SIEMENS

Data sheet	6AG1243-1BX30-2AX0

Product type designation	**SIPLUS S7-1200 CP 1243-1** SIPLUS S7-1200 CP 1243-1 -40...+70°C with conformal coating based on 6GK7243-1BX30-0XE0 . Communications Processor CP 1243-1 for connecting SIMATIC S7-1200 as additional Ethernet interface and for connection to control center via remote system protocols (DNP3, IEC 60870, TeleControl Basic), Security (Firewall, VPN)

Transfer rate

Transfer rate	
• at the 1st interface	10 ... 100 Mbit/s

Interfaces

Number of interfaces / acc. to Industrial Ethernet	1
Number of electrical connections	
• at the 1st interface / acc. to Industrial Ethernet	1
• for power supply	0
Type of electrical connection	
• at the 1st interface / acc. 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 / acc. 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 acc. to EN 60721-3-3	Yes; Class 3B2 mold and fungal spores (excluding fauna), Class 3B3 on request
• conformity acc. to EN 60721-3-6	Yes; Class 6B2 mold, fungal and dry rot spores (excluding fauna)
Resistance to chemically active substances	
• conformity acc. 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 acc. to EN 60721-3-6	Yes
Resistance to mechanically active substances	
• conformity acc. 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 acc. 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.
Coating / for equipped printed circuit board / acc. 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 test / of the coating / acc. 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 acc. 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
Mounting type	
• 35 mm DIN rail mounting	Yes
• wall mounting	Yes

Product features, product functions, product components / general

Number of units	
• per CPU / maximum	3

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 e-mail 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 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 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

Further information / Internet-Links

Internet-Link	
• to website: Selector SIMATIC NET SELECTION TOOL	http://www.siemens.com/snst
• to website: Industrial communication	http://www.siemens.com/simatic-net
• to website: Industry Mall	https://mall.industry.siemens.com
• to website: Information and Download Center	http://www.siemens.com/industry/infocenter
• to website: Image database	http://automation.siemens.com/bilddb

• to website: CAx Download Manager	http://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 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)
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