



SIMATIC S7-300, CP 341 Communications processor with RS422/485 interface incl. configuration package on CD

Figure similar

General information	
Product type designation	CP 341
Product function	
Protection function	
Engineering with	
Integrated drive control	
Operating mode	
Operator control and monitoring	
Process images	
User administration	
Alarms	
Recipes/user archives	
Display	
Line display	
Resolution (pixels)	
Control elements	
Input device	
Keyboard fonts	
Touch operation	
Connection type	
Special operator controls	
Frame size/design	
Ergonomics	
Supply voltage	
Rated value (DC)	Yes
• 24 V DC	
Line frequency	
Mains filter	
Mains buffering	
Load voltage L+	
Digital inputs	
Load voltage 1L+	
Load voltage 2L+	
Load voltage L1	
Auxiliary voltage 1L+, load voltage 2L+	
Input voltage	

Input voltage acc. to VDE	
Input voltage acc. to UL	
Line frequency	
<b>Input current</b>	
from supply voltage L+, max.	100 mA
from backplane bus 5 V DC, max.	70 mA
<b>Output current</b>	
horizontal installation	
vertical installation	
<b>Encoder supply</b>	
Output current	
5 V encoder supply	
24 V encoder supply	
Additional 24 V encoder supply	
<b>Power loss</b>	
Power loss, typ.	1.6 W
Power loss, max.	2.4 W
<b>Memory</b>	
Work memory	
Working memory for additional functions	
<b>Battery</b>	
Design	
<b>CPU-blocks</b>	
DB	
FB	
FC	
<b>Counters, timers and their retentivity</b>	
S7 counter	
IEC counter	
S7 times	
<b>Data areas and their retentivity</b>	
Flag	
<b>Address area</b>	
I/O address area	
of which distributed	
per integrated IO subsystem	
Process image	
Subprocess images	
Digital channels	
Analog channels	
Addressing volume	
<b>Hardware configuration</b>	
Formation of potential groups	
Module exchange	
Interface modules	
Number of DP masters	
Number of IO Controllers	
Number of operable FMs and CPs (recommended)	
Expansion modules	
Rack	
Submodules	
Selection of BaseUnit for connection variants	
PtP CM	
<b>Time of day</b>	
Clock	
Operating hours counter	
Time switching clocks	

<b>Digital inputs</b>
Number of simultaneously controllable inputs
all mounting positions
horizontal installation
Digital input functions, parameterizable
Input voltage
Input current
for 10 k switched contact
Internal preparation time
Input delay (for rated value of input voltage)
for standard inputs
for interrupt inputs
Encoder connection
Connection method
<b>Digital outputs</b>
Digital output functions, parameterizable
Control supply voltage
Switching capacity of the outputs
Load resistance range
Trend key points E
Output voltage
Output current
Output delay with resistive load
Parallel switching of two outputs
Switching frequency
Total current of the outputs
horizontal installation
Total current of the outputs (per group)
all mounting positions
horizontal installation
vertical installation
Total current of the outputs (per module)
all mounting positions
horizontal installation
Pulse output (passive)
Frequency output
Relay outputs
Integrated high-speed cams
<b>Analog inputs</b>
Input ranges
Measuring range
Input ranges (rated values), voltages
Input ranges (rated values), currents
Input ranges (rated values), thermocouples
Input ranges (rated values), resistance thermometer
Input ranges (rated values), resistors
Input ranges (rated values), strain gauges (full bridges)
Thermocouple (TC)
Characteristic linearization
<b>Analog outputs</b>
Output ranges, voltage
Output ranges, current
Connection of actuators
Load impedance (in rated range of output)
<b>Analog value generation for the inputs</b>
Integration and conversion time/resolution per channel
<b>Analog value generation for the outputs</b>

Integration and conversion time/resolution per channel	
<b>Encoder</b>	
Connection of signal encoders	
Connectable encoders	
Incremental encoder	
Encoder signals, incremental encoder (symmetrical)	
Encoder signals, incremental encoder (asymmetrical)	
Encoder signals, absolute encoder (SSI)	
Encoder signals, IEPE	
<b>Drive axis</b>	
EC motor	
<b>Errors/accuracies</b>	
Operational error limit in overall temperature range	
Basic error limit (operational limit at 25 °C)	
<b>Power electronics</b>	
Control of heating elements	
Load connection type	
Setpoint input	
Heating power	
<b>Interfaces</b>	
Number of interfaces	1; Isolated
Transmission rate, min.	0.3 kbit/s
Transmission rate, max.	115.2 kbit/s
Video interfaces	
Touch interfaces	
MPI	
PROFIBUS DP	
PROFIBUS PA	
Supports protocol for PROFINET IO	
PROFINET functions	
Industrial Ethernet	
Point-to-point connection	
<ul style="list-style-type: none"> <li>• Cable length, max.</li> <li>• supported printers</li> <li>• Connector type</li> </ul>	<ul style="list-style-type: none"> <li>1 200 m</li> <li>Serial printers</li> <li>15-pin sub D socket</li> </ul>
Integrated protocol driver	
— 3964 (R)	Yes; not with RS 485
— ASCII	Yes
— RK 512	Yes; not with RS 485
Telegram length, max.	
— 3964 (R)	4 096 byte
— ASCII	4 096 byte
— RK 512	4 096 byte
Transmission rate, RS 422/485	
— with 3964 (R) protocol, max.	115.2 kbit/s
— with ASCII protocol, max.	115.2 kbit/s
— with printer driver, max.	115.2 kbit/s
— with RK 512 protocol, max.	115.2 kbit/s
ET-Connection	
EtherNet/IP	
AS-Interface	
WLAN	
<b>1. Interface</b>	
Interface types	
Protocols	
MPI	
PROFIBUS DP master	

Services
PROFIBUS DP slave
PROFINET IO Controller
Services
Update time for IRT
PROFINET IO Device
Services
PROFINET CBA
Open IE communication
CAN
BACnet
<b>2. Interface</b>
Interface types
Protocols
PROFIBUS DP master
Services
PROFIBUS DP slave
PROFINET IO Controller
Services
Update time for IRT
PROFINET IO Device
Services
PROFINET CBA
<b>3. Interface</b>
Interface types
Protocols
PROFIBUS DP master
Services
PROFIBUS DP slave
PROFINET IO Controller
PROFINET IO Device
Services
PROFINET CBA
<b>4. Interface</b>
Interface types
Protocols
PROFIBUS DP master
PROFINET IO Controller
<b>Interface types</b>
RJ 45 (Ethernet)
RS 232
RS 485
RS 422
USB port
<b>Protocols</b>
Protocols (USB)
Protocols (Ethernet)
WEB characteristics
Protocols (terminal link)
Number of connections
PROFINET IO Device
Redundancy mode
SIMATIC communication
EtherNet/IP
Services
Updating times
Redundancy mode
Open IE communication

Web server
PROFIBUS DP
PROFIdrive
DALI
Integrated protocols
Freeport
3964 (R)
OPC UA
<b>Communication functions</b>
Global data communication
S7 basic communication
S7 communication
LOGO! communication
S5 compatible communication
Standard communication (FMS)
PROFINET CBA (at set setpoint communication load)
Remote interconnections with acyclic transmission
Remote interconnections with cyclic transmission
iPAR server
Number of connections
<b>Test commissioning functions</b>
Status/control
Forcing
Diagnostic buffer
<b>Interrupts/diagnostics/status information</b>
Alarms
<b>Integrated Functions</b>
Monitoring functions
Safety monitoring functions
Counting functions
Load cell
Position detection
Control technology
Step-by-step controllers
Pulse generator
Measuring functions
Operating mode for measured value acquisition
Measuring range
Accuracy
Measuring inputs for voltage
Measuring inputs for current
Measuring inputs for current (Rog. or I/U converter)
Error limits
<b>Counter</b>
Counting mode
External gate counters
Counter input 5 V
Counter input 24 V
<b>Drive interface</b>
Signal Input
<b>Potential separation</b>
Potential separation digital inputs
Potential separation digital outputs
Potential separation analog inputs
Potential separation analog outputs
Potential separation channels
Potential separation valve outputs

Potential separation counter
Potential separation controller
<b>EMC</b>
Interference immunity against discharge of static electricity
Interference immunity against high-frequency electromagnetic fields
Interference immunity to cable-borne interference
Interference immunity against voltage surge
Interference immunity against conducted variable disturbance induced by high-frequency fields
Interference immunity to magnetic fields
Emission of radio interference acc. to EN 55 011
Emission of radio interference acc. to EN 55 022
<b>Standards, approvals, certificates</b>
Highest safety class achievable in safety mode
Highest safety class achievable for safety-related tripping of standard modules
Highest safety class achievable for deactivated dark test
Use in hazardous areas
Marine approval
<b>Ambient conditions</b>
Free fall
Ambient temperature during operation
• min. 0 °C
• max. 60 °C
Operation (vertical installation)
Ambient temperature during storage/transportation
• min. -40 °C
• max. 70 °C
Air pressure acc. to IEC 60068-2-13
Vibrations
Shock testing
Resistance
Coolants and lubricants
Fire resistance
Pollutant concentrations
<b>Hardware requirement</b>
Processor
Graphic
<b>Operating systems</b>
pre-installed operating system
Runs under operating system
<b>Software</b>
Preinstalled
Software functions
Multi-user system
Runtime software
Runtime
Block
• FB length in RAM, max. 6 100 byte; Data communication, sending and receiving
Adjustable parameters
<b>Configuration</b>
Configuration
Configuration software
Script languages (Runtime)
Programming
Programming language
Configuration examples
Software libraries
Know-how protection

Access protection	
<b>Languages</b>	
Online languages	
<b>Functionality under WinCC (TIA Portal)</b>	
Multiproject	
Message system	
Recipe management	
Variables	
Images	
Image objects	
Complex image objects	
Attributes for dynamic objects	
Lists	
Archiving	
Filters	
Security	
Data carrier support	
Logging through printer	
Character sets	
Transfer (upload/download)	
Process coupling	
Functions	
<b>Functionality under WinCC Unified</b>	
Parameter set management (recipes)	
Image objects	
<b>Connection method</b>	
Design of electrical connection for supply voltage	3 screw-type terminals: L+, M, GND
ET-Connection	
Terminals	
Connection I/O signals	
Conductor cross-section in mm <sup>2</sup>	
Conductor cross-section acc. to AWG	
<b>Dimensions</b>	
Width	40 mm
Height	125 mm
Depth	120 mm
<b>Weights</b>	
Weight, approx.	300 g
<b>Other</b>	
Data for selecting a voltage transformer	

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