SIEMENS

Data sheet 6GK1160-4AA01

product type designation	**CP 1604**
	Communications processor CP 1604 PC/104 plus card (32-bit; 33/66 MHz; 3.3/5 V) with asic ERTEC 400 for connection to PROFINET IO with 4-port real-time switch via Development kit DK-16XX PN IO; NCM PC.



product brand name	SIMATIC NET
Technical Product Detail Page	https://i.siemens.com/1P6GK1160-4AA01
transfer rate	
transfer rate	100
interfaces	
number of electrical connections	
● at the 1st interface / according to Industrial Ethernet	4
● for power supply	1
type of electrical connection	
● at the 1st interface / according to Industrial Ethernet	RJ45 port via connection board
● of the backplane bus	PCI-104 (32Bit)
● for power supply	4-pole terminal block through power supply board
supply voltage, current consumption, power loss	
type of voltage / of the supply voltage	DC
type of voltage supply / optional external power supply	Yes
supply voltage	
● 1 / from backplane bus	5 V
● external	5 V
● note	optional external power supply and external supply voltage alternatively via power supply board (optional accessory)
relative symmetrical tolerance / at DC	
● at 5 V	5 %
consumed current	
● 1 / from backplane bus / at DC / maximum	0.8 A
● from external supply voltage / at DC / at 24 V / maximum	0.3 A
power loss [W]	4 W
power loss [W] / in switch mode / maximum	4.1 W
ambient conditions	
ambient temperature	
● during operation	5 ... 60 °C
● during storage	-20 ... +60 °C
● during transport	-20 ... +60 °C
relative humidity / at 25 °C / without condensation / during operation / maximum	95 %
protection class IP	IP00
design, dimensions and weights	
module format	PC/104-Plus
width	90 mm

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height	24 mm
depth	95 mm
net weight	110 g
fastening method	Screw mounting
product features, product functions, product components / general	
number of plug-in cards of same design / plug-in / per PC station	1
number of units / note	-
performance data / PROFINET communication / as PN IO controller	
software / for PROFINET IO communication / required	No
number of PN IO devices / on PROFINET IO controller / operable / total	128
number of PN IO IRT devices / on PROFINET IO controller / operable	64
data volume	
● as user data for input variables / as PROFINET IO controller / maximum	8192 byte
● as user data for output variables / as PROFINET IO controller / maximum	8192 byte
● as user data for input variables per PN IO device / as PROFINET IO controller / maximum	1430 byte
● as user data for output variables per PN IO device / as PROFINET IO controller / maximum	1430 byte
performance data / PROFINET communication / as PN IO device	
data volume	
● as user data for input variables / as PROFINET IO device / maximum	1430 byte
● as user data for output variables / as PROFINET IO device / maximum	1430 byte
● as user data for input variables / for each sub-module as PROFINET IO device	254 byte
● as user data for output 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, engineering	
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
● I&M4 - OEM data	Yes
product functions / diagnostics	
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

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● redundancy manager	Yes
protocol / is supported / Media Redundancy Protocol (MRP)	Yes
standards, specifications, approvals	
product function / is supported / identification link	Yes; acc. to IEC 61406-1:2022
standards, specifications, approvals / Environmental Product Declaration	
Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
● total	145.53 kg
● during manufacturing	33.2 kg
● during operation	112.27 kg
● after end of life	0.06 kg
accessories	
accessories	optional: Connection board for CP 1604, power supply board for CP 1604, HARDNET-IE DK (development kit)
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://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 cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement - and continuously maintain - a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under https://www.siemens.com/cert. (V4.7)
Approvals / Certificates	
General Product Approval	

CE EG-Konf.	EAC	China RoHS	Manufacturer Declaration	RCM	China RoHS

Environment	Industrial Communication
EPD	PROFINET

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