

## Data sheet

6GK7542-6VX00-0XE0

### product type designation



### CP 1542SP-1 IRC

Communications Processor CP 1542SP-1 IRC for connection of an SIMATIC S7-ET 200SP to Industrial Ethernet, SINAUT ST7, TeleControl Server Basic, IEC 60870-5-104 or DNP3 protocol to a control center; Open IE communication (TCP/IP, ISO-on-TCP, UDP), IP broadcast/multicast, SNMPV1, DHCP, secure email, IPv4/IPv6, support of SINEMA Remote Connect with autoconfiguration; time-of-day synchronization via NTP, access to web server of CPU, BusAdapter required.

Technical Product Detail Page

<https://i.siemens.com/1P6GK7542-6VX00-0XE0>

### transfer rate

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

### interfaces

number of interfaces / according to Industrial Ethernet	1
number of electrical connections	
• at the 1st interface / according to Industrial Ethernet	2
type of electrical connection	
• at the 1st interface / according to Industrial Ethernet	via ET 200SP bus adapter (RJ45, FC, SCRJ), integrated switch

### supply voltage, current consumption, power loss

type of voltage / of the supply voltage	DC
supply voltage	24 V
supply voltage	19.2 ... 28.8 V
power loss [W]	6 W

### ambient conditions

ambient temperature	
• for vertical installation / during operation	-30 ... +50 °C
• for horizontally arranged busbars / during operation	-30 ... +60 °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
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### design, dimensions and weights

width	60 mm
height	117 mm
depth	74 mm
net weight	0.18 kg
fastening method	

• 35 mm DIN-rail mounting	Yes
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### product features, product functions, product components / general

number of units	
• per CPU / maximum	2
• note	2 CPUs can be plugged in per CPU, simultaneous operation with BA Send and CM DP is possible

### performance data / open communication

number of possible connections / for open communication • by means of T blocks / maximum	32
data volume • as user data per ISO on TCP connection / for open communication / by means of T blocks / maximum	65536 byte
<b>performance data / S7 communication</b>	
number of possible connections / for S7 communication • maximum	16
• with OP connections / maximum	16
<b>performance data / multi-protocol mode</b>	
number of active connections / with multi-protocol mode	32
<b>performance data / IT functions</b>	
number of possible connections • as email client / maximum	1
<b>performance data / telecontrol</b>	
suitability for use • node station	No
• substation	Yes
• TIM control center	No
control center connection • by means of a permanent connection	IEC 60870-5, DNP3, (Modbus TCP by block solutions of the CPU) capable control stations, connection to Telecontrol Server Basic and ST7 capable control station
• by means of demand-oriented connection	supported
• note	supported
	Connection to SCADA system by IEC 60870-5 104, DNP3, Telecontrol Server Basic and ST7 capable control center
protocol / is supported • DNP3	Yes
• IEC 60870-5	Yes
• SINAUT ST7 protocol	Yes
product function / data buffering if connection is aborted	Yes; TCSB 64000 events, SINAUT ST7 32000 telegrams, DNP3 100000 events, IEC 60870-5 100000 events
number of data points per station / maximum	1500
number of stations / for direct communication / with Telecontrol Server Basic • in send direction / maximum	3
• in receive direction / maximum	15
<b>product functions / management, configuration, engineering</b>	
product function / MIB support	Yes
protocol / is supported • SNMP v1	Yes
• SNMP v3	Yes
• DCP	Yes
• LLDP	Yes
configuration software • required	STEP 7 Professional V14 (TIA Portal) or higher
identification & maintenance function • I&M0 - device-specific information	Yes
• I&M1 - higher level designation/location designation	Yes
product function / is supported / identification link	Yes; acc. to IEC 61406-1:2022
<b>product functions / diagnostics</b>	
product function / web-based diagnostics	Yes; via ET 200SP CPU
<b>product functions / security</b>	
product function / with VPN connection	SINEMA RC
product function • blocking of communication via physical ports	Yes
<b>product functions / time</b>	
product function / SICLOCK support	Yes
product function / pass on time synchronization	Yes
protocol / is supported	

• NTP	Yes
• NTP (secure)	No
time synchronization	
• from NTP-server	Yes
• from control center	Yes
<b>standards, specifications, approvals</b>	
certificate of suitability / CE marking	Yes
certificate of suitability / UKCA marking	Yes
certificate of suitability / Regulatory Compliance Mark (RCM)	Yes
certificate of suitability / RoHS conformity	Yes
certificate of suitability / EAC approval	Yes
<b>standards, specifications, approvals / hazardous environments / header</b>	
certificate of suitability / ATEX	Yes
certificate of suitability / IECEx	Yes
certificate of suitability / CCC / for hazardous zone according to GB standard	Yes
certificate of suitability / FM registration	Yes
<b>standards, specifications, approvals / Environmental Product Declaration</b>	
Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
• total	207.05 kg
• during manufacturing	19.13 kg
• during operation	187.74 kg
• after end of life	0.18 kg
<b>further information / internet links</b>	
internet link	
• to website: Selection guide for cables and connectors	<a href="https://support.industry.siemens.com/cs/ww/en/view/109766358">https://support.industry.siemens.com/cs/ww/en/view/109766358</a>
• to web page: selection aid TIA Selection Tool	<a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a>
• to website: Industrial communication	<a href="https://www.siemens.com/simatic-net">https://www.siemens.com/simatic-net</a>
• to web page: SiePortal	<a href="https://sieportal.siemens.com/">https://sieportal.siemens.com/</a>
• to website: Image database	<a href="https://www.automation.siemens.com/bilddb">https://www.automation.siemens.com/bilddb</a>
• to website: CAx-Download-Manager	<a href="https://siemens.com/cax">https://siemens.com/cax</a>
• to website: Industry Online Support	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>
<b>security information</b>	
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#### Approvals / Certificates

##### General Product Approval



[Declaration of Conformity](#)



[China RoHS](#)

General Product Approval

For use in hazardous locations



[FM](#)

[CCC-Ex](#)

other

Environment

[Miscellaneous](#)



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