

SIMATIC S7-200, CPU 224XP COMPACT UNIT,  
DC POWER SUPPLY 14 DI DC/10 DO DC,  
2 AI, 1 AO 12/16 KB CODE/10 KB DATA,  
2 PPI/FREEPORT PORTS



Supply voltage	
24 V DC	Ja
Voedingsspanning / bij DC / nominale waarde / minimaal	20,4 V
Voedingsspanning / bij DC / nominale waarde / maximaal	28,8 V
Load voltage L+	
Rated value (DC)	24 V
permissible range, lower limit (DC)	20,4 V
permissible range, upper limit (DC)	28,8 V
Input current	
Inrush current, max.	12 A
from supply voltage L+, max.	900 mA
Encoder supply	
24 V encoder supply	
24 V	Ja
Short-circuit protection	Ja
Output current, max.	280 mA
Memory	
Number of memory modules (optional)	1

<b>Data and program memory</b>	
<b>Data memory, max.</b>	10 kbyte
<b>Program memory, max.</b>	16 kbyte
<b>Backup</b>	
<b>present</b>	Ja
<b>Battery</b>	
<b>Backup battery</b>	
<b>Backup time, max.</b>	100 h
<b>CPU processing times</b>	
<b>for bit operations, max.</b>	0,22 µs
<b>Counters, timers and their retentivity</b>	
<b>S7 counter</b>	
<b>Number</b>	256
<b>of which retentive with battery</b>	
<b>adjustable</b>	Ja
<b>lower limit</b>	1
<b>upper limit</b>	256
<b>Counting range</b>	
<b>lower limit</b>	0
<b>upper limit</b>	32767
<b>S7 times</b>	
<b>Number</b>	256
<b>of which retentive with battery</b>	
<b>adjustable</b>	Ja
<b>upper limit</b>	64
<b>Time range</b>	
<b>lower limit</b>	1 ms
<b>upper limit</b>	54 min
<b>Data areas and their retentivity</b>	
<b>Flag</b>	
<b>Number, max.</b>	32 byte
<b>Retentivity available</b>	Ja
<b>Hardware configuration</b>	
<b>Expansion devices, max.</b>	7
<b>Expansion modules</b>	
<b>Analog inputs/outputs, max.</b>	38
<b>Digital inputs/outputs, max.</b>	168
<b>AS-Interface inputs/outputs, max.</b>	62

<b>Digital inputs</b>	
Aantal digitale ingangen	14
m/p-reading	Ja
<b>Input voltage</b>	
Ingangsspanning / aan de digitale ingang / bij DC / nominale waarde	24 V
<b>Input current</b>	
Ingangsstroom / aan de digitale ingang / bij signaal <1> / typisch	2,5 mA
<b>Input delay (for rated value of input voltage)</b>	
<b>for standard inputs</b>	
parameterizable	Ja
at "0" to "1", min.	0,2 ms
at "0" to "1", max.	12,8 ms
<b>for interrupt inputs</b>	
parameterizable	Ja
<b>for counter/technological functions</b>	
parameterizable	Ja
<b>Cable length</b>	
Cable length, shielded, max.	500 m
Cable length unshielded, max.	300 m
<b>Digital outputs</b>	
Aantal van de digitale uitgangen	10
Short-circuit protection	Nee
<b>Switching capacity of the outputs</b>	
with resistive load, max.	0,75 A
on lamp load, max.	5 W
<b>Output current</b>	
Uitgangsstroom / aan de digitale uitgang / bij signaal <1> / nominale waarde	750 mA
Reststroom / aan de digitale uitgang / bij signaal <0> / maximaal	10 $\mu$ A
<b>Output delay with resistive load</b>	
"0" to "1", max.	15 $\mu$ s
"1" to "0", max.	130 $\mu$ s
<b>Parallel switching of 2 outputs</b>	
for uprating	Ja
<b>Switching frequency</b>	
of the pulse outputs, with resistive load, max.	100 kHz

<b>Total current of the outputs (per group)</b>	
<b>all mounting positions</b>	
up to 40 °C, max.	3,75 A
<b>horizontal installation</b>	
up to 55 °C, max.	3,75 A
<b>Relay outputs</b>	
Max. number of relay outputs, integrated	0
<b>Cable length</b>	
Cable length, shielded, max.	500 m
Cable length unshielded, max.	150 m
<b>Analog inputs</b>	
Number of analog potentiometers	2
<b>Encoder</b>	
<b>Connectable encoders</b>	
2-wire sensor	Ja
permissible quiescent current (2-wire sensor), max.	1 mA
<b>1. Interface</b>	
<b>Functionality</b>	
MPI	Ja
PPI	Ja
serial data exchange	Ja
<b>MPI</b>	
Transmission rate, min.	19,2 kbit/s
Transmission rate, max.	187,5 kbit/s
<b>2. Interface</b>	
<b>Functionality</b>	
MPI	Ja
PPI	Ja
serial data exchange	Ja
<b>MPI</b>	
Transmission rate, min.	19,2 kbit/s
Transmission rate, max.	187,5 kbit/s
<b>Integrated Functions</b>	
Number of counters	6
Counting frequency (counter) max.	200 kHz
Number of alarm inputs	4
Number of pulse outputs	2
Limit frequency (pulse)	20 kHz

<b>Galvanic isolation</b>	
<b>Galvanic isolation digital inputs</b>	
between the channels	Ja
<b>Galvanic isolation digital outputs</b>	
between the channels	Ja
between the channels, in groups of	5
<b>Degree and class of protection</b>	
IP20	Ja
<b>Ambient conditions</b>	
<b>Operating temperature</b>	
Omgevingstemperatuur / bij horizontale inbouwpositie / tijdens bedrijf / minimaal	0 °C
Omgevingstemperatuur / bij horizontale inbouwpositie / tijdens bedrijf / maximaal	55 °C
Omgevingstemperatuur / bij verticale inbouwpositie / tijdens bedrijf / minimaal	0 °C
Omgevingstemperatuur / bij verticale inbouwpositie / tijdens bedrijf / maximaal	45 °C
<b>Air pressure</b>	
Luchtdruk / minimaal	860 hPa
Luchtdruk / maximaal	1080 hPa
<b>Relative humidity</b>	
Relatieve luchtvochtigheid / tijdens de werking / minimaal	5 %
Relatieve luchtvochtigheid / tijdens de werking / maximaal	95 %
<b>Configuration</b>	
<b>Programming</b>	
Number of subroutines, max.	64
<b>Programming language</b>	
LAD	Ja
FBD	Ja
STL	Ja
<b>Know-how protection</b>	
User program protection/password protection	Ja
<b>Aansluitingstechniek</b>	
Plug-in I/O terminals	Ja
<b>Dimensions</b>	
Breedte	140 mm
Hoogte	80 mm
Diepte	62 mm

## Weights

<b>Weight, approx.</b>	390 g
Status	21-jul-2014