

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> <li>• Current</li> <li>• Thermocouple</li> <li>• Resistance thermometer</li> <li>• Resistance</li> </ul>	<ul style="list-style-type: none"> <li>Yes; ±10V, ±5V, ±2.5V</li> <li>Yes; 0 to 20 mA</li> <li>No</li> <li>No</li> <li>No</li> </ul>
Input ranges (rated values), voltages	
<ul style="list-style-type: none"> <li>• -10 V to +10 V <ul style="list-style-type: none"> <li>— Input resistance (-10 V to +10 V)</li> </ul> </li> <li>• -2.5 V to +2.5 V <ul style="list-style-type: none"> <li>— Input resistance (-2.5 V to +2.5 V)</li> </ul> </li> <li>• -5 V to +5 V <ul style="list-style-type: none"> <li>— Input resistance (-5 V to +5 V)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Yes</li> <li>9 MΩ</li> <li>Yes</li> <li>9 MΩ</li> <li>Yes</li> <li>9 MΩ</li> </ul>
Input ranges (rated values), currents	
<ul style="list-style-type: none"> <li>• 0 to 20 mA <ul style="list-style-type: none"> <li>— Input resistance (0 to 20 mA)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Yes</li> <li>250 Ω</li> </ul>
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> <li>• with current outputs, max.</li> </ul>	<ul style="list-style-type: none"> <li>1 kΩ</li> <li>500 Ω</li> </ul>
Analog value generation for the inputs	
Integration and conversion time/resolution per channel	
<ul style="list-style-type: none"> <li>• Resolution with overrange (bit including sign), max.</li> <li>• Interference voltage suppression for interference frequency f1 in Hz</li> </ul>	<ul style="list-style-type: none"> <li>12 bit; voltage mode: 11 bit + sign bit, current mode: 11 bit</li> <li>10 / 50 / 60 / 400 Hz</li> </ul>
Smoothing of measured values	
<ul style="list-style-type: none"> <li>• parameterizable</li> <li>• Step: None</li> <li>• Step: low</li> <li>• Step: Medium</li> </ul>	<ul style="list-style-type: none"> <li>Yes; In 4 stages: 1x, 4x, 16x, 32x cycle time</li> <li>Yes; 1x</li> <li>Yes; 4x</li> <li>Yes; 16x</li> </ul>

• 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>Classifications</b>	

	Version	Classification
eClass	14	27-24-22-01
eClass	12	27-24-22-01
eClass	9.1	27-24-22-01
eClass	9	27-24-22-01
eClass	8	27-24-22-01
eClass	7.1	27-24-22-01
eClass	6	27-24-22-01
ETIM	9	EC001420
ETIM	8	EC001420
ETIM	7	EC001420
IDEA	4	3562
UNSPSC	15	32-15-17-05

**Approvals / Certificates**

**General Product Approval**



last modified:

3/12/2024