



SIMATIC S7-1200, CPU 1214C,
 COMPACT CPU, DC/DC/DC,
 ONBOARD I/O: 14 DI 24V DC;
 10 DO 24 V DC;
 2 AI 0 - 10V DC,
 POWER SUPPLY: DC 20.4 - 28.8 V DC,
 PROGRAM/DATA MEMORY: 75 KB

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	
Opgenomen stroom / maximaal	1,5 A
Inrush current, max.	12 A
Output current	
Current output to backplane bus (5 V DC), max.	1600 mA
Power loss	
Werkelijk vermogensverlies / typisch	12 W
Memory	
usable memory for user data	75 kbyte
Work memory	

integrated	75 kbyte
expandable	Nee
Load memory	
integrated	4 Mbyte
Backup	
without battery	Ja
CPU processing times	
for bit operations, typ.	0,085 μ s
for word operations, typ.	1,7 μ s
for floating point arithmetic, typ.	2,5 μ s
Data areas and their retentivity	
retentive data area in total (incl. times, counters, flags), max.	10 kbyte
Flag	
Number, max.	8 kbyte
Address area	
Process image	
Inputs, adjustable	1 kbyte
Outputs, adjustable	1 kbyte
Time of day	
Clock	
Hardware clock (real-time clock)	Ja
Backup time	480 h
Digital inputs	
Aantal digitale ingangen	14
of which inputs usable for technological functions	6
integrated channels (DI)	14
m/p-reading	Ja
Number of simultaneously controllable inputs	
all mounting positions	
up to 40 °C, max.	14
Input voltage	
Ingangsspanning / aan de digitale ingang / bij DC / nominale waarde	24 V
Input current	
Ingangsstroom / aan de digitale ingang / bij signaal <1> / typisch	1 mA
Input delay (for rated value of input voltage)	
for standard inputs	

at "0" to "1", min.	0,2 ms
at "0" to "1", max.	12,8 ms
for interrupt inputs	
parameterizable	Ja
Cable length	
Cable length, shielded, max.	500 m
Cable length unshielded, max.	300 m
Digital outputs	
Aantal van de digitale uitgangen	10
of which high-speed outputs	4
integrated channels (DO)	10
Short-circuit protection	Nee
Switching capacity of the outputs	
with resistive load, max.	0,5 A
on lamp load, max.	5 W
Output voltage	
Uitgangsspanning / aan de digitale uitgang / bij signaal <0> / bij DC / maximaal	0,1 V
Output current	
Uitgangsstroom / aan de digitale uitgang / bij signaal <1> / nominale waarde	0,5 A
Reststroom / aan de digitale uitgang / bij signaal <0> / maximaal	0,1 mA
Output delay with resistive load	
"0" to "1", max.	1 µs
"1" to "0", max.	5 µs
Switching frequency	
of the pulse outputs, with resistive load, max.	100 kHz
Relay outputs	
Max. number of relay outputs, integrated	0
Cable length	
Cable length, shielded, max.	500 m
Cable length unshielded, max.	150 m
Analog inputs	
integrated channels (AI)	2
Aantal analoge ingangen	2
Input ranges	
Ingangsgrootte / aan de analoge ingang / spanningssignaal	Ja

Input ranges (rated values), voltages	
Bereik ingangsspanning / aan de analoge ingang / 0 V ... 10 V	Ja
Cable length	
Cable length, shielded, max.	100 m
Analog outputs	
Aantal analoge uitgangen	0
Cable length	
Cable length, shielded, max.	100 m
Analog value generation	
Integration and conversion time/resolution per channel	
Resolution with overrange (bit including sign), max.	10 bit
Integration time, parameterizable	Ja
Conversion time (per channel)	625 µs
Encoder	
Connectable encoders	
2-wire sensor	Ja
1. Interface	
isolated	Ja
automatic detection of transmission rate	Ja
Autonegotiation	Ja
Autocrossing	Ja
Functionality	
PROFINET IO Controller	Ja
Communication functions	
S7 communication	
supported	Ja
as server	Ja
as client	Ja
Open IE communication	
TCP/IP	Ja
ISO-on-TCP (RFC1006)	Ja
UDP	Ja
Web server	
supported	Ja
User-defined websites	Ja
Test commissioning functions	
Status/control	

Status/control variable	Ja
Forcing	
Forcing	Ja
Diagnostic buffer	
present	Ja
Integrated Functions	
Number of counters	6
Counting frequency (counter) max.	100 kHz
Frequency meter	Ja
controlled positioning	Ja
PID controller	Ja
Number of alarm inputs	4
Number of pulse outputs	2
Limit frequency (pulse)	100 kHz
Galvanic isolation	
Galvanic isolation digital inputs	
between the channels, in groups of	1
Galvanic isolation digital outputs	
Galvanic isolation digital outputs	Ja
between the channels	Nee
between the channels, in groups of	1
EMC	
Interference immunity against discharge of static electricity	
Interference immunity against discharge of static electricity acc. to IEC 61000-4-2	Ja
Test voltage at air discharge	8 kV
Test voltage at contact discharge	6 kV
Interference immunity to cable-borne interference	
on the supply lines acc. to IEC 61000-4-4	Ja
Interference immunity on signal cables acc. to IEC 61000-4-4	Ja
Interference immunity against voltage surge	
on the supply lines acc. to IEC 61000-4-5	Ja
Interference immunity against conducted variable disturbance induced by high-frequency fields	
Interference immunity against high-frequency radiation acc. to IEC 61000-4-6	Ja
Emission of radio interference acc. to EN 55 011	
Emission of radio interference acc. to EN 55 011 (limit class A)	Ja

Emission of radio interference acc. to EN 55 011 (limit class B)	Ja
Degree and class of protection	
IP20	Ja
Standards, approvals, certificates	
Geschiktheidsbewijs / EG-conformiteitsmerkteken	Ja
Geschiktheidsbewijs / CSA-goedkeuring	Ja
UL approval	Ja
cULus	Ja
Geschiktheidsbewijs / C-Tick	Ja
FM approval	Ja
Marine approval	
Marine approval	Ja
Ambient conditions	
Operating temperature	
min.	-20 °C
Omgevingstemperatuur / tijdens de werking / maximaal	60 °C
Omgevingstemperatuur / bij horizontale inbouwpositie / tijdens bedrijf / minimaal	-20 °C
Omgevingstemperatuur / bij horizontale inbouwpositie / tijdens bedrijf / maximaal	60 °C
Omgevingstemperatuur / bij verticale inbouwpositie / tijdens bedrijf / minimaal	-20 °C
Omgevingstemperatuur / bij verticale inbouwpositie / tijdens bedrijf / maximaal	50 °C
Storage/transport temperature	
Omgevingstemperatuur / tijdens opslag en transport / minimaal	-40 °C
Omgevingstemperatuur / tijdens opslag en transport / maximaal	70 °C
Air pressure	
Operation, min.	795 hPa
Operation, max.	1080 hPa
Storage/transport, min.	660 hPa
Storage/transport, max.	1080 hPa
Relative humidity	
Relatieve luchtvochtigheid / tijdens de werking / maximaal	95 %
Vibrations	
Operation, tested according to IEC 60068-2-6	Ja
Shock test	
tested according to IEC 60068-2-27	Ja

Climatic and mechanical conditions for storage and transport	
Climatic conditions for storage and transport	
Free fall	
Drop height, max. (in packaging)	0,3 m
Mechanical and climatic conditions during operation	
Climatic conditions in operation	
Temperature	
min.	-20 °C
max.	60 °C
Configuration	
Programming	
Programming language	
LAD	Ja
FBD	Ja
SCL	Ja
Cycle time monitoring	
adjustable	Ja
Dimensions	
Breedte	110 mm
Hoogte	100 mm
Diepte	75 mm
Weights	
Weight, approx.	415 g
Status	22-jul-2014