

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.



transfer rate	
transfer rate	100 Mbit/s
interfaces	
number of electrical connections	
<ul style="list-style-type: none"> <li>at the 1st interface / according to Industrial Ethernet</li> <li>for power supply</li> </ul>	4 1
type of electrical connection	
<ul style="list-style-type: none"> <li>at the 1st interface / according to Industrial Ethernet</li> <li>for power supply</li> </ul>	RJ45 port via connection board 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	
<ul style="list-style-type: none"> <li>1 / from backplane bus</li> <li>external</li> <li>note</li> </ul>	5 V 5 V optional external power supply and external supply voltage alternatively via power supply board (optional accessory)
relative symmetrical tolerance / at DC	
<ul style="list-style-type: none"> <li>at 5 V</li> </ul>	5 %
consumed current	
<ul style="list-style-type: none"> <li>1 / from backplane bus / at DC / maximum</li> <li>from external supply voltage / at DC / at 24 V / maximum</li> </ul>	0.8 A 0.3 A
power loss [W]	4 W
power loss [W] / in switch mode / maximum	4.1 W
ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> <li>during operation</li> <li>during storage</li> <li>during transport</li> </ul>	5 ... 60 °C -20 ... +60 °C -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
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	
<ul style="list-style-type: none"> <li>as user data for input variables / as PROFINET IO controller / maximum</li> </ul>	8192 byte
<ul style="list-style-type: none"> <li>as user data for output variables / as PROFINET IO controller / maximum</li> </ul>	8192 byte
<ul style="list-style-type: none"> <li>as user data for input variables per PN IO device / as PROFINET IO controller / maximum</li> </ul>	1430 byte
<ul style="list-style-type: none"> <li>as user data for output variables per PN IO device / as PROFINET IO controller / maximum</li> </ul>	1430 byte
performance data / PROFINET communication / as PN IO device	
data volume	
<ul style="list-style-type: none"> <li>as user data for input variables / as PROFINET IO device / maximum</li> </ul>	1430 byte
<ul style="list-style-type: none"> <li>as user data for output variables / as PROFINET IO device / maximum</li> </ul>	1430 byte
<ul style="list-style-type: none"> <li>as user data for input variables / for each sub-module as PROFINET IO device</li> </ul>	254 byte
<ul style="list-style-type: none"> <li>as user data for output variables / for each sub-module as PROFINET IO device</li> </ul>	254 byte
<ul style="list-style-type: none"> <li>as user data for the consistency area for each sub-module</li> </ul>	254 byte
number of submodules / per PROFINET IO-Device	64
product functions / management, configuration, engineering	
product function / MIB support	Yes
protocol / is supported	
<ul style="list-style-type: none"> <li>SNMP v1</li> </ul>	Yes
<ul style="list-style-type: none"> <li>DCP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>LLDP</li> </ul>	Yes
configuration software / required	Included in scope of supply
identification & maintenance function	
<ul style="list-style-type: none"> <li>I&amp;M0 - device-specific information</li> </ul>	Yes
<ul style="list-style-type: none"> <li>I&amp;M1 - higher level designation/location designation</li> </ul>	Yes
<ul style="list-style-type: none"> <li>I&amp;M2 - installation date</li> </ul>	Yes
<ul style="list-style-type: none"> <li>I&amp;M3 - comment</li> </ul>	Yes
<ul style="list-style-type: none"> <li>I&amp;M4 - signature</li> </ul>	Yes
<ul style="list-style-type: none"> <li>I&amp;M4 - OEM data</li> </ul>	Yes
product functions / diagnostics	
product function	
<ul style="list-style-type: none"> <li>web-based diagnostics</li> </ul>	Yes
<ul style="list-style-type: none"> <li>port diagnostics</li> </ul>	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	
<ul style="list-style-type: none"> <li>ring redundancy</li> </ul>	Yes
<ul style="list-style-type: none"> <li>redundancy manager</li> </ul>	Yes
protocol / is supported / Media Redundancy Protocol (MRP)	Yes
standards, specifications, approvals	
standard	
<ul style="list-style-type: none"> <li>for EMC</li> </ul>	2004/108/EC
<ul style="list-style-type: none"> <li>for safety / from CSA and UL</li> </ul>	CAN/CSA C22.2 & UL 60950-1

<ul style="list-style-type: none"> <li>• for emitted interference</li> <li>• for interference immunity</li> </ul>	<p>EN 61000-6-3, EN 61000-6-4</p> <p>EN 61000-6-1, EN 61000-6-2</p>
<p>certificate of suitability</p> <ul style="list-style-type: none"> <li>• CE marking</li> <li>• C-Tick</li> </ul>	<p>Yes</p> <p>Yes</p>
<b>accessories</b>	
accessories	optional: Connection board for CP 1604, power supply board for CP 1604, HARDNET-IE DK (development kit)
<b>further information / internet links</b>	
<p>internet link</p> <ul style="list-style-type: none"> <li>• to web page: selection aid TIA Selection Tool</li> <li>• to website: Industrial communication</li> <li>• to website: Industry Mall</li> <li>• to website: Information and Download Center</li> <li>• to website: Image database</li> <li>• to website: CAX-Download-Manager</li> <li>• to website: Industry Online Support</li> </ul>	<p><a href="http://www.siemens.com/tia-selection-tool">http://www.siemens.com/tia-selection-tool</a></p> <p><a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a></p> <p><a href="http://www.siemens.com/industrial-controls/mall">http://www.siemens.com/industrial-controls/mall</a></p> <p><a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a></p> <p><a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a></p> <p><a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a></p> <p><a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a></p>
<b>security information</b>	
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