

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	
- Voltage - Current - Thermocouple - Resistance thermometer - Resistance	Yes; $\pm 10\text{V}$, $\pm 5\text{V}$, $\pm 2.5\text{V}$ Yes; 0 to 20 mA No No No
Input ranges (rated values), voltages	
-10 V to +10 V — Input resistance (-10 V to +10 V) -2.5 V to +2.5 V — Input resistance (-2.5 V to +2.5 V) -5 V to +5 V — Input resistance (-5 V to +5 V)	Yes 9 M Ω Yes 9 M Ω Yes 9 M Ω
Input ranges (rated values), currents	
0 to 20 mA — Input resistance (0 to 20 mA)	Yes 250 Ω
Analog outputs	
Number of analog outputs	2; Current or voltage
Output ranges, voltage	
-10 V to +10 V	Yes
Output ranges, current	
0 to 20 mA	Yes
Load impedance (in rated range of output)	
- with voltage outputs, min. - with current outputs, max.	1 k Ω 500 Ω
Analog value generation for the inputs	
Integration and conversion time/resolution per channel	
- Resolution with overrange (bit including sign), max. - Interference voltage suppression for interference frequency f1 in Hz	12 bit; voltage mode: 11 bit + sign bit, current mode: 11 bit 10 / 50 / 60 / 400 Hz
Smoothing of measured values	
- parameterizable - Step: None - Step: low - Step: Medium	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		
Classifications			
		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