



SIMATIC S7-200, ANALOG OUTPUT EM 232,  
FOR S7-22X CPU ONLY, 4 AQ, +/- 10V DC,  
0..20mA 12/11 BIT CONVERTER

Input current	
from backplane bus 5 V DC, max.	20 mA
from sensor current supply or external current supply (24 V DC), max.	70 mA
Power losses	
Power loss, typ.	2 W
Analog outputs	
Number of analog outputs	4
Output ranges, voltage	
-10 to +10 V	Yes
Output ranges, current	
4 to 20 mA	Yes
Load impedance (in rated range of output)	
with voltage outputs, min.	5 k $\Omega$
with current outputs, max.	0.5 k $\Omega$
Analog value creation	
Integrations and conversion time/ resolution per channel	
Resolution (incl. overrange)	V/12 bits, I/11 bits
Settling time	

for voltage output	100 $\mu$ s
for current output	2 ms
<b>Displayable conversion value range</b>	
bipolar signals	-32000 to +32000
unipolar signals	0 to 32000
<b>Errors/accuracies</b>	
<b>Operational limit in overall temperature range</b>	
Voltage, relative to output area	+/- 2 %
Current, relative to output area	+/- 2 %
<b>Basic error limit (operational limit at 25 °C)</b>	
Voltage, relative to output area	+/- 0,5 %
Current, relative to output area	+/- 0,5 %
<b>Galvanic isolation</b>	
<b>Galvanic isolation analog outputs</b>	
Galvanic isolation analog outputs	No
<b>Connection method</b>	
Plug-in I/O terminals	No
<b>Dimensions</b>	
Width	71.2 mm
Height	80 mm
Depth	62 mm
<b>Weight</b>	
Weight, approx.	190 g
Status	Feb 25, 2013