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Data sheet 6GK7545-1GX00-0XE0



Communications processor CP 1545-1 for connection of SIMATIC S7-1500 to Industrial Ethernet; TCP/IP, UDP, S7 communication, Security (firewall), SNMPv1/v3, DHCP, FTP client/server, email, IPv4/IPv6, time-of-day synchronization via NTP, connection to cloud systems via MQTT, 1x RJ45 (10/100/1000 Mbps)

Transfer rate	
Transfer rate	
• at the 1st interface	10 ... 1000 Mbit/s

Interfaces	
Number of interfaces / acc. to Industrial Ethernet	1
Number of electrical connections	
• at the 1st interface / acc. to Industrial Ethernet	1
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	15 V
Relative symmetrical tolerance / at DC	
• at 15 V	3 %
Consumed current	
• from backplane bus / at DC / at 15 V / typical	0.3 A
Power loss [W]	4.5 W

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Ambient conditions	
Ambient temperature	
• for vertical installation / during operation	0 ... 40 °C
• for horizontally arranged busbars / during operation	0 ... 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

Design, dimensions and weights	
Module format	Compact module S7-1500 single width
Width	35 mm
Height	142 mm
Depth	129 mm
Net weight	0.32 kg
Mounting type	
• S7-1500 rail mounting	Yes

Product features, product functions, product components / general	
Number of units	
• per CPU / maximum	8
• Note	depending on CPU type

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 data points per device / maximum	500

Performance data / open communication	
Number of possible connections / for open communication	
• by means of T blocks / maximum	118; depending on the system upper limit
Amount of data	
• as user data per ISO on TCP connection / for open communication / by means of T blocks / maximum	65536 byte

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Number of Multicast stations	118
Performance data / S7 communication	
Number of possible connections / for S7 communication	
• maximum	118; depending on the system upper limit
Performance data / multi-protocol mode	
Number of active connections / with multi-protocol mode	118
Performance data / IT functions	
Number of possible connections	
• as client / by means of FTP / maximum	32
• as server / by means of FTP / maximum	16
Number of possible connections	
• as server / by means of HTTP / maximum	4
• as e-mail client / maximum	1
Amount of data / as user data for email / maximum	64 Kibyte
Performance data / telecontrol	
Protocol / is supported	
• TCP/IP	Yes
Product functions / management, configuration, engineering	
Product function / MIB support	Yes
Protocol / is supported	
• SNMP v1	Yes
• SNMP v3	Yes
• DCP	Yes
• LLDP	Yes
Identification & maintenance function	
• I&M0 - device-specific information	Yes
• I&M1 – higher-level designation/location designation	Yes
Product functions / Diagnostics	
Product function / Web-based diagnostics	Yes; via S7-1500 CPU
Product functions / Routing	
Service / Routing / Note	IP routing up to 1 Mbps
Product function	
• Static IP routing	Yes
• Static IP routing IPv6	No
• dynamic IP routing	No
• dynamic IP routing IPv6	No
Protocol / is supported	

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• RIP v1	No
• RIPv2	No
• RIPnG for IPv6	No
• OSPFv2	No
• OSPFv3 for IPv6	No
• VRRP	No
• VRRP for IPv6	No
• BGP	No
• PPP	No
• PPoE via DSL	No

Product functions / Security

Firewall version	stateful inspection
Product function	
• password protection for Web applications	No
• 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	Yes

Product functions / time

Product function / SICLOCK support	No
Product function / pass on time synchronization	Yes
Protocol / is supported	
• NTP	Yes

Further information / Internet-Links

Internet-Link	
• to website: Selector SIMATIC NET 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

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