



*** SPARE PART*** SIMATIC S7-1200, ANALOG OUTPUT, SM 1232, 4 AO, +/-10V, 14 BIT RESOLUTION, OR 0-20 MA, 13 BIT RESOLUTION,

Figure similar

Supply voltage	
Rated value (DC)	
<ul style="list-style-type: none"> • 24 V DC 	Yes
Input current	
Current consumption, typ.	45 mA
from backplane bus 5 V DC, typ.	80 mA
Power loss	
Power loss, typ.	1.5 W
Analog inputs	
Number of analog inputs	0
Thermocouple (TC)	
Temperature compensation	
— Parameterizable	No
Analog outputs	
Number of analog outputs	4; Current or voltage
Output ranges, voltage	
<ul style="list-style-type: none"> • -10 V to +10 V 	Yes
Output ranges, current	
<ul style="list-style-type: none"> • 0 to 20 mA 	Yes
Load impedance (in rated range of output)	
<ul style="list-style-type: none"> • with voltage outputs, min. • with current outputs, max. 	1 000 Ω 600 Ω
Analog value generation	

Measurement principle	Differential
Integration and conversion time/resolution per channel	
<ul style="list-style-type: none"> • Resolution (incl. overrange) • Integration time, parameterizable • Interference voltage suppression for interference frequency f1 in Hz 	Voltage: 14 bits; Current : 13 bits Yes 40 dB, DC to 60 V for interference frequency 50 / 60 Hz
Errors/accuracies	
Temperature error (relative to output range), (+/-)	25 °C ±0.3%, to 55 °C ±0.6% total measurement range
Basic error limit (operational limit at 25 °C)	
<ul style="list-style-type: none"> • Voltage, relative to output area, (+/-) • Current, relative to output area, (+/-) 	0.3 % 0.3 %
Interference voltage suppression for $f = n \times (f1 \pm 1 \%)$, f1 = interference frequency	
<ul style="list-style-type: none"> • Common mode voltage, max. 	12 V
Interrupts/diagnostics/status information	
Alarms	
<ul style="list-style-type: none"> • Alarms • Diagnostic alarm 	Yes Yes
Diagnostic messages	
<ul style="list-style-type: none"> • Diagnostic functions • Monitoring the supply voltage • Wire-break • Short-circuit 	Yes Yes Yes Yes
Diagnostics indication LED	
<ul style="list-style-type: none"> • for status of the outputs • for maintenance 	Yes Yes
Degree and class of protection	
Degree of protection acc. to EN 60529	
<ul style="list-style-type: none"> • IP20 	Yes
Standards, approvals, certificates	
CE mark	Yes
FM approval	Yes
RCM (formerly C-TICK)	Yes
Highest safety class achievable in safety mode	
<ul style="list-style-type: none"> • SIL acc. to IEC 61508 	none
Ambient conditions	
Free fall	
<ul style="list-style-type: none"> • Drop height, max. (in packaging) 	0.3 m; five times, in dispatch package
Ambient temperature during operation	
<ul style="list-style-type: none"> • permissible temperature range 	0 °C to 55 °C horizontal installation, 0 °C to 45 °C vertical installation
Ambient temperature during storage/transportation	

• min.	-40 °C
• max.	70 °C
Air pressure acc. to IEC 60068-2-13	
• Operation, min.	795 hPa
• Operation, max.	1 080 hPa
• Storage/transport, min.	660 hPa
• Storage/transport, max.	1 080 hPa
Relative humidity	
• permissible range (without condensation) at 25 °C	95 %
Pollutant concentrations	
— SO2 at RH < 60% without condensation	SO2: < 0.5 ppm; H2S: < 0.1 ppm; RH < 60% condensation-free
Connection method	
required front connector	Yes
Mechanics/material	
Type of housing (front)	
• plastic	Yes
Dimensions	
Width	45 mm
Height	100 mm
Depth	75 mm
Weights	
Weight, approx.	180 g
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