

product type designation

CP 1628



***** spare part ***** communications processor CP 1628 PCI express X1 (3, 3 V/12 V) for connection to Industrial Ethernet (10/100/1000 Mbps) with 2-port switch (RJ45) and integrated security (firewall VPN) via HARDNET-IE S7 and S7-REDCONNECT operating system support, see SIMATIC NET software. See SIOS ID: 109817613

product brand name

SIMATIC NET

transfer rate

transfer rate 10, 100, 1000 Mbit/s

interfaces

number of electrical connections

- at the 1st interface / according to Industrial Ethernet 2
- for power supply 1

type of electrical connection

- at the 1st interface / according to Industrial Ethernet RJ45 port
- of the backplane bus PCI Express x1
- for power supply 2-pole terminal block

supply voltage, current consumption, power loss

type of voltage / of the supply voltage DC

type of voltage supply / optional external power supply Yes

supply voltage

- 1 / from backplane bus 3.3 V
- 2 / from backplane bus 12 V
- external 24 V
- external 10.5 ... 32 V

relative symmetrical tolerance / at DC

- at 3.3 V 9 %
- at 5 V 5 %
- at 12 V 8 %
- at 24 V 33 %

consumed current

- 1 / from backplane bus / at DC / maximum 0.85 A
- 2 / from backplane bus / at DC / maximum 0.4 A
- from external supply voltage / at DC / at 12 V / maximum 0.55 A
- from external supply voltage / at DC / at 24 V / maximum 0.3 A

power loss [W] 7.6 W

power loss [W] / in switch mode / maximum 7.2 W

ambient conditions

ambient temperature

- during operation 5 ... 55 °C
- during storage -20 ... +60 °C
- during transport -20 ... +60 °C

relative humidity / at 25 °C / without condensation / during operation / maximum 95 %

protection class IP	IP00
design, dimensions and weights	
module format	PCI Express x1 (half length)
width	18 mm
height	111 mm
depth	167 mm
net weight	124 g
product features, product functions, product components / general	
number of plug-in cards of same design / plug-in / per PC station	4
number of units / note	-
performance data / open communication	
software / for open communication / by means of SEND/RECEIVE / required	Yes, HARDNET-IE S7 (S7-1613)
number of possible connections / for open communication / by means of SEND/RECEIVE / maximum	120
performance data / S7 communication	
software / for S7 communication / required	Yes, HARDNET-IE S7 (S7-1613)
number of possible connections / for S7/PG communication / maximum	120
number of possible connections / for optimized S7 communication / maximum	64
performance data / multi-protocol mode	
number of active connections / with multi-protocol mode	120
number of configurable connections / per PC station	207
performance data / PROFINET CBA	
software / for PROFINET CBA communication / required	Yes, PN CBA OPC server
number of remote connection partners / with PROFINET CBA	228
number of connections / with PROFINET CBA / total	10000
product functions / management, configuration, engineering	
product function / MIB support	Yes
protocol / is supported	
• SNMP v1	Yes
• SNMP v3	Yes
• DCP	Yes
• LLDP	No
configuration software / required	Included in the scope of delivery of the required software product
configuration software / for PROFINET CBA / required	Yes, SIMATIC iMAP
identification & maintenance function	
• I&M0 - device-specific information	Yes
• I&M1 - higher level designation/location designation	Yes
• I&M2 - installation date	No
• I&M3 - comment	No
• I&M4 - signature	No
• I&M4 - OEM data	No
product functions / switch	
product feature / switch	Yes
product function / switch-managed	No
product function / with IRT / PROFINET IO switch	No
product functions / redundancy	
software / for redundancy function / required	Yes, HARDNET-IE S7-REDCONNECT for communication with SIMATIC S7 H systems
product functions / security	
firewall version	stateful inspection
product function / with VPN connection	IPSec
type of encryption algorithms / with VPN connection	AES-256, AES-192, AES-128, 3DES-168, DES-56
type of authentication procedure / with VPN connection	Preshared key (PSK), X.509v3 certificates
type of hashing algorithms / with VPN connection	MD5, SHA-1
number of possible VPN tunnels	64
number of possible connections / for S7 communication	

<ul style="list-style-type: none"> • via ISO and VPN / with S7-REDCONNECT / maximum 	64
<ul style="list-style-type: none"> • via TCP and VPN / with S7-REDCONNECT / maximum 	120
number of available IP addresses / with VPN connection / maximum	16

product functions / time

product function / SICLOCK support	Yes
protocol / is supported / NTP	Yes

further information / internet links

internet link	
<ul style="list-style-type: none"> • to web page: selection aid TIA Selection Tool • to website: Industrial communication • to website: Image database • to website: CAx-Download-Manager • to website: Industry Online Support 	https://www.siemens.com/tstcloud https://www.siemens.com/simatic-net https://www.automation.siemens.com/bilddb https://www.siemens.com/cax https://support.industry.siemens.com

security information

security information	<p>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)</p>
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Approvals / Certificates

General Product Approval

[Declaration of Conformity](#)



EG-Konf.



CCC



[China RoHS](#)

General Product Approval **EMV**

[Miscellaneous](#)



RCM



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