

product type designation	CM 1542-1
Technical Product Detail Page	https://l.siemens.com/1P6GK7542-1AX10-0XE0
transfer rate	
transfer rate	100 Mbit/s
<ul style="list-style-type: none"> at the 1st interface 	
interfaces	
number of interfaces / according to Industrial Ethernet	1
number of electrical connections	2
<ul style="list-style-type: none"> at the 1st interface / according to Industrial Ethernet 	
type of electrical connection	RJ45 port
<ul style="list-style-type: none"> at the 1st interface / according to Industrial Ethernet 	
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	3 %
<ul style="list-style-type: none"> at 15 V 	
consumed current	0.22 A
<ul style="list-style-type: none"> from backplane bus / at DC / at 15 V / typical 	
power loss [W]	3.3 W
ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> for vertical installation / during operation for horizontally arranged busbars / during operation during storage during transport note 	-30 ... +40 °C -30 ... +60 °C -40 ... +70 °C -40 ... +70 °C without condensation or icing
installation altitude / at height above sea level / maximum	5000 m
ambient condition / relating to ambient temperature - air pressure - installation altitude	restrictions for installation altitudes > 2 000 m, see manual
relative humidity	95 %
<ul style="list-style-type: none"> at 25 °C / without condensation / during operation / maximum 	
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	0.4 kg
fastening method	Yes
<ul style="list-style-type: none"> S7-1500 rail mounting 	
product features, product functions, product components / general	
number of units	8
<ul style="list-style-type: none"> per CPU / maximum note 	depending on CPU type
performance data / open communication	
number of possible connections / for open communication	64; depending on the system upper limit
<ul style="list-style-type: none"> by means of T blocks / maximum 	

data volume	
<ul style="list-style-type: none"> as user data per ISO on TCP connection / for open communication / by means of T blocks / maximum 	65536 byte
number of Multicast stations	6
performance data / S7 communication	
number of possible connections / for S7 communication	
<ul style="list-style-type: none"> maximum 	64; depending on the system upper limit
performance data / multi-protocol mode	
number of active connections / with multi-protocol mode	64
performance data / PROFINET communication / as PN IO controller	
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	10
data volume	
<ul style="list-style-type: none"> as user data for input variables / as PROFINET IO controller / maximum 	8 Kibyte
<ul style="list-style-type: none"> as user data for output variables / as PROFINET IO controller / maximum 	8 Kibyte
<ul style="list-style-type: none"> as user data for input variables per PN IO device / as PROFINET IO controller / maximum 	1433 byte
<ul style="list-style-type: none"> as user data for output variables per PN IO device / as PROFINET IO controller / maximum 	1433 byte
<ul style="list-style-type: none"> as user data for input variables per PN IO device / for each sub-module as PROFINET IO controller / maximum 	256 byte
<ul style="list-style-type: none"> as user data for output variables per PN IO device / for each sub-module as PROFINET IO controller / maximum 	256 byte
performance data / PROFINET communication / as PN IO device	
product function / PROFINET IO device	Yes
data volume	
<ul style="list-style-type: none"> as user data for input variables / as PROFINET IO device / maximum 	8192 byte
<ul style="list-style-type: none"> as user data for output variables / as PROFINET IO device / maximum 	8192 byte
<ul style="list-style-type: none"> as user data for input variables / for each sub-module as PROFINET IO device 	256 byte
<ul style="list-style-type: none"> as user data for output variables / for each sub-module as PROFINET IO device 	256 byte
<ul style="list-style-type: none"> as user data for the consistency area for each sub-module 	256 byte
number of submodules / per PROFINET IO-Device	32
performance data / telecontrol	
protocol / is supported	
<ul style="list-style-type: none"> TCP/IP 	Yes
product functions / management, configuration, engineering	
product function / MIB support	Yes
protocol / is supported	
<ul style="list-style-type: none"> SNMP v1 DCP LLDP 	Yes Yes Yes
configuration software	
<ul style="list-style-type: none"> required 	STEP 7 Professional V18 (TIA Portal) or higher
identification & maintenance function	
<ul style="list-style-type: none"> I&M0 - device-specific information I&M1 - higher level designation/location designation 	Yes Yes
product function / is supported / identification link	Yes; acc. to IEC 61406-1:2022
product functions / diagnostics	
product function / web-based diagnostics	Yes; via S7-1500 CPU
product functions / switch	
product feature / switch	Yes
product function	

<ul style="list-style-type: none"> • switch-managed 	No
<ul style="list-style-type: none"> • with IRT / PROFINET IO switch 	Yes
<ul style="list-style-type: none"> • configuration with STEP 7 	Yes
product functions / routing	
service / routing / note	IP routing up to 1 Mbps
product function	
<ul style="list-style-type: none"> • static IP routing 	Yes
<ul style="list-style-type: none"> • static IP routing IPv6 	No
<ul style="list-style-type: none"> • dynamic IP routing 	No
<ul style="list-style-type: none"> • dynamic IP routing IPv6 	No
protocol / is supported	
<ul style="list-style-type: none"> • RIP v1 	No
<ul style="list-style-type: none"> • RIPv2 	No
<ul style="list-style-type: none"> • RIPnG for IPv6 	No
<ul style="list-style-type: none"> • OSPFv2 	No
<ul style="list-style-type: none"> • OSPFv3 for IPv6 	No
<ul style="list-style-type: none"> • VRRP 	No
<ul style="list-style-type: none"> • VRRP for IPv6 	No
<ul style="list-style-type: none"> • BGP 	No
<ul style="list-style-type: none"> • PPP 	No
<ul style="list-style-type: none"> • PpOE via DSL 	No
product functions / redundancy	
product function	
<ul style="list-style-type: none"> • ring redundancy 	Yes
<ul style="list-style-type: none"> • redundancy manager 	Yes
protocol / is supported / Media Redundancy Protocol (MRP)	Yes
product functions / security	
product function	
<ul style="list-style-type: none"> • switch-off of non-required services 	Yes
<ul style="list-style-type: none"> • blocking of communication via physical ports 	No
<ul style="list-style-type: none"> • log file for unauthorized access 	No
product functions / time	
product function / SICLOCK support	Yes
product function / pass on time synchronization	Yes
protocol / is supported	
<ul style="list-style-type: none"> • NTP 	Yes
standards, specifications, approvals	
certificate of suitability / CE marking	Yes
certificate of suitability / UKCA marking	Yes
certificate of suitability / cULus approval	Yes
certificate of suitability / KC approval	Yes
certificate of suitability / Regulatory Compliance Mark (RCM)	Yes
certificate of suitability / RoHS conformity	Yes
certificate of suitability / EAC approval	Yes
standards, specifications, approvals / hazardous environments / header	
certificate of suitability / ATEX	Yes
certificate of suitability / IECEx	Yes
certificate of suitability / ULhazloc approval	Yes
certificate of suitability / CCC / for hazardous zone according to GB standard	Yes
certificate of suitability / FM registration	Yes
standards, specifications, approvals / Environmental Product Declaration	
Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
<ul style="list-style-type: none"> • total 	124.91 kg
<ul style="list-style-type: none"> • during manufacturing 	21.24 kg
<ul style="list-style-type: none"> • during operation 	103.32 kg
<ul style="list-style-type: none"> • after end of life 	0.35 kg
further information / internet links	

internet link

- to website: Selection guide for cables and connectors
- to web page: selection aid TIA Selection Tool
- to website: Industrial communication
- to web page: SiePortal
- to website: Image database
- to website: CAx-Download-Manager
- to website: Industry Online Support

- <https://support.industry.siemens.com/cs/ww/en/view/109766358>
- <https://www.siemens.com/tstcloud>
- <https://www.siemens.com/simatic-net>
- <https://sieportal.siemens.com/>
- <https://www.automation.siemens.com/bilddb>
- <https://siemens.com/cax>
- <https://support.industry.siemens.com>

security information

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Approvals / Certificates

General Product Approval		EMV	For use in hazardous locations	
		China RoHS		
CCC-Ex		PROFINET		

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