# SIEMENS

**Data sheet**                                                    **6GK7542-5FX00-0XE0**

| product type designation | CP 1542-5 |
|---|---|

Communications processor CP 1542-5 for connection of SIMATIC S7-1500 to PROFIBUS DP, DPV1 master or DP slave, S7 and PG/OP communication, time-of-day synchronization, diagnostics, reduced quantity structure.

| **transfer rate** | |
|---|---|
| transfer rate | |
| ● at the 1st interface / according to PROFIBUS | 9.6 kbit/s ... 12 Mbit/s |
| **interfaces** | |
| number of interfaces / according to Industrial Ethernet | 0 |
| number of electrical connections | |
| ● at the 1st interface / according to PROFIBUS | 1 |
| type of electrical connection | |
| ● at the 1st interface / according to PROFIBUS | 9-pin Sub-D socket (RS485) |
| **supply voltage, current consumption, power loss** | |
| type of voltage / of the supply voltage | DC |
| supply voltage / 1 / from backplane bus | 15 V |
| relative symmetrical tolerance / at DC | |
| ● at 15 V | 3 % |
| consumed current | |
| ● from backplane bus / at DC / at 15 V / typical | 0.1 A |
| power loss [W] | 1.5 W |
| **ambient conditions** | |
| ambient temperature | |
| ● for vertical installation / during operation | 0 ... 40 °C |
| ● for horizontally arranged busbars / during operation | 0 ... 60 °C |
| ● during storage | -40 ... +70 °C |
| ● during transport | -40 ... +70 °C |
| relative humidity | |
| ● at 25 °C / without condensation / during operation / maximum | 95 % |
| protection class IP | IP20 |
| **design, dimensions and weights** | |
| module format | Compact module S7-1500 single width |
| width | 35 mm |
| height | 142 mm |
| depth | 129 mm |
| net weight | 0.27 kg |
| fastening method | |
| ● S7-1500 rail mounting | Yes |
| **product features, product functions, product components / general** | |
| number of units | |
| ● per CPU / maximum | 8 |
| ● note | depending on CPU type |

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| performance data / PROFIBUS DP | |
|---|---|
| service / as DP master | |
| ● DPV1 | Yes |
| number of DP slaves | |
| ● on DP master / operable | 32 |
| data volume | |
| ● of the address range of the inputs / as DP master / total | 2048 byte |
| ● of the address range of the outputs / as DP master / total | 2048 byte |
| ● of the address range of the inputs / per DP slave | 244 byte |
| ● of the address range of the outputs / per DP slave | 244 byte |
| service / as DP slave | |
| ● DPV0 | Yes |
| ● DPV1 | Yes |
| data volume | |
| ● of the address range of the inputs / as DP slave / total | 240 byte |
| ● of the address range of the outputs / as DP slave / total | 240 byte |

| performance data / S7 communication | |
|---|---|
| number of possible connections / for S7 communication | |
| ● maximum | 16; depending on the system upper limit |

| performance data / multi-protocol mode | |
|---|---|
| number of active connections / with multi-protocol mode | 16 |

| performance data / telecontrol | |
|---|---|
| protocol / is supported | |
| ● TCP/IP | No |

| product functions / management, configuration, engineering | |
|---|---|
| configuration software | |
| ● required | STEP 7 Professional V12 SP1 (TIA Portal) or higher |
| identification & maintenance function | |
| ● I&M0 - device-specific information | Yes |
| ● I&M1 - higher level designation/location designation | Yes |

| product functions / diagnostics | |
|---|---|
| product function / web-based diagnostics | Yes; via S7-1500 CPU |

| product functions / time | |
|---|---|
| product function / pass on time synchronization | Yes |

| standards, specifications, approvals / hazardous environments | |
|---|---|
| certificate of suitability / CCC / for hazardous zone according to GB standard | Yes |

| further information / internet-Links | |
|---|---|
| Internet-Link | |
| ● to web page: selection aid TIA Selection Tool | http://www.siemens.com/tia-selection-tool |
| ● to website: Industrial communication | http://www.siemens.com/simatic-net |
| ● to website: Industry Mall | https://mall.industry.siemens.com |
| ● to website: Information and Download Center | http://www.siemens.com/industry/infocenter |
| ● 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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