



SIMATIC S7-1200, CPU 1215C, COMPACT CPU, DC/DC/DC, 2 PROFINET PORT, ONBOARD I/O: 14 DI 24V DC; 10 DO 24V DC 0.5A 2 AI 0-10V DC, 2 AO 0-20MA DC, POWER SUPPLY: DC 20.4 - 28.8 V DC, PROGRAM/DATA MEMORY: 100 KB

Display	
with display	No
Supply voltage	
Rated value (DC)	Yes
<ul style="list-style-type: none"> • 24 V DC 	
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Load voltage L+	
<ul style="list-style-type: none"> • Rated value (DC) 	24 V
<ul style="list-style-type: none"> • permissible range, lower limit (DC) 	20.4 V
<ul style="list-style-type: none"> • permissible range, upper limit (DC) 	28.8 V
Input current	
Current consumption (rated value)	500 mA; Typical
Inrush current, max.	12 A; at 28.8 V DC
Encoder supply	
24 V encoder supply	
<ul style="list-style-type: none"> • 24 V 	Permissible range: 20.4V to 28.8V
Output current	
Current output to backplane bus (DC 5 V), max.	1 600 mA; Max. 5 V DC for SM and CM
Power losses	
Power loss, typ.	12 W
Memory	
Type of memory	EEPROM

Usable memory for user data	100 kbyte
Work memory	
• Integrated	125 kbyte
• expandable	No
Load memory	
• Integrated	4 Mbyte
• Plug-in (SIMATIC Memory Card), max.	2 Gbyte; with SIMATIC memory card
Backup	
• present	Yes; maintenance-free
• without battery	Yes
CPU processing times	
for bit operations, typ.	0.085 µs; / Operation
for word operations, typ.	1.7 µs; / Operation
for floating point arithmetic, typ.	2.3 µs; / Operation
CPU-blocks	
Number of blocks (total)	DBs, FCs, FBs, counters and timers. The maximum number of addressable blocks ranges from 1 to 65535. There is no restriction, the entire working memory can be used
OB	
• Number, max.	Limited only by RAM for code
Data areas and their retentivity	
retentive data area in total (incl. times, counters, flags), max.	10 kbyte
Flag	
• Number, max.	8 kbyte; Size of bit memory address area
Address area	
I/O address area	
• Inputs	1 024 byte
• Outputs	1 024 byte
Process image	
• Inputs, adjustable	1 kbyte
• Outputs, adjustable	1 kbyte
Hardware configuration	
Number of modules per system, max.	3 comm. modules, 1 signal board, 8 signal modules
Time of day	
Clock	
• Hardware clock (real-time clock)	Yes
• Deviation per day, max.	+/- 60 s/month at 25 °C
• Backup time	480 h; Typical
Digital inputs	

Number of digital inputs	14; Integrated
<ul style="list-style-type: none"> • of which, inputs usable for technological functions 	6; HSC (High Speed Counting)
integrated channels (DI)	14
m/p-reading	Yes
Number of simultaneously controllable inputs	
all mounting positions	
— up to 40 °C, max.	14
Input voltage	
<ul style="list-style-type: none"> • Rated value (DC) 	24 V
<ul style="list-style-type: none"> • for signal "0" 	5 V DC at 1 mA
<ul style="list-style-type: none"> • for signal "1" 	15 VDC at 2.5 mA
Input current	
<ul style="list-style-type: none"> • for signal "1", typ. 	1 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— Parameterizable	0.1 / 0.2 / 0.4 / 0.8 / 1.6 / 3.2 / 6.4 / 10.0 / 12.8 / 20.0 µs; 0.05 / 0.1 / 0.2 / 0.4 / 0.8 / 1.6 / 3.2 / 6.4 / 10.0 / 12.8 / 20.0 ms
— at "0" to "1", min.	0.1 µs
— at "0" to "1", max.	20 ms
for interrupt inputs	
— Parameterizable	Yes
for counter/technological functions	
— Parameterizable	Yes; Single phase : 3 at 100 kHz & 3 at 30 kHz, differential: 3 at 80 kHz & 3 at 30 kHz
Cable length	
<ul style="list-style-type: none"> • Cable length, shielded, max. 	500 m; 50 m for technological functions
<ul style="list-style-type: none"> • Cable length unshielded, max. 	300 m; For technological functions: No
Digital outputs	
Number of digital outputs	10
<ul style="list-style-type: none"> • of which high-speed outputs 	4; 100 kHz Pulse Train Output
integrated channels (DO)	10
short-circuit protection	No; to be provided externally
Switching capacity of the outputs	
<ul style="list-style-type: none"> • with resistive load, max. 	0.5 A
<ul style="list-style-type: none"> • on lamp load, max. 	5 W
Output voltage	
<ul style="list-style-type: none"> • for signal "0", max. 	0.1 V; with 10 kOhm load
<ul style="list-style-type: none"> • for signal "1", min. 	20 V
Output current	
<ul style="list-style-type: none"> • for signal "1" rated value 	0.5 A
<ul style="list-style-type: none"> • for signal "0" residual current, max. 	0.1 mA