

SIPLUS S7-1200 CP 1243-1 RAIL -25 ... +70°C (T1 with 70°C for 10 Min) with conformal coating based on 6GK7243-1BX30-0XE0



Figure similar

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	
<ul style="list-style-type: none"> • for vertical installation / during operation 	-25 ... +60 °C
<ul style="list-style-type: none"> • for horizontally arranged busbars / during operation 	-25 ... +70 °C
<ul style="list-style-type: none"> • during storage 	-40 ... +70 °C
<ul style="list-style-type: none"> • during transport 	-40 ... +70 °C
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"> • 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	
<ul style="list-style-type: none"> • conformity acc. to EN 60721-3-3 	Yes; Class 3B2 mold and fungal spores (excluding fauna), Class 3B3 on request
<ul style="list-style-type: none"> • conformity acc. to EN 60721-3-5 	Yes; Class 5B2 mold and fungal spores (excluding fauna), Class 5B3 on request
resistance to chemically active substances	
<ul style="list-style-type: none"> • 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.
<ul style="list-style-type: none"> • conformity acc. to EN 60721-3-5 	Yes; Class 5C3 (RH < 75 %) incl. salt spray in accordance with EN 50155 (ST2). 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"> • 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.
<ul style="list-style-type: none"> • conformity acc. 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 / 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 coating / for electronic devices in railway applications acc. to EN 50155	Yes; Protective coating of the Class PC2 according to EN 50155:2017
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 supported
• by means of a permanent connection	
• 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
standards, specifications, approvals	
certificate of suitability / fire protection in accordance with EN 45545-2	Yes; Railway vehicles - Documentation on request
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 $U_{Ni} = 0.5 \text{ kVUNm} = \text{DC } 24$
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 T1, horizontal mounting position, salt spray class ST2
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	
• to website: Selector TIA 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	<p>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)</p>
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