70 °C |
| during storage | -40 +70 °C |
| during transport | -40 +70 °C |
| installation altitude / at height above sea level / maximum | 5000 m |
| ambient condition / relating to ambient temperature - air pressure - installation altitude | Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax - 20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m) |
| relative humidity | |
| with condensation / according to IEC 60068-2-38 / maximum | 100 %; RH including condensation/frost (no commissioning when condensation is present), horizontal installation |
| chemical resistance / to commercially available cooling lubricants | Yes; incl. airborne diesel and oil droplets |
| resistance to biologically active substances | |
| conformity according to EN 60721-3-3 | Yes; Class 3B2 mold and fungal spores (excluding fauna), Class 3B3 on request |
| conformity according to EN 60721-3-6 | Yes; Class 6B2 mold, fungal and dry rot spores (excluding fauna) |
| resistance to chemically active substances | |
| • conformity according to EN 60721-3-3 | Yes; Class 3C4 (RH < 75 %) incl. salt spray in accordance with EN 60068-2-52 (Severity 3). The supplied plug covers must remain in place on the unused interfaces during operation. |
| conformity according to EN 60721-3-6 | Yes |

| over the unused interfaces during operation. | | _ |
|--|--|---|
| • conformity according to EN 60721-3-6 coating / for equipped printed circuit board / according to EN 61086 coating / for equipped printed circuit board / according to EN 61086 coating / for equipped printed circuit board / according to EN 61086 coating / protection against pollution according to EN 60084-3 yee, of cest of the coating / according to MIL 146058C yees, Coating discotoration during service life possible product conformity / of the coating / Qualification and based according to IN COCCESSA. yees coating discotoration during service life possible product conformity / of the coating / Qualification and Based According according to IN COCCESSA. yees coating discotoration during service life possible product cases and service according to IN COCCESSA. yees coating discotoration during service life possible product coating according to IN COCCESSA. yees coating discotoration during service life possible product cases and service life possible product coating according to IN COCCESSA. yees coating discotoration during service life possible product coating according to IN COCCESSA. yees coating discotoration during service life possible product coating according to IN COCCESSA. yees coating discotoration during service life possible coating discotoration during service life possible with the discotoration of IN COCCESSA. yees coating discotoration during service life possible with the discotoration of IN COCCESSA. yees coating discotoration during service life possible with the discotoration of IN COCCESSA. yees coating discotoration during service life possible product coating according to IN COCCESSA. yees coating discotoration during service life possible product coating according to IN COCCESSA. yees coating discotoration during service life possible product coating according to IN COCCESSA. yee coating discotoration during service life possible product coating according to IN COCCESSA. yees coating discotoration duri | • | |
| work the unused interfaces during operation. work the procession of the equipped printed circuit board / according to EN (1996) floped ocasing / protection against pollution according to EN (1996) floped ocasing / protection against pollution according to EN (1996) floped ocasing / protection according to MIL-146058C (1996) product conformity / of the coating / Cualification and Ferfarmance of Elevited Insulating Compound for Printed Book (1996) profused conformity / of the coating / Cualification and Performance of Elevited Insulating Compound for Printed Book (1996) profused to disease of the CCC 459A (1996) production class of the CCC 459A (1996) production conscion (1996) production class of the CCC 459A (1996) production of the CCC 459A (1996) production class of the CCC 459A (1996) prod | conformity according to EN 60721-3-3 | Yes; Class 3S4 incl. sand, dust. The supplied plug covers must remain in place over the unused interfaces during operation. |
| Stock Stoc | conformity according to EN 60721-3-6 | Yes; Class 6S3 incl. sand, dust. The supplied plug covers must remain in place over the unused interfaces during operation. |
| ### Special Contents of the coating / coading to Mit1-40686C product conformity / of the coating / Qualification and Performance of Electrical Installing Compound for Printed Board Assemblies according to IPC-CC-830A professional P design, dimensions and weights module format width ### Special Compound for Printed ### Special Compound | | Yes; Class 2 for high availability |
| product conformity / of the coating / Qualification and Performance of Electrical Installating Compound for Printed Board Assemblies according to IPC-CC-830A protection class IP IP20 design, dimensions and welghts IP20 despit and the disconsions IP20 despit and mensions IP20 despit and me | | Yes; Protection of the type 1 |
| Performance of Electrical Insulating Compound for Printed Board Assemblishes according to IPC-C-930A P20 | type of test / of the coating / according to MIL-I-46058C | Yes; Coating discoloration during service life possible |
| Incompany Compact module S7-1200 single width Month Mo | Performance of Electrical Insulating Compound for Printed | Yes; Conformal coating, class A |
| module format width 30 mm height 110 mm depth 75 mm net weight 0.122 kg fastering method • Sh mm top hat DIN rail mounting • Wes product features, product functions, product components / general number of units • per CPU / maximum • per CPU / maximum • by means of 1 blocks / maximum • like CPU performance data / 17 functions • maximum • performance data / 17 functions • as email client / maximum • se semail client / maximum • like CPU performance data / relocations • se semail client / maximum • Statistion • Titl control center • Once testion No • Substation • Titl control center • Once testion Spermanent connection • once in the connection Sperman of a permanent connection • once in the connection Sperman of a permanent connection • Once in the connection Sperman of a permanent connection • Once in the CPU protocol / is supported • Once (Connection Sperman of a permanent connection Sperman of a permanent conne | protection class IP | IP20 |
| width helight 110 mm 11 | design, dimensions and weights | |
| height | module format | Compact module S7-1200 single width |
| depth 75 mm ret weight 0.122 kg | width | 30 mm |
| net weight fastening method | height | 110 mm |
| fastening method • 35 mm top hat DIN rail mounting • wall mounting router fastures, product functions, product components / general number of units • per CPU / maximum • per CPU / maximum • per communication number of possible connections / for open communication • by means of T blocks / maximum • maximum • per maximum • node station • substation • substation • Tim Centrol center • ontrol center connection • To y means of a permanent connection • onte • control center connection • onte • protocol / is supported • DNP3 • IEC 60870-5 product function / data buffering if connection is aborted • DNP3 • IEC 60870-5 product function / fast points per station / maximum • in receive direction / maximum • in receive direct | depth | 75 mm |
| • 35 mm top hat DIN rail mounting • wall mounting • yes • wall mounting roduct foatures, product functions, product components / general number of units • per CPU / maximum • per CPU / maximum • by means of T blocks / maximum • by means of T blocks / maximum • note station • by means of a permanent connection • note • TIM control center control center connection • note • To use with TeleControl Server Basic, WinCC and PCS7 • supported • note • note • DNP3 • LEG G8870-5 • Yes • product function / data buffering if connection is aborted • number of data points per station / maximum • in receive direction / maximum • program download with SIMATIC STEP 7 • remote firmware update • required | net weight | 0.122 kg |
| • wall mounting product features, product functions, product components / general number of units • per CPU / maximum 3 performance data / open communication • by means of T blooks / maximum 1 like CPU performance data / S7 communication • maximum 1 like CPU performance data / S7 communication • maximum 1 like CPU performance data / IT functions number of possible connections / for S7 communication • maximum 1 like CPU performance data / IT functions number of possible connections • as email client / maximum 1 like CPU performance data / It functions number of possible connections • as email client / maximum 1 like CPU performance data / It functions number of possible connections • as email client / maximum 1 like CPU performance data / telecontrol suitability for use • node station 1 like CPU • node station 1 like CPU • node station 2 like CPU • node station 3 like CPU • node station 4 like control 8 like CPU • control center connection 5 like CPU • node station 4 like control 8 like CPU • product function of a permanent connection 6 like CPU • product function / data buffering if connection is aborted 7 like control 8 like CPU • number of stations / for direct communication / with Telecontrol 9 like CPU • in send direction / maximum 1 like CPU • in send direction / maximum 1 like CPU • in send direction / maximum 1 like CPU • in send direction / maximum 1 like CPU • in send direction / maximum 1 like CPU • in send direction / maximum 1 like CPU • in send direction / maximum 1 like CPU • in send direction / maximum 1 like CPU • in send direction / maximum 1 like CPU • in send direction / maximum 1 like CPU • in send direction / maximum 1 like CPU • in send direction / maximum 1 like CPU • in send direction / maximum 1 like CPU • in send direction / maximum 1 like CPU • in send direction / maximum 1 like CPU • in send direction / maximum 1 like CPU • in send direction / maximum 1 like CPU • in send direction / maximum 1 like CPU • in send direction / maximum 1 like CPU | fastening method | |
| product features, product functions, product components / general number of units | • 35 mm top hat DIN rail mounting | Yes |
| number of units | wall mounting | Yes |
| performance data / open communication number of possible connections / for open communication | product features, product functions, product components / ge | neral |
| performance data / open communication number of possible connections / for open communication • by means of T blocks / maximum performance data / \$7 communication number of possible connections / for \$7 communication • maximum number of possible connections / for \$7 communication • maximum number of possible connections • as email client / maximum 1 performance data / I'l functions number of possible connections • as email client / maximum 1 performance data / telecontrol suitability for use • node station • TiM control center • No control center connection • by means of a permanent connection • note protocol / is supported • DNP3 • IEC 60870-5 product function / data buffering if connection is aborted number of data points per station / maximum • in receive direction / maximum • in receive direction / maximum • in receive direction / maximum • program download with SIMATIC STEP 7 product function / online diagnostics with SIMATIC STEP 7 • remote firmware update • required • STEP 7 Basic/Professional | number of units | |
| performance data / open communication number of possible connections / for open communication • by means of T blocks / maximum performance data / 57 communication number of possible connections / for S7 communication • maximum ilike CPU performance data / IT functions number of possible connections • as email client / maximum 1 performance data / IT functions number of possible connections • as email client / maximum 1 performance data / telecontrol suitability for use • node station • TIM control center • No control center connection • by means of a permanent connection • note protocol / is supported • DNP3 • IEC 60870-5 product function / data buffering if connection is aborted number of data points per station / maximum • in receive direction / maximum • in receive direction / maximum • in receive direction / maximum • program download with SIMATIC STEP 7 product function • program download with SIMATIC STEP 7 • remote firmware update • required • STEP 7 Basic/Professional | • per CPU / maximum | 3 |
| by means of T blocks / maximum like CPU | performance data / open communication | |
| by means of T blocks / maximum like CPU | number of possible connections / for open communication | |
| number of possible connections / for S7 communication • maximum performance data / IT functions number of possible connections • as email client / maximum performance data / telecontrol suitability for use • node station • TM control center control center connection • note 1 | · | like CPU |
| maximum for possible connections a semail client / maximum 1 performance data / It functions a semail client / maximum 1 performance data / tolecontrol suitability for use a node station Yes a tild control center No control center connection For use with TeleControl Server Basic, WinCC and PCS7 supported by means of a permanent connection Connection SCADA system via Telecontrol Server Basic and Standard Telecontrol yes yes a lEC 60870-5 Yes product function / data buffering if connection is aborted number of stations / for direct communication / with Telecontrol Server Basic in send direction / maximum 15 performance data / teleservice diagnostics function / online diagnostics with SIMATIC STEP 7 Yes a required SELP 7 Basic/Professional product functions / diagnostics step 7 Basic/Professional | · | |
| maximum for possible connections a semail client / maximum 1 performance data / It functions a semail client / maximum 1 performance data / tolecontrol suitability for use a node station Yes a tild control center No control center connection For use with TeleControl Server Basic, WinCC and PCS7 supported by means of a permanent connection Connection SCADA system via Telecontrol Server Basic and Standard Telecontrol yes yes a lEC 60870-5 Yes product function / data buffering if connection is aborted number of stations / for direct communication / with Telecontrol Server Basic in send direction / maximum 15 performance data / teleservice diagnostics function / online diagnostics with SIMATIC STEP 7 Yes a required SELP 7 Basic/Professional product functions / diagnostics step 7 Basic/Professional | number of possible connections / for S7 communication | |
| number of possible connections | | like CPU |
| number of possible connections | performance data / IT functions | |
| as a small client / maximum performance data / telecontrol suitability for use • node station • substation • Substation • TIM control center control center connection • hore • note • DNP3 • IEC 60870-5 product function / data buffering if connection is aborted number of data points per station / maximum number of data points per station / maximum • in send direction / maximum • in receive direction / maximum • in receive direction / maximum • performance data / teleservice diagnostics function / online diagnostics with SIMATIC STEP 7 product function • program download with SIMATIC STEP 7 • remode firmware update • required • required • STEP 7 Basic/Professional | | |
| suitability for use | · | 1 |
| suitability for use | | |
| • node station • substation • substation • TIM control center control center connection • by means of a permanent connection • note • note • note • note • DNP3 • IEC 60870-5 product function / data buffering if connection is aborted number of data points per station / maximum pumber of stations / for direct communication / with Telecontrol Server Basic • in send direction / maximum • in receive direction / maximum • in receive direction / online diagnostics with SIMATIC STEP 7 • remote firmware update product functions / management, configuration, engineering configuration software • required Product functions / diagnostics | · | |
| Substation TIM control center TIM control center Tontrol center connection Tontrol center | , | No |
| TilM control center control center connection by means of a permanent connection note Connection to SCADA system via Telecontrol Server Basic and Standard Telecontrol protocols protocol / is supported DNP3 IEC 60870-5 product function / data buffering if connection is aborted number of data points per station / maximum in receive direction / maximum in receive direction / maximum in receive direction / maximum product function / online diagnostics with SIMATIC STEP 7 product function program download with SIMATIC STEP 7 remote firmware update product functions / management, configuration, engineering configuration software required STEP 7 Basic/Professional | | |
| control center connection • by means of a permanent connection • note Connection to SCADA system via Telecontrol Server Basic and Standard Telecontrol protocols protocol / is supported • DNP3 • IEC 60870-5 product function / data buffering if connection is aborted number of data points per station / maximum 200 number of stations / for direct communication / with Telecontrol Server Basic • in send direction / maximum 3 • in receive direction / maximum 15 performance data / teleservice diagnostics function / online diagnostics with SIMATIC STEP 7 • remote firmware update product functions / management, configuration, engineering configuration software • required Product functions / diagnostics STEP 7 Basic/Professional | | |
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| Connection to SCADA system via Telecontrol Server Basic and Standard Telecontrol protocols protocol / is supported DNP3 IEC 60870-5 yes product function / data buffering if connection is aborted rumber of data points per station / maximum 200 number of stations / for direct communication / with Telecontrol Server Basic in send direction / maximum in receive direction / maximum in receive direction / maximum in receive data / teleservice diagnostics function / online diagnostics with SIMATIC STEP 7 product function program download with SIMATIC STEP 7 remote firmware update required STEP 7 Basic/Professional Connection to SCADA system via Telecontrol Server Basic and Standard Telecontr | | |
| Protocol / is supported DNP3 Pes IEC 60870-5 Product function / data buffering if connection is aborted Product function / data points per station / maximum Product function / for direct communication / with Telecontrol Server Basic Performance data / teleservice diagnostics function / online diagnostics with SIMATIC STEP 7 Product function Program download with SIMATIC STEP 7 Product function Product function / management, configuration, engineering Configuration software Product functions / diagnostics | | |
| DNP3 IEC 60870-5 Yes product function / data buffering if connection is aborted number of data points per station / maximum 200 number of stations / for direct communication / with Telecontrol Server Basic in send direction / maximum in receive direction / maximum in receive direction / maximum diagnostics function / online diagnostics with SIMATIC STEP 7 product function program download with SIMATIC STEP 7 remote firmware update remote firmware update product functions / management, configuration, engineering configuration software required STEP 7 Basic/Professional | ● Hote | |
| DNP3 IEC 60870-5 Yes product function / data buffering if connection is aborted number of data points per station / maximum 200 number of stations / for direct communication / with Telecontrol Server Basic in send direction / maximum in receive direction / maximum in receive direction / maximum diagnostics function / online diagnostics with SIMATIC STEP 7 product function program download with SIMATIC STEP 7 remote firmware update remote firmware update product functions / management, configuration, engineering configuration software required STEP 7 Basic/Professional | protocol / is supported | |
| product function / data buffering if connection is aborted number of data points per station / maximum number of stations / for direct communication / with Telecontrol Server Basic • in send direction / maximum • in receive direction / maximum 15 performance data / teleservice diagnostics function / online diagnostics with SIMATIC STEP 7 product function • program download with SIMATIC STEP 7 • remote firmware update product functions / management, configuration, engineering configuration software • required STEP 7 Basic/Professional | | Yes |
| product function / data buffering if connection is aborted number of data points per station / maximum number of stations / for direct communication / with Telecontrol Server Basic • in send direction / maximum • in receive direction / maximum 15 performance data / teleservice diagnostics function / online diagnostics with SIMATIC STEP 7 product function • program download with SIMATIC STEP 7 • remote firmware update product functions / management, configuration, engineering configuration software • required STEP 7 Basic/Professional | • IEC 60870-5 | Yes |
| number of data points per station / maximum number of stations / for direct communication / with Telecontrol Server Basic in send direction / maximum in receive direction / maximum in receive direction / maximum formance data / teleservice diagnostics function / online diagnostics with SIMATIC STEP 7 product function program download with SIMATIC STEP 7 remote firmware update remote firmware update step 7 Basic/Professional product functions / diagnostics STEP 7 Basic/Professional | | Yes; 64,000 events |
| number of stations / for direct communication / with Telecontrol Server Basic • in send direction / maximum • in receive direction / maximum 15 performance data / teleservice diagnostics function / online diagnostics with SIMATIC STEP 7 product function • program download with SIMATIC STEP 7 • remote firmware update product functions / management, configuration, engineering configuration software • required STEP 7 Basic/Professional | <u> </u> | |
| in send direction / maximum in receive direction / maximum formance data / teleservice diagnostics function / online diagnostics with SIMATIC STEP 7 product function program download with SIMATIC STEP 7 remote firmware update product functions / management, configuration, engineering configuration software required STEP 7 Basic/Professional product functions / diagnostics | number of stations / for direct communication / with Telecontrol | |
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| product function • program download with SIMATIC STEP 7 • remote firmware update product functions / management, configuration, engineering configuration software • required product functions / diagnostics STEP 7 Basic/Professional | performance data / teleservice | |
| program download with SIMATIC STEP 7 remote firmware update reduct functions / management, configuration, engineering configuration software required STEP 7 Basic/Professional product functions / diagnostics | diagnostics function / online diagnostics with SIMATIC STEP 7 | Yes |
| remote firmware update product functions / management, configuration, engineering configuration software required STEP 7 Basic/Professional product functions / diagnostics | product function | |
| product functions / management, configuration, engineering configuration software • required STEP 7 Basic/Professional product functions / diagnostics | program download with SIMATIC STEP 7 | Yes |
| configuration software • required STEP 7 Basic/Professional product functions / diagnostics | • remote firmware update | Yes |
| • required STEP 7 Basic/Professional product functions / diagnostics | product functions / management, configuration, engineering | |
| • required STEP 7 Basic/Professional product functions / diagnostics | configuration software | |
| | • required | STEP 7 Basic/Professional |
| product function / web-based diagnostics Yes | product functions / diagnostics | |
| | product function / web-based diagnostics | Yes |

| product functions / security | |
|--|--|
| firewall version | stateful inspection |
| product function / with VPN connection | IPsec, SINEMA RC |
| type of encryption algorithms / with VPN connection | AES-256, AES-192, AES-128, 3DES-168 |
| type of authentication procedure / with VPN connection | Preshared key (PSK), X.509v3 certificates |
| type of hashing algorithms / with VPN connection | MD5, SHA-1, SHA-2 |
| number of possible connections / with VPN connection | 8 |
| product function | |
| password protection for Web applications | No |
| password protection for teleservice access | No |
| encrypted data transmission | Yes |
| ACL - IP-based | No |
| ACL - IP-based for PLC/routing | No |
| switch-off of non-required services | Yes |
| blocking of communication via physical ports | No |
| log file for unauthorized access | No |
| product functions / time | |
| protocol / is supported | |
| NTP | Yes |
| NTP (secure) | Yes |
| time synchronization | |
| • from NTP-server | Yes |
| • from control center | Yes |
| standards, specifications, approvals | 155 |
| reference code | |
| • according to IEC 81346-2:2019 | KEC |
| further information / internet links | NEO |
| internet link | |
| 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 | The state of the s |
| 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 | EMV |

Miscellaneous



Manufacturer Declara-tion







For use in hazardous locations

CCC-Ex





last modified: