# SIEMENS

**Data sheet**             **6GK7243-8RX30-0XE0**

| 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; IEC 60870-5, station type: RTU; WAN connections;1) Ethernet 2) Additionally expandable with TS module RS-232 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 / according to Industrial Ethernet | 1 |
| number of electrical connections | |
| ● at the 1st interface / according to Industrial Ethernet | 1 |
| ● for power supply | 1 |
| type of electrical connection | |
| ● at the 1st interface / according 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 | |
| ● from backplane bus / at DC / at 5 V / typical | 0.25 A |
| ● from external supply voltage / at DC / at 24 V / typical | 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 | |
| ● for vertical installation / during operation | -20 ... +60 °C |
| ● for horizontally arranged busbars / during operation | -20 ... +70 °C |
| ● during storage | -40 ... -70 °C |
| ● during transport | -40 ... +70 °C |
| relative humidity | |
| ● at 25 °C / without condensation / during operation / maximum | 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 |
| fastening method | |
| ● 35 mm DIN-rail mounting | Yes |
| ● S7-300 rail mounting | No |
| ● wall mounting | Yes |
| **product features, product functions, product components / general** | |
| number of units | |
| ● per CPU / maximum | 1 |
| ● note | One CP pluggable on left side of CPU, one TS Module pluggable left side of CP. |
| **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 | Configured S7-Connection for ST7-Communication |
| ● with PG connections / maximum | 2 |
| ● with OP connections / maximum | 1 |
| service | |
| ● SINAUT ST7 via S7 communication | Yes |
| **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 |
| ● note | Ethernet and TS Module can be operated in parallel |
| control center connection | control center with ST7 function |
| ● by means of a permanent connection | supported |
| protocol / is supported | |
| ● DNP3 | Yes |
| ● IEC 60870-5 | Yes |
| ● SINAUT ST7 protocol | Yes |
| 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 | |
| ● for SINAUT ST7 protocol with multi-master polling / 10-bit | Yes |
| ● for SINAUT ST7 protocol with polling or spontaneous / 10-bit or 11-bit | Yes |
| operating mode for scanning of data transmission | |
| ● with dedicated line/radio link / with SINAUT ST7 protocol | Polling |
| ● with dial-up network / with SINAUT ST7 protocol | spontaneous |
| hamming distance | |
| ● for SINAUT ST7 protocol | 4 |
| **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** | |
| protocol / is supported | |
| ● SNMP v3 | Yes |
| ● DCP | Yes |
| configuration software | |
| ● required | SINAUT ES V5.5 and STEP7 V13 SP1 or higher |
| ● for PG configuring / required / SINAUT ST7 configuration software for PG | Yes |
| 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 |
| 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 | |
| ● password protection for teleservice access | No |
| ● encrypted data transmission | Yes |
| ● MSC client via GPRS modem with MSC capability | Yes |
| protocol | |
| ● is supported / MSC protocol | Yes |
| ● with Virtual Private Network MSC / is supported | TCP/IP |
| key length / for MSC / with Virtual Private Network | 128 bit |
| number of possible connections | |
| ● as MSC client / with VPN connection | 1 |
| ● as MSC server / with VPN connection | 0 |
| **product functions / time** | |
| protocol / is supported | |
| ● NTP | Yes |
| time synchronization | |
| ● from NTP-server | Yes |
| ● from control center | Yes |
| **standards, specifications, approvals** | |
| reference code | |
| ● according to IEC 81346-2:2019 | KEC |
| **standards, specifications, approvals / Environmental Product Declaration** | |
| Environmental Product Declaration | Yes |
| global warming potential [CO2 eq] | |
| ● total | 89.58 kg |
| ● during manufacturing | 14.29 kg |
| ● during operation | 75.11 kg |
| ● after end of life | 0.18 kg |
| **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** | |
| security information | 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 |

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## Approvals / Certificates

### General Product Approval

| CE EG-Konf. | [Declaration of Conformity](#) | UK CA | CCC | EAC | UL |
|---|---|---|---|---|---|

| General Product Approval | For use in hazardous locations | | | Environment | |
|---|---|---|---|---|---|
| RCM | ATEX | IECEx | [CCC-Ex](#) | [Confirmation](#) | EPD |

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