SIEMENS

Product data sheet 6GK7443-1GX20-0XE0

COMMUNICATIONS PROCESSOR CP 443-1 ADVANCED FOR CONNECTING SIMATIC S7-400CPU TO INDUSTRIAL ETHERNET: PROFINET IO-CONTROLLER WITH RT AND IRT,
MRP,
PROFINET CBA TCP/IP,ISO,UDP,S7-COM,S5-COMP. COM.(SEND/RECEIVE)W.FETCH/WRITE WITH AND W/O RFC 1006,MULTICAST DIAGNOSTIC EXPANSIONS,SNMP,DHCP FTP CLIENT/SERVER,E-MAIL, DATA STORAGE ON C-PLUG,
PROFINET-SS 4XRJ45(10/100 MBIT) SWITCHED,
GIGABIT-SS 1XRJ45 (10/100/1000 MBIT)

Transmission rate	
Transfer rate	
• at the interface 1	10 … 1000 Mbit/s
• at the interface 2	10 … 100 Mbit/s
Interfaces	
Number of electrical connections	
• at interface 1 / in accordance with Industrial Ethernet	1
• at interface 2 / in accordance with Industrial Ethernet	4
design of the removable storage / C-PLUG	Yes
Supply voltage, current consumption, power loss	
Type of voltage / of supply voltage	DC
Power supply / 1 / from backplane bus	5 V
Relative symmetrical tolerance / at 5 V / with DC	5 %
Consumed current / from backplane bus / at 5 V / for DC / Typical	1.8 A
Resistive loss	7.25 W
Permitted ambient conditions	
Ambient temperature	
• during operating	0 … 60 °C
• during storage	-40 … +70 °C
• during transport	-40 … +70 °C
Relative humidity	

• at 25 °C / without condensation / during operating / maximum	95 %
Protection class IP	IP20
Design, dimensions and weight	
Width	25 mm
Height	290 mm
Depth	210 mm
Net weight	0.7 kg
Product properties, functions, components / general	
Number of units	
• per CPU / maximum	14
Performance data / open communication	
Number of possible connections / for open communication / by means of SEND/RECEIVE blocks / maximum	64
Data volume	
• as user data per ISO connection / for open communication / by means of SEND/RECEIVE blocks / maximum	8 Kibyte
• as user data per ISO on TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum	8 Kibyte
• as user data per TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum	8 Kibyte
• as user data per UDP connection / for open IE communication / by means of SEND/RECEIVE blocks / maximum	2 Kibyte
Number of possible connections / for open communication / by means of T blocks / maximum	64
Data volume / as user data per ISO on TCP connection / for open communication / by means of T blocks / maximum	1452 byte
Performance data / S7 communication	
Number of possible connections / for S7 communication	
• maximum	128
• with PG connections / maximum	2
Performance data / multi-protocol mode	
Number of active connections / with multiprotocol mode	128
Performance data / IT functions	
Number of possible connections	
• as client / by means of FTP / maximum	20
• as server	
• by means of FTP / maximum	10
• by means of HTTP / maximum	4
• as e-mail client / maximum	1
Amount of data / as useful data for e-mail / maximum	8 Kibyte
Storage capacity / of user memory	

• as flash memory file system	30 Mibyte
• as RAM	16 Mibyte
Memory capacity / of the user memory / additionally buffered as RAM via central backup battery	512 Kibyte
Number of possible write cycles / flash memory cells	100000
Performance data / PROFINET communication / as PN IO-Controller	
Number of PN IO-Devices / on PROFINET IO-Controller / usable / total	128
Number of PN IO IRT-Devices / on PROFINET IO-Controller / usable	32
Number of external PN IO lines / with PROFINET / per rack	4
Amount of data	
• as useful data for input variables / as PROFINET IO controller / maximum	4 Kibyte
• as useful data for input variables / with PROFINET IO controller / maximum	4 Kibyte
• as useful data for input variables per PN IO device / with PROFINET IO controller / maximum	240 byte
• as useful data for output variables per PN IO device / with PROFINET IO controller / maximum	240 byte
Performance data / PROFINET CBA	
Number of remote connection partners / with PROFINET CBA	64
Number of connections / with PROFINET CBA / total	600
Amount of data	
• as useful data for digital inputs / with PROFINET CBA / maximum	8 Kibyte
• as useful data for digital outputs / in the case of PROFINET CBA / max.	8 Kibyte
• as useful data for arrays and data types	
• in the case of acyclic transmission / with PROFINET CBA / maximum	8 Kibyte
• in the case of cyclic transmission / with PROFINET CBA / maximum	250 byte
• in the case of local interconnection / with PROFINET CBA / maximum	2400 byte
Performance data / PROFINET CBA / remote connection / with acyclic transmission	
Updating time / of the remote interconnections / in the case of acyclic transmission / with PROFINET CBA	100 ms
Number of remote connections to input variables / with acyclic transmission / with PROFINET CBA / maximum	150
Number of remote connections to output variables / with acyclic transmission / with PROFINET CBA / maximum	150
Amount of data	
• as useful data for remote interconnections with input variables / in the case of acyclic transmission / with PROFINET CBA	8 Kibyte

• as useful data for remote interconnections with output variables / in the case of acyclic transmission / with PROFINET CBA	8 Kibyte
Performance data / PROFINET CBA / remote connection / with cyclic transmission	
Updating time / of the remote interconnections / in the case of acyclic transmission / with PROFINET CBA	10 ms
Number of remote connections to input variables / with cyclic transmission / with PROFINET CBA / maximum	250
Number of remote connections to output variables / with cyclic transmission / with PROFINET CBA / maximum	250
Amount of data	
• as useful data for remote interconnections with input variables / in the case of cyclic transmission / with PROFINET CBA / max.	2000 byte
• as useful data for remote interconnections with output variables / in the case of cyclic transmission / with PROFINET CBA / maximum	2000 byte
Performance data / PROFINET CBA / HMI variables via PROFINET / acyclic	
Number of connectable HMI stations / for HMI variables / with acyclic transmission / with PROFINET CBA	3
Updating time / of the HMI variables / in the case of acyclic transmission / with PROFINET CBA	500 ms
Number of HMI variables / with acyclic transmission / with PROFINET CBA / maximum	200
Amount of data / as useful data for HMI variables / in the case of acyclic transmission / with PROFINET CBA / maximum	8 Kibyte
Performance data / PROFINET CBA / device-internal connections	
Number of internal connections / with PROFINET CBA / maximum	300
Data volume / of internal connections / with PROFINET CBA / maximum	2400 byte
Performance data / PROFINET CBA / connections to constants	
Number of connections to constants / with PROFINET CBA / maximum	500
Amount of data / as useful data for interconnections with constants / in the case of PROFINET CBA / maximum	4000 byte
Performance data / PROFINET CBA / PROFIBUS proxy functionality	
Product function / with PROFINET CBA / PROFIBUS proxy functionality	No
Product functions / management, configuration	
Product function / MIB support	Yes
Protocol / is supported	
• SNMP v1	Yes
• DCP	Yes
• LLDP	Yes

Product functions / Diagnosis	
Product function / Web-based diagnostics	Yes
Product functions / switch	
Product feature / switch	Yes
Product function	
• switch-managed	No
• for IRT / PROFINET IO switch	Yes
• Configuration with STEP 7	Yes
Product functions / Redundancy	
Product function	
• Ring redundancy	Yes
• Redundancy manager	Yes
• MRP redundancy protocol	Yes
Product functions / Security	
Product function	
• password protection for Web applications	Yes
• ACL - IP-based	Yes
• ACL - IP-based for PLC/routing	Yes
• switchoff of non-required services	Yes
• blocking of communication via physical ports	Yes
• log file for unauthorized access	No
Product functions / Time	
Product function	
• SICLOCK support	Yes
• pass on time synchronization	Yes
Protocol / is supported / NTP	Yes
letzte Änderung:	May 14, 2012