



SIMATIC S7-200 SMART, analog I/O SM AM06, 4 AI/2 AO, 0..10 V, 0..5 V, 0/4..20mA, +/-5 V, +/-2.5 V, 12 bit resolution or 4..20 mA, +/-10 V 11 bit resolution

General information	
Product type designation	SM AM06, AI 4x12 bit, AQ 2x11 bit
CiR - Configuration in RUN	
Reparameterization possible in RUN	No
Supply voltage	
Type of supply voltage	DC
Rated value (DC)	24 V; -15 / +20 %
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Input current	
Current consumption, typ.	60 mA
from backplane bus 5 V DC, typ.	80 mA
Power loss	
Power loss, typ.	2 W
Analog inputs	
Number of analog inputs	4
Input ranges	
<ul style="list-style-type: none"> <li>• Voltage</li> </ul>	Yes; $\pm 10\text{V}$ , $\pm 5\text{V}$ , $\pm 2.5\text{V}$
<ul style="list-style-type: none"> <li>• Current</li> </ul>	Yes; 0 to 20 mA
<ul style="list-style-type: none"> <li>• Thermocouple</li> </ul>	No
<ul style="list-style-type: none"> <li>• Resistance thermometer</li> </ul>	No
<ul style="list-style-type: none"> <li>• Resistance</li> </ul>	No
Input ranges (rated values), voltages	
<ul style="list-style-type: none"> <li>• -10 V to +10 V</li> </ul>	Yes
— Input resistance (-10 V to +10 V)	9 M $\Omega$
<ul style="list-style-type: none"> <li>• -2.5 V to +2.5 V</li> </ul>	Yes
— Input resistance (-2.5 V to +2.5 V)	9 M $\Omega$
<ul style="list-style-type: none"> <li>• -5 V to +5 V</li> </ul>	Yes
— Input resistance (-5 V to +5 V)	9 M $\Omega$
Input ranges (rated values), currents	
<ul style="list-style-type: none"> <li>• 0 to 20 mA</li> </ul>	Yes
— Input resistance (0 to 20 mA)	250 $\Omega$
Analog outputs	
Number of analog outputs	2; Current or voltage
Output ranges, voltage	
<ul style="list-style-type: none"> <li>• -10 V to +10 V</li> </ul>	Yes
Output ranges, current	
<ul style="list-style-type: none"> <li>• 0 to 20 mA</li> </ul>	Yes
Load impedance (in rated range of output)	
<ul style="list-style-type: none"> <li>• with voltage outputs, min.</li> </ul>	1 k $\Omega$

• with current outputs, max.	500 Ω
<b>Analog value generation for the inputs</b>	
Integration and conversion time/resolution per channel	
• Resolution with overrange (bit including sign), max.	12 bit; voltage mode: 11 bit + sign bit, current mode: 11 bit
• Interference voltage suppression for interference frequency f1 in Hz	10 / 50 / 60 / 400 Hz
Smoothing of measured values	
• parameterizable	Yes; In 4 stages: 1x, 4x, 16x, 32x cycle time
• Step: None	Yes; 1x
• Step: low	Yes; 4x
• Step: Medium	Yes; 16x
• Step: High	Yes; 32x
<b>Analog value generation for the outputs</b>	
Integration and conversion time/resolution per channel	
• Resolution with overrange (bit including sign), max.	11 bit; voltage mode: 11 bit + sign bit, current mode: 11 bit
• Resolution in isochronous mode (including overrange)	voltage mode: 10 bit + sign bit, current mode: 10 bit
<b>Interrupts/diagnostics/status information</b>	
Diagnostics function	Yes
Diagnoses	
• Monitoring the supply voltage	Yes
• Wire-break	Yes
• Short-circuit	Yes
Diagnostics indication LED	
• for status of the inputs	Yes
• for status of the outputs	Yes
<b>Degree and class of protection</b>	
IP degree of protection	IP20
<b>Standards, approvals, certificates</b>	
CE mark	Yes
<b>Dimensions</b>	
Width	45 mm
Height	100 mm
Depth	81 mm
<b>Weights</b>	
Weight, approx.	173.4 g
<b>last modified:</b>	8/23/2023 