

### product type designation



Figure similar

### SIPLUS S7-1200 CP 1243-1 RAIL

SIPLUS S7-1200 CP 1243-1 rail based on 6GK7243-1BX30-0XE0 with conformal coating, -25...+70 °C, OT1 with ST1/2 (+70 °C für 10 minutes), 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)

| transfer rate  |   |
|--|---|
| transfer rate  |   |
| <ul style="list-style-type: none"> <li>at the 1st interface</li> </ul>   | 10 ... 100 Mbit/s   |
| interfaces   |   |
| number of interfaces / according to Industrial Ethernet  | 1   |
| number of electrical connections   |   |
| <ul style="list-style-type: none"> <li>at the 1st interface / according to Industrial Ethernet</li> <li>for power supply</li> </ul>  | 1<br>0  |
| type of electrical connection  |   |
| <ul style="list-style-type: none"> <li>at the 1st interface / according to Industrial Ethernet</li> </ul>  | 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   |   |
| <ul style="list-style-type: none"> <li>from backplane bus / at DC / at 5 V / typical</li> </ul>  | 0.25 A  |
| power loss [W]   | 1.25 W  |
| ambient conditions   |   |
| ambient temperature  |   |
| <ul style="list-style-type: none"> <li>for vertical installation / during operation</li> <li>for horizontally arranged busbars / during operation</li> <li>during storage</li> <li>during transport</li> <li>note</li> </ul> | -25 ... +60 °C<br>-25 ... +70 °C<br>-40 ... +70 °C<br>-40 ... +70 °C<br>+70 °C for 10 min (OT1, ST1/ST2 according to EN 50155)  |
| installation altitude / at height above sea level / maximum  | 2000 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)  |
| relative humidity  |   |
| <ul style="list-style-type: none"> <li>with condensation / according to IEC 60068-2-38 / maximum</li> </ul>  | 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   |   |
| <ul style="list-style-type: none"> <li>conformity according to EN 60721-3-3</li> <li>conformity according to EN 60721-3-5</li> </ul>   | Yes; Class 3B2 mold and fungal spores (excluding fauna), Class 3B3 on request<br>Yes; Class 5B2 mold and fungal spores (excluding fauna), Class 5B3 on request                      |
| resistance to chemically active substances   |   |
| <ul style="list-style-type: none"> <li>conformity according to EN 60721-3-3</li> </ul>   | 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. |

|   |  |
|---|--|
| <ul style="list-style-type: none"> <li>conformity according to EN 60721-3-5</li> </ul>  | Yes; Class 5C3 (RH < 75%) including salt spray acc. to EN 60068-2-52 (Severity level 3). The supplied plug covers must remain in place over the unused interfaces during operation!  |
| resistance to mechanically active substances <ul style="list-style-type: none"> <li>conformity according to EN 60721-3-3</li> <li>conformity according to EN 60721-3-5</li> </ul>                   | Yes; Class 3S4 incl. sand, dust. The supplied plug covers must remain in place over the unused interfaces during operation.<br>Yes; Class 5S3 incl. sand, dust. The supplied plug covers must remain in place over the unused interfaces during operation. |
| coating / for equipped printed circuit board / according to EN 61086  | Yes; Class 2 for high availability   |
| type of coating / protection against pollution according to EN 60664-3  | Yes; Protection of the type 1  |
| type of coating / for electronic devices in railway applications according to EN 50155  | Yes; Protective coating of the Class PC2 according to EN 50155:2017  |
| type of test / of the coating / according to MIL-I-46058C   | Yes; Coating discoloration during service life possible  |
| product conformity / of the coating / Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A   | Yes; Conformal coating, class A  |
| protection class IP   | IP20   |
| <b>design, dimensions and weights</b>   |  |
| module format   | Compact module S7-1200 single width  |
| width   | 30 mm  |
| height  | 110 mm   |
| depth   | 75 mm  |
| net weight  | 0.122 kg   |
| fastening method <ul style="list-style-type: none"> <li>35 mm top hat DIN rail mounting</li> <li>wall mounting</li> </ul>   | Yes<br>Yes   |
| <b>product features, product functions, product components / general</b>  |  |
| number of units <ul style="list-style-type: none"> <li>per CPU / maximum</li> </ul>   | 3  |
| <b>performance data / open communication</b>  |  |
| number of possible connections / for open communication <ul style="list-style-type: none"> <li>by means of T blocks / maximum</li> </ul>  | like CPU   |
| <b>performance data / S7 communication</b>  |  |
| number of possible connections / for S7 communication <ul style="list-style-type: none"> <li>maximum</li> </ul>   | like CPU   |
| <b>performance data / IT functions</b>  |  |
| number of possible connections <ul style="list-style-type: none"> <li>as email client / maximum</li> </ul>  | 1  |
| <b>performance data / telecontrol</b>   |  |
| suitability for use <ul style="list-style-type: none"> <li>node station</li> <li>substation</li> <li>TIM control center</li> </ul>  | No<br>Yes<br>No  |
| control center connection <ul style="list-style-type: none"> <li>by means of a permanent connection</li> <li>note</li> </ul>  | For use with TeleControl Server Basic, WinCC and PCS7 supported<br>Connection to SCADA system via Telecontrol Server Basic and Standard Telecontrol protocols  |
| protocol / is supported <ul style="list-style-type: none"> <li>DNP3</li> <li>IEC 60870-5</li> </ul>   | Yes<br>Yes   |
| product function / data buffering if connection is aborted  | Yes; 64,000 events   |
| number of data points per station / maximum   | 200  |
| number of stations / for direct communication / with Telecontrol Server Basic <ul style="list-style-type: none"> <li>in send direction / maximum</li> <li>in receive direction / maximum</li> </ul> | 3<br>15  |
| <b>performance data / teleservice</b>   |  |
| diagnostics function / online diagnostics with SIMATIC STEP 7   | Yes  |
| product function <ul style="list-style-type: none"> <li>program download with SIMATIC STEP 7</li> <li>remote firmware update</li> </ul>   | Yes<br>Yes   |

| product functions / management, configuration, engineering   |  |
|--|--|
| configuration software   |  |
| <ul style="list-style-type: none"> <li>required</li> </ul>   | STEP 7 Basic/Professional  |
| 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   |  |
| <ul style="list-style-type: none"> <li>password protection for Web applications</li> <li>password protection for teleservice access</li> <li>encrypted data transmission</li> <li>ACL - IP-based</li> <li>ACL - IP-based for PLC/routing</li> <li>switch-off of non-required services</li> <li>blocking of communication via physical ports</li> <li>log file for unauthorized access</li> </ul> | <p>No</p> <p>No</p> <p>Yes</p> <p>No</p> <p>No</p> <p>Yes</p> <p>No</p> <p>No</p>  |
| product functions / time   |  |
| protocol / is supported  |  |
| <ul style="list-style-type: none"> <li>NTP</li> <li>NTP (secure)</li> </ul>  | <p>Yes</p> <p>Yes</p>  |
| time synchronization   |  |
| <ul style="list-style-type: none"> <li>from NTP-server</li> <li>from control center</li> </ul>   | <p>Yes</p> <p>Yes</p>  |
| standards, specifications, approvals   |  |
| certificate of suitability   |  |
| <ul style="list-style-type: none"> <li>fire protection in accordance with EN 45545-2</li> </ul>  | Yes; Railway vehicles - for proof, see Service & Support   |
| railway application  |  |
| certificate of suitability / railway application in accordance with EN 50121-3-2   | Yes; EMC for railway vehicles  |
| certificate of suitability / railway application in accordance with EN 50121-4   | Yes; EMC for signal and telecommunication equipment  |
| certificate of suitability / railway application in accordance with EN 50124-1   | Yes; Railway applications - Overvoltage category OV2 pollution degree PD2 rated impulse voltage UNi = 0.5 kVUNm = DC 24  |
| certificate of suitability / railway application in accordance with EN 50125-1   | Yes; Railway vehicles - See ambient conditions   |
| certificate of suitability / railway application in accordance with EN 50125-2   | Yes; Fixed-electrical installations - see ambient conditions   |
| certificate of suitability / railway application in accordance with EN 50125-3   | Yes; Signal and telecommunications equipment - see Ambient conditions vibrations and shocks: Application point outside the rails (distance 1 m to 3 m from rail)   |
| certificate of suitability / railway application in accordance with EN 50155   | Yes; Railway vehicles - temperature class OT1, ST1/ST2, horizontal mounting position   |
| certificate of suitability / railway application in accordance with EN 61373   | Yes; Railway vehicles - Vibrations and shocks Category 1 Class A/B   |
| further information / internet links   |  |
| internet link  |  |
| <ul style="list-style-type: none"> <li>to web page: selection aid TIA Selection Tool</li> <li>to website: Industrial communication</li> <li>to website: Industry Mall</li> <li>to website: Information and Download Center</li> <li>to website: Image database</li> <li>to website: CAX-Download-Manager</li> <li>to website: Industry Online Support</li> </ul>                                 | <p><a href="http://www.siemens.com/snst">http://www.siemens.com/snst</a></p> <p><a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a></p> <p><a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a></p> <p><a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a></p> <p><a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a></p> <p><a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a></p> <p><a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a></p> |
| 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   |

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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)

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