


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"> • Voltage • Current • Thermocouple • Resistance thermometer • Resistance 	<ul style="list-style-type: none"> Yes; ±10V, ±5V, ±2.5V Yes; 0 to 20 mA No No No
Input ranges (rated values), voltages	
<ul style="list-style-type: none"> • -10 V to +10 V <ul style="list-style-type: none"> — Input resistance (-10 V to +10 V) • -2.5 V to +2.5 V <ul style="list-style-type: none"> — Input resistance (-2.5 V to +2.5 V) • -5 V to +5 V <ul style="list-style-type: none"> — Input resistance (-5 V to +5 V) 	<ul style="list-style-type: none"> Yes 9 MΩ Yes 9 MΩ Yes 9 MΩ
Input ranges (rated values), currents	
<ul style="list-style-type: none"> • 0 to 20 mA <ul style="list-style-type: none"> — Input resistance (0 to 20 mA) 	<ul style="list-style-type: none"> Yes 250 Ω
Analog outputs	
Number of analog outputs	2; 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. 	<ul style="list-style-type: none"> 1 kΩ 500 Ω
Analog value generation for the inputs	
Integration and conversion time/resolution per channel	
<ul style="list-style-type: none"> • Resolution with overrange (bit including sign), max. • Interference voltage suppression for interference frequency f1 in Hz 	<ul style="list-style-type: none"> 12 bit; voltage mode: 11 bit + sign bit, current mode: 11 bit 10 / 50 / 60 / 400 Hz
Smoothing of measured values	
<ul style="list-style-type: none"> • parameterizable • Step: None • Step: low • Step: Medium 	<ul style="list-style-type: none"> Yes; In 4 stages: 1x, 4x, 16x, 32x cycle time Yes; 1x Yes; 4x Yes; 16x

• Step: High	Yes; 32x
Analog value generation for the outputs	
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
Interrupts/diagnostics/status information	
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
Degree and class of protection	
IP degree of protection	IP20
Standards, approvals, certificates	
CE mark	Yes
Dimensions	
Width	45 mm
Height	100 mm
Depth	81 mm
Weights	
Weight, approx.	173.4 g
last modified:	3/12/2024 

SIMATIC S7-200 SMART, analog I/O SM AM06, 2AI/1AO, 0...10V, 0...5V, 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 AM03, AI 2x12 bit, AQ 1x11 bit
Power loss	
Power loss, typ.	1.1 W
Analog inputs	
Number of analog inputs	2
Input ranges	
• Voltage	Yes
• Current	Yes
• Thermocouple	No
• Resistance thermometer	No
• Resistance	No
Analog outputs	
Number of analog outputs	1
Analog value generation for the inputs	
Integration and conversion time/resolution per channel	
• Resolution with overrange (bit including sign), max.	12 bit
Analog value generation for the outputs	
Integration and conversion time/resolution per channel	
• Resolution with overrange (bit including sign), max.	11 bit
Dimensions	
Width	45 mm
Height	100 mm
Depth	81 mm
Weights	
Weight, approx.	172 g

last modified: 3/12/2024 