SIEMENS

Data sheet 6GK1161-6AA02

Product type designation

CP 1616

COMMUNICATION PROCESSOR CP 1616 PCI-CARD (32 BIT; 33/66MHZ; 3.3/5V) WITH ASIC ERTEC 400 FOR CONNECT. TO PROFINET IO WITH 4-PORT-REAL-TIME-SWITCH (RJ45) VIA DEVELOPMENT KIT DK-16XX PN IO; NCM PC

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

Interfaces	
Number of electrical connections	
• at the 1st interface / acc. to Industrial Ethernet	4
• for power supply	1
Type of electrical connection	
• at the 1st interface / acc. to Industrial Ethernet	RJ45 port
• for power supply	Low-voltage socket for hollow plug 3.5 mm (-) / 1.3 mm (+)

Supply voltage, current consumption, power loss	
Type of voltage / of the supply voltage	DC
Type of voltage supply / optional external supply	Yes
Supply voltage	
• 1 / from backplane bus	5 V
• external	6 ... 9 V
Relative symmetrical tolerance / for DC	
• at 5 V	5 %
• at 12 V	5 %
Consumed current	
• 1 / from backplane bus / for DC / maximum	0.8 A
• from external supply voltage / for DC / at 6 V / maximum	0.65 A

• from external supply voltage / for DC / at 9 V / maximum	0.45 A
Active power loss	4 W
Active power loss / in switch mode / maximum	4.1 W

Permitted ambient conditions	
Ambient temperature	
• during operation	5 ... 70 °C
• during storage	-40 ... +70 °C
• during transport	-20 ... +60 °C
Relative humidity / at 25 °C / without condensation / during operation / maximum	95 %
Protection class IP	IP00

Design, dimensions and weight	
Module format	PCI
Width	18 mm
Height	107 mm
Depth	167 mm
Net weight	110 g
Number of plug-in cards of same design / plug-in / per PC station	1
Number of units / Note	-

Performance data	

Performance data / PROFINET communication / as PN IO-Controller	
Software / for PROFINET IO communication / required	No
Number of PN IO devices / on PROFINET IO controller / usable / total	128
Number of PN IO IRT devices / on PROFINET IO controller / usable	64
Amount of data	
• as user data for input variables / as PROFINET IO controller / maximum	8192 byte
• as user data for input variables / as PROFINET IO controller / maximum	8192 byte
• as user data for input variables per PN IO device / as PROFINET IO controller / maximum	1433 byte
• as user data for output variables per PN IO device / as PROFINET IO controller / maximum	1433 byte

Performance data / PROFINET communication / as PN IO-Device	
Amount of data	
• as user data for input variables / as PROFINET IO device / maximum	1433 byte

• as user data for input variables / as PROFINET IO device / maximum	1433 byte
• as user data for input variables / for each sub-module as PROFINET IO device	254 byte
• as user data for input variables / for each sub-module as PROFINET IO device	254 byte
• as user data for the consistency area for each sub-module	254 byte
Number of submodules / per PROFINET IO-Device	64

Product functions / management, configuration	
Product function / MIB support	Yes
Protocol / is supported	
• SNMP v1	Yes
• DCP	Yes
• LLDP	Yes
Configuration software / required	Included in scope of supply
Identification & maintenance function	
• I&M0 - device-specific information	Yes
• I&M1 – higher-level designation/location designation	Yes
• I&M2 - installation date	Yes
• I&M3 - comment	Yes
• I&M4 - signature	Yes

Product functions / Diagnosis	
Product function	
• Web-based diagnostics	Yes
• Port diagnostics	Yes

Product functions / switch	
Product feature / Switch	Yes
Product function / switch-managed	No
Product function / with IRT / PROFINET IO switch	Yes

Product functions / Redundancy	
Software / for redundancy function / required	No
Product function	
• Ring redundancy	Yes
• Redundancy manager	Yes
Protocol / is supported / Media Redundancy Protocol (MRP)	Yes

Standards, specifications, approvals	
Standard	
• for EMC	89/336/EEC

• for safety / from CSA and UL	CAN/CSA C22.2 & UL 60950-1
• for emitted interference	EN 61000-6-3, EN 61000-6-4
• for interference immunity	EN 61000-6-1, EN 61000-6-2
Certificate of suitability	
• CE marking	Yes
• C-Tick	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	http://www.siemens.com/industrial-controls/mall
• to website: Information and Download Center	http://www.siemens.com/automation/net/catalog
• 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

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