SIMATIC S7-300 advanced controller

I/O modules Communication

CP 342-5

Overview



DP-M	DP-S	FMS	PG/OP	S7/S5	
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- PROFIBUS DP master or slave with electrical interface for connecting the SIMATIC S7-300 to PROFIBUS at up to 12 Mbit/s (including 45.45 kbit)
- Communication services:PROFIBUS DP

 - PG/OP communication (OP multiplexing)

 - S7 communication (client, server)
 Open communication (SEND/RECEIVE)
- Easy configuration and programming over PROFIBUS
- Cross-network programming device communication through
- Modules can be replaced without the need for a PG

Technical specifications

Article number	6GK7342-5DA03-0XE0	
Product type designation	CP 342-5	
Transmission rate		
Transfer rate		
 at the 1st interface acc. to PROFIBUS 	9.6 kbit/s 12 Mbit/s	
Interfaces		
Number of interfaces acc. to Industrial Ethernet	0	
Number of electrical connections		
 at the 1st interface acc. to PROFIBUS 	1	
• for power supply	1	
Type of electrical connection		
 at the 1st interface acc. to PROFIBUS 	9-pin Sub-D socket (RS485)	
• for power supply	4-pole terminal block	
Supply voltage, current consumption, power loss		
Type of voltage of the supply voltage	DC	
Supply voltage 1 from backplane bus	5 V	
Supply voltage external	24 V	
Relative positive tolerance for DC at 24 V	20 %	
Relative negative tolerance for DC at 24 V	15 %	
Consumed current		
 from backplane bus for DC at 5 V typical 	0.15 A	
	0.25 A	
 from external supply voltage for DC at 24 V typical 		

Article number	6GK7342-5DA03-0XE0	
Product type designation	CP 342-5	
Permitted ambient conditions		
Ambient temperature		
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 weight		
Module format	Compact module S7-300 single width	
Width	40 mm	
Height	125 mm	
Depth	120 mm	
Net weight	0.3 kg	
Product properties, functions, components general		
Number of units		
• per CPU maximum	4	
Performance data open communication		
Number of possible connections for open communication by means of SEND/RECEIVE blocks		
• maximum	16	
Amount of data		
as user data per connection for open communication by means of SEND/RECEIVE blocks maximum	240 byte	

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Technical specifications (continued)

 		
Article number	6GK7342-5DA03-0XE0	
Product type designation	CP 342-5	
Performance data PROFIBUS DP		
Service as DP master		
• DPV0	Yes	
Number of DP slaves on DP master usable	124	
Amount of data		
 of the address area of the inputs as DP master total 	2 160 byte	
 of the address area of the outputs as DP master total 	2 160 byte	
 of the address area of the inputs per DP slave 	244 byte	
 of the address area of the outputs per DP slave 	244 byte	
of the address area of the diagnostic data per DP slave	240 byte	
Service as DP slave		
• DPV0	Yes	
Amount of data		
 of the address area of the inputs as DP slave total 	240 byte	
 of the address area of the outputs as DP slave total 	240 byte	

Article number	6GK7342-5DA03-0XE0
Product type designation	CP 342-5
Performance data S7 communication	
Number of possible connections for S7 communication	
• maximum	16
Performance data multi-protocol mode	
Number of active connections with multi-protocol mode	
without DP maximum	32
• with DP maximum	28
Performance data telecontrol	
Protocol is supported	
• TCP/IP	No
Product functions management, configuration	
Configuration software	
• required	STEP 7 V5.1 SP2 or higher / STEP 7 Professional V12 (TIA Portal) or higher
• required	STEP 7 Professiona

Ordering data Article No.

CP 342-5 communications processor

Communications processor for electrical connection of SIMATIC S7-300 to PROFIBUS at up to 12 Mbit/s, with electronic manual on CD-ROM

6GK7342-5DA03-0XE0

Accessories	
PROFIBUS FastConnect connection plug RS 485	
With 90° cable outlet; insulation displacement technology, max. transmission rate 12 Mbit/s • Without PG interface • With PG interface	6ES7972-0BA52-0XA0 6ES7972-0BB52-0XA0
PROFIBUS bus connector IP20	
With connection to PPI, MPI, PROFIBUS	0F07070 0P440 0V40
Without PG interfaceWith PG interface	6ES7972-0BA12-0XA0 6ES7972-0BB12-0XA0
PROFIBUS FC Standard Cable	
2-core bus cable, shielded, special design for fast mounting, delivery unit: max. 1000 m, minimum order 20 m, sold by the meter	6XV1830-0EH10
PROFIBUS bus terminal 12M	
Bus terminal for connection of PROFIBUS nodes up to 12 Mbps with connecting cable	6GK1500-0AA10
SIMATIC S7-300 DM 370	6ES7370-0AA01-0AA0
Dummy module; used for module replacement	

Article No.

Note:

You can find order information for software for communication with PC systems in Catalog IK PI.