

### Product type designation

### CP 1243-8 IRC

Communications processor CP 1243-8 IRC for operating a SIMATIC S7-1200 in the TeleControl system Professional; for SINAUT ST7; DNP3; IEC60870-5, Station type: RTU; WAN connections: 1) Ethernet 2) Additionally expandable with TS module RS232 or TS module modem or TS module GSM or TS module ISDN; Operation with TIM modules possible



### Transfer rate

#### Transfer rate

- at the 1st interface 10 ... 100 Mbit/s
- at the 2nd interface 0.3 ... 115.2 kbit/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	1
Type of electrical connection	
• at the 1st interface / acc. to Industrial Ethernet	RJ45 port
Type of electrical connection	
• at interface 2 / for external data transmission	Interface to the TS Module
• for power supply	3-pole terminal block

### Supply voltage, current consumption, power loss

Type of voltage / of the supply voltage	DC
Supply voltage / 1 / from backplane bus	5 V

Supply voltage / external	24 V
Supply voltage / external	19.2 ... 28.8 V
Supply voltage / external / at DC / Rated value	24 V
Supply voltage / external / at DC / rated value	19.2 ... 28.8 V
Consumed current	
<ul style="list-style-type: none"> <li>• from backplane bus / at DC / at 5 V / typical</li> </ul>	0.25 A
<ul style="list-style-type: none"> <li>• from external supply voltage / at DC / at 24 V / typical</li> </ul>	0.1 A
Power loss [W]	2.4 W; 1.25 W from S7-1200 backplane without TS module. 2.4 W from 24 V DC external with TS module

### Ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> <li>• for vertical installation / during operation</li> </ul>	-20 ... +60 °C
<ul style="list-style-type: none"> <li>• for horizontally arranged busbars / during operation</li> </ul>	-20 ... +70 °C
<ul style="list-style-type: none"> <li>• during storage</li> </ul>	-40 ... -70 °C
<ul style="list-style-type: none"> <li>• during transport</li> </ul>	-40 ... +70 °C
Relative humidity	
<ul style="list-style-type: none"> <li>• at 25 °C / without condensation / during operation / maximum</li> </ul>	95 %
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	
<ul style="list-style-type: none"> <li>• 35 mm DIN rail mounting</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• S7-300 rail mounting</li> </ul>	No
<ul style="list-style-type: none"> <li>• wall mounting</li> </ul>	Yes

### Product features, product functions, product components / general

Number of units	
<ul style="list-style-type: none"> <li>• per CPU / maximum</li> </ul>	1
<ul style="list-style-type: none"> <li>• Note</li> </ul>	One CP pluggable on left side of CPU, one TS Module pluggable left side of CP.

### Performance data / open communication

Number of possible connections / for open communication	
<ul style="list-style-type: none"> <li>• by means of T blocks / maximum</li> </ul>	like CPU

### Performance data / S7 communication

Number of possible connections / for S7 communication	
<ul style="list-style-type: none"> <li>• maximum</li> <li>• with PG connections / maximum</li> <li>• with OP connections / maximum</li> </ul>	<p>Configured S7-Connection for ST7-Communication</p> <p>2</p> <p>1</p>
Service	
<ul style="list-style-type: none"> <li>• SINAUT ST7 via S7 communication</li> </ul>	Yes

### Performance data / IT functions

Number of possible connections	
<ul style="list-style-type: none"> <li>• as e-mail client / maximum</li> </ul>	1

### Performance data / telecontrol

Suitability for use	
<ul style="list-style-type: none"> <li>• Node station</li> <li>• substation</li> <li>• TIM control center</li> <li>• Note</li> </ul>	<p>No</p> <p>Yes</p> <p>No</p> <p>Ethernet and TS Module can be operated in parallel</p>
Control center connection	
<ul style="list-style-type: none"> <li>• by means of a permanent connection</li> </ul>	control center with ST7 function supported
Protocol / is supported	
<ul style="list-style-type: none"> <li>• DNP3</li> <li>• IEC 60870-5</li> <li>• SINAUT ST7 protocol</li> </ul>	<p>Yes</p> <p>Yes</p> <p>Yes</p>
Product function / data buffering if connection is aborted	Yes; DNP3, IEC60870-5: 64000 events, SINAUT ST7: 16000 telegrams
Number of data points per station / maximum	500
Transmission format	
<ul style="list-style-type: none"> <li>• for SINAUT ST7 protocol with multi-master polling / 10-bit</li> <li>• for SINAUT ST7 protocol with polling or spontaneous / 10-bit or 11-bit</li> </ul>	<p>Yes</p> <p>Yes</p>
Operating mode for scanning of data transmission	
<ul style="list-style-type: none"> <li>• with dedicated line/radio link / with SINAUT ST7 protocol</li> <li>• with dial-up network / with SINAUT ST7 protocol</li> </ul>	<p>Polling</p> <p>spontaneous</p>
Hamming distance	
<ul style="list-style-type: none"> <li>• for SINAUT ST7 protocol</li> </ul>	4

### Performance data / teleservice

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> </ul>	Yes

- Remote firmware update

Yes

### Product functions / management, configuration, engineering

Protocol / is supported	
<ul style="list-style-type: none"> <li>• SNMP v3</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• DCP</li> </ul>	Yes
Configuration software	
<ul style="list-style-type: none"> <li>• required</li> </ul>	SINAUT ES V5.5 and STEP7 V13 SP1 or higher
<ul style="list-style-type: none"> <li>• for PG configuring / required / SINAUT ST7 configuration software for PG</li> </ul>	Yes

### Product functions / Diagnostics

Product function / Web-based diagnostics	Yes
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### Product functions / Security

Firewall version	stateful inspection
Operating mode / Virtual Private Network (VPN)	Yes
Product function / with VPN connection	IPsec, SINEMA RC
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 connections / with VPN connection	8
Product function	
<ul style="list-style-type: none"> <li>• password protection for teleservice access</li> </ul>	No
<ul style="list-style-type: none"> <li>• encrypted data transmission</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• MSC client via GPRS modem with MSC capability</li> </ul>	Yes
Protocol	
<ul style="list-style-type: none"> <li>• is supported / MSC protocol</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• with Virtual Private Network MSC / is supported</li> </ul>	TCP/IP
Key length / for MSC / with Virtual Private Network	128 bit
Number of possible connections	
<ul style="list-style-type: none"> <li>• as MSC client / with VPN connection</li> </ul>	1
<ul style="list-style-type: none"> <li>• as MSC server / with VPN connection</li> </ul>	0

### Product functions / time

Protocol / is supported	
<ul style="list-style-type: none"> <li>• NTP</li> </ul>	Yes
time synchronization	
<ul style="list-style-type: none"> <li>• from NTP-server</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• from control center</li> </ul>	Yes

### accessories

accessories	TS Module RS232 or TS Module MODEM or TS Module ISDN or TS Module GSM pluggable
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**Further information / Internet-Links**

Internet-Link	
<ul style="list-style-type: none"> <li>• to website: Selector SIMATIC NET SELECTION TOOL <a href="http://www.siemens.com/snst">http://www.siemens.com/snst</a></li> <li>• to website: Industrial communication <a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a></li> <li>• to website: Industry Mall <a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a></li> <li>• to website: Information and Download Center <a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a></li> <li>• to website: Image database <a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a></li> <li>• to website: CAx Download Manager <a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a></li> <li>• to website: Industry Online Support <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a></li> </ul>	

**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 <a href="http://www.siemens.com/industrialsecurity">http://www.siemens.com/industrialsecurity</a>. To stay informed about product updates as they occur, sign up for a product-specific newsletter. For more information, visit <a href="http://support.automation.siemens.com">http://support.automation.siemens.com</a>. (V3.4)</p>
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