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Data sheet 6AG2243-1BX30-1XE0

product type designation	**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)



Figure similar

Technical Product Detail Page	https://i.siemens.com/1P6AG2243-1BX30-1XE0
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	-25 ... +60 °C
● for horizontally arranged busbars / during operation	-25 ... +70 °C
● during storage	-40 ... +70 °C
● during transport	-40 ... +70 °C
● note	+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	
● 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 60721-3-5	Yes; Class 5B2 mold and fungal spores (excluding fauna), Class 5B3 on request
resistance to chemically active substances	

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● 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 60721-3-5	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	
● 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.
● conformity according to EN 60721-3-5	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
design, dimensions and weights	
module format	Compact module S7-1200 single width
width	30 mm
height	110 mm
depth	75 mm
net weight	0.122 kg
fastening method	
● 35 mm DIN-rail mounting	Yes
● wall mounting	Yes
product features, product functions, product components / general	
number of units	
● per CPU / maximum	3
product functions / cloud connectivity	
protocol / is supported	
● Message Queuing Telemetry Transport (MQTT)	Yes
● Advanced Message Queuing Protocol (AMQP)	No
product function / for cloud connectivity	
● trigger management	Yes
● time stamping	Yes
product feature / for cloud connectivity / buffered message frame memory	No
number of active connections / for cloud connectivity	1
number of data points per device / maximum	500
performance data / open communication	
number of possible connections / for open communication	
● by means of T blocks / maximum	like CPU
performance data / S7 communication	
number of possible connections / for S7 communication	
● maximum	like CPU
performance data / IT functions	
number of possible connections	
● as email client / maximum	1
performance data / telecontrol	
suitability for use	
● node station	No
● substation	Yes
● TIM control center	No
control center connection	For use with TeleControl Server Basic, WinCC and PCS7
● by means of a permanent connection	supported
● note	Connection to SCADA system via Telecontrol Server Basic and Standard

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	Telecontrol protocols
protocol / is supported	
● DNP3	Yes
● IEC 60870-5	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	
● in send direction / maximum	3
● in receive direction / maximum	15
performance data / teleservice	
diagnostics function / online diagnostics with SIMATIC STEP 7	Yes
product function	
● program download with SIMATIC STEP 7	Yes
● remote firmware update	Yes
product functions / management, configuration, engineering	
configuration software	
● required	STEP 7 Basic/Professional
product function / is supported / identification link	Yes; acc. to IEC 61406-1:2022
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
product functions / position detection	
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 signaling and telecommunications 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	Yes; Railway vehicles - Vibrations and shocks Category 1 Class A/B

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EN 61373	
certificate of suitability / fire protection in accordance with EN 45545-2	Yes; Railway vehicles - for proof, see Service & Support

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://siemens.com/cax
● to website: Industry Online Support	https://support.industry.siemens.com

security information

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Approvals / Certificates

General Product Approval

Manufacturer Declaration

China RoHS

EMV

Railway

Confirmation

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