

### product type designation



Figure similar

### CP 443-1 Advanced

SIPLUS NET CP 443-1 Advanced based on 6GK7443-1GX30-0XE0 with conformal coating, 0...+60 °C, 1x 10/100/1000 Mbps; 4x 10/100 Mbps (IE switch); RJ 45 ports; ISO; TCP; UDP; PROFINET IO controller S7 communication; open communication (send/ receive); S7 routing; IP configuration via DHCP/block; IP access control list; time- of-day synchronization; extended Web diagnostics; fast start up; support for PROFinenergy; IP routing; FTP; web server;

Technical Product Detail Page

<https://l.siemens.com/1P6AG1443-1GX30-4XE0>

### transfer rate

transfer rate

- at the 1st interface 10 ... 1000 Mbit/s
- at the 2nd interface 10 ... 100 Mbit/s

### interfaces

|   |           |
|---|-----------|
| number of interfaces / according to Industrial Ethernet   | 5         |
| number of electrical connections                          |           |
| • at the 1st interface / according to Industrial Ethernet | 1         |
| • at the 2nd interface / according to Industrial Ethernet | 4         |
| type of electrical connection                             |           |
| • at the 1st interface / according to Industrial Ethernet | RJ45 port |
| • at the 2nd interface / according to Industrial Ethernet | RJ45 port |
| design of the removable storage                           |           |
| • C-PLUG  | Yes       |

### supply voltage, current consumption, power loss

|   |       |
|---|-------|
| type of voltage / of the supply voltage         | DC    |
| supply voltage / 1 / from backplane bus         | 5 V   |
| relative symmetrical tolerance / at DC          |       |
| • at 5 V  | 5 %   |
| consumed current                                |       |
| • from backplane bus / at DC / at 5 V / typical | 1.8 A |
| power loss [W]                                  | 9 W   |

### ambient conditions

|  |  |
|--|--|
| ambient temperature  |  |
| • during operation   | 0 ... 60 °C  |
| • during storage   | -40 ... +70 °C   |
| • during transport   | -40 ... +70 °C   |
| installation altitude / at height above sea level / maximum                                | 5000 m   |
| ambient condition / relating to ambient temperature - air pressure - installation altitude | Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax - 20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m) |
| relative humidity  |  |
| • with condensation / according to IEC 60068-2-38 / maximum                                | 100 %; RH including condensation/frost (no commissioning when condensation is present), horizontal installation  |
| chemical resistance / to commercially available cooling lubricants                         | Yes; incl. airborne diesel and oil droplets  |
| resistance to biologically active substances   |  |

|   |   |
|---|---|
| <ul style="list-style-type: none"> <li>conformity according to EN 60721-3-3</li> </ul>  | Yes; Class 3B2 mold and fungal spores (excluding fauna), Class 3B3 on request   |
| <ul style="list-style-type: none"> <li>conformity according to EN 60721-3-6</li> </ul>  | Yes; Class 6B2 mold, fungal and dry rot spores (excluding fauna)  |
| resistance to chemically active substances  |   |
| <ul style="list-style-type: none"> <li>conformity according to EN 60721-3-3</li> </ul>  | Yes; Class 3C4 (RH < 75 %) incl. salt spray in accordance with EN 60068-2-52 (Severity 3). The supplied plug covers must remain in place on the unused interfaces during operation. |
| <ul style="list-style-type: none"> <li>conformity according to EN 60721-3-6</li> </ul>  | Yes   |
| resistance to mechanically active substances  |   |
| <ul style="list-style-type: none"> <li>conformity according to EN 60721-3-3</li> </ul>  | Yes; Class 3S4 incl. sand, dust. The supplied plug covers must remain in place over the unused interfaces during operation.   |
| <ul style="list-style-type: none"> <li>conformity according to EN 60721-3-6</li> </ul>  | Yes; Class 6S3 incl. sand, dust. The supplied plug covers must remain in place over the unused interfaces during operation.   |
| coating / for equipped printed circuit board / according to EN 61086  | Yes; Class 2 for high availability  |
| type of coating / protection against pollution according to EN 60664-3  | Yes; Protection of the type 1   |
| type of test / of the coating / according to MIL-I-46058C   | Yes; Coating discoloration during service life possible   |
| product conformity / of the coating / Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A   | Yes; Conformal coating, class A   |
| protection class IP   | IP20  |
| <b>design, dimensions and weights</b>   |   |
| module format   | Compact module S7-400 single width  |
| width   | 25 mm   |
| height  | 290 mm  |
| depth   | 210 mm  |
| net weight  | 0.7 kg  |
| <b>product features, product functions, product components / general</b>  |   |
| number of units   |   |
| <ul style="list-style-type: none"> <li>per CPU / maximum</li> </ul>   | 14  |
| <ul style="list-style-type: none"> <li>note</li> </ul>  | max. 4 as PN IO ctrl.   |
| <b>performance data / open communication</b>  |   |
| number of possible connections / for open communication / by means of SEND/RECEIVE blocks / maximum   | 64  |
| data volume   |   |
| <ul style="list-style-type: none"> <li>as user data per ISO connection / for open communication / by means of SEND/RECEIVE blocks / maximum</li> </ul>        | 8 Kibyte  |
| <ul style="list-style-type: none"> <li>as user data per ISO on TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum</li> </ul> | 8 Kibyte  |
| <ul style="list-style-type: none"> <li>as user data per TCP connection / for open communication / by means of SEND/RECEIVE blocks / maximum</li> </ul>        | 8 Kibyte  |
| <ul style="list-style-type: none"> <li>as user data per UDP connection / for open IE communication / by means of SEND/RECEIVE blocks / maximum</li> </ul>     | 2 Kibyte  |
| number of possible connections / for open communication   |   |
| <ul style="list-style-type: none"> <li>by means of T blocks / maximum</li> </ul>  | 64  |
| data volume   |   |
| <ul style="list-style-type: none"> <li>as user data per ISO on TCP connection / for open communication / by means of T blocks / maximum</li> </ul>            | 1452 byte   |
| <b>performance data / S7 communication</b>  |   |
| number of possible connections / for S7 communication   |   |
| <ul style="list-style-type: none"> <li>maximum</li> </ul>   | 128; when using several CPUs  |
| <ul style="list-style-type: none"> <li>with PG connections / maximum</li> </ul>   | 2   |
| <b>performance data / multi-protocol mode</b>   |   |
| number of active connections / with multi-protocol mode   | 128   |
| <b>performance data / IT functions</b>  |   |
| number of possible connections  |   |
| <ul style="list-style-type: none"> <li>as client / by means of FTP / maximum</li> </ul>   | 20  |
| <ul style="list-style-type: none"> <li>as server / by means of FTP / maximum</li> </ul>   | 10  |
| number of possible connections  |   |

|  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• as server / by means of HTTP / maximum</li> </ul>   | 4  |
| <ul style="list-style-type: none"> <li>• as email client / maximum</li> </ul>  | 1  |
| data volume / as user data for email / maximum   | 8 Kibyte   |
| storage capacity / of the user memory  |  |
| <ul style="list-style-type: none"> <li>• as flash memory file system</li> </ul>  | 30 Miabyte   |
| <ul style="list-style-type: none"> <li>• as RAM</li> </ul>   | 16 Miabyte   |
| <ul style="list-style-type: none"> <li>• additionally buffered as RAM via central backup battery</li> </ul>  | 512 Kibyte   |
| number of possible write cycles / of the flash memory cells  | 100000   |
| <b>performance data / PROFINET communication / as PN IO controller</b>   |  |
| product function / PROFINET IO controller  | Yes  |
| number of PN IO devices / on PROFINET IO controller / operable / total   | 128  |
| number of PN IO IRT devices / on PROFINET IO controller / operable   | 64   |
| number of external PN IO lines / with PROFINET / per rack  | 4  |
| data volume  |  |
| <ul style="list-style-type: none"> <li>• as user data for input variables / as PROFINET IO controller / maximum</li> </ul>                                       | 8 Kibyte   |
| <ul style="list-style-type: none"> <li>• as user data for output variables / as PROFINET IO controller / maximum</li> </ul>                                      | 8 Kibyte   |
| <ul style="list-style-type: none"> <li>• as user data for input variables per PN IO device / as PROFINET IO controller / maximum</li> </ul>                      | 1433 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>                     | 1433 byte  |
| <ul style="list-style-type: none"> <li>• as user data for input variables per PN IO device / for each sub-module as PROFINET IO controller / maximum</li> </ul>  | 240 byte   |
| <ul style="list-style-type: none"> <li>• as user data for output variables per PN IO device / for each sub-module as PROFINET IO controller / maximum</li> </ul> | 240 byte   |
| <b>performance data / telecontrol</b>  |  |
| protocol / is supported  |  |
| <ul style="list-style-type: none"> <li>• TCP/IP</li> </ul>   | Yes  |
| <b>product functions / management, configuration, engineering</b>  |  |
| 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>• SNMP v3</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   |  |
| <ul style="list-style-type: none"> <li>• required</li> </ul>   | STEP 7 V5.5 SP3 or higher / STEP 7 Professional V12 (TIA Portal) or higher |
| product function / is supported / identification link  | Yes; acc. to IEC 61406-1:2022  |
| <b>product functions / diagnostics</b>   |  |
| product function / web-based diagnostics   | Yes  |
| <b>product functions / switch</b>  |  |
| product feature / switch   | Yes  |
| product function   |  |
| <ul style="list-style-type: none"> <li>• switch-managed</li> </ul>   | No   |
| <ul style="list-style-type: none"> <li>• with IRT / PROFINET IO switch</li> </ul>  | Yes  |
| <ul style="list-style-type: none"> <li>• configuration with STEP 7</li> </ul>  | Yes  |
| <b>product functions / redundancy</b>  |  |
| 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  |
| <b>product functions / security</b>  |  |
| firewall version   | stateful inspection  |
| product function / with VPN connection   | IPSec  |
| type of encryption algorithms / with VPN connection  | AES-256, AES-192, AES-128, 3DES-168, DES-56                                |
| type of authentication procedure / with VPN connection   | Preshared key (PSK), X.509v3 certificates                                  |
| type of hashing algorithms / with VPN connection   | MD5, SHA-1   |
| number of possible connections / with VPN connection   | 32   |

|  |     |
|--|-----|
| product function                               |     |
| • password protection for Web applications     | Yes |
| • ACL - IP-based                               | Yes |
| • ACL - IP-based for PLC/routing               | Yes |
| • switch-off 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 |
| product function / pass on time synchronization | Yes |
| protocol / is supported                         |     |
| • NTP   | Yes |

**further information / internet links**

|   |   |
|---|---|
| internet link   |   |
| • to website: Selection guide for cables and connectors | <a href="https://support.industry.siemens.com/cs/ww/en/view/109766358">https://support.industry.siemens.com/cs/ww/en/view/109766358</a> |
| • to web page: selection aid TIA Selection Tool         | <a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a>   |
| • to website: Industrial communication                  | <a href="https://www.siemens.com/simatic-net">https://www.siemens.com/simatic-net</a>   |
| • to web page: SiePortal                                | <a href="https://sieportal.siemens.com/">https://sieportal.siemens.com/</a>   |
| • to website: Image database                            | <a href="https://www.automation.siemens.com/bilddb">https://www.automation.siemens.com/bilddb</a>                                       |
| • to website: CAX-Download-Manager                      | <a href="https://siemens.com/cax">https://siemens.com/cax</a>   |
| • to website: Industry Online Support                   | <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>   |

**security information**

|                      |  |
|----------------------|--|
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|----------------------|--|

**Approvals / Certificates**

**General Product Approval**



[Manufacturer Declaration](#)



[China RoHS](#)



[China RoHS](#)

**General Product Approval**      **EMV**      **For use in hazardous locations**



[CCC-Ex](#)

**For use in hazardous locations**



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last modified:

3/10/2026 