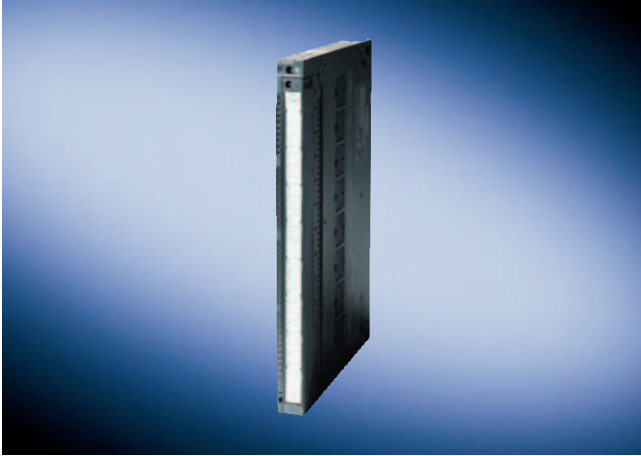


SIMATIC S7-400

Analog modules

SM 432 analog output module

Overview



- Analog outputs for the SIMATIC S7-400
- For the connection of analog actuators

5

Technical specifications

	6ES7 432-1HF00-0AB0
Voltages and currents	
Load voltage L+	
• Rated value (DC)	24 V
Current consumption	
from backplane bus DC 5 V, max.	150 mA
from supply voltage L+, max.	400 mA
Power loss, max.	9 W
Analog outputs	
Number of analg outputs	8
Cable length, shielded, max.	200 m
Voltage output, Short-circuit protection	Yes
Voltage output, short-circuit current, max..	30 mA
Current output, no-load voltage, max.	19 V
Output ranges, voltage	
• 0 to 10 V	Yes
• 1 to 5 V	Yes
• -10 to +10 V	Yes
Output ranges, current	
• 0 to 20 mA	Yes
• -20 to +20 mA	Yes
• 4 to 20 mA	Yes
Load impedance (in rated range of output)	
• with voltage outputs, min.	1 k Ω
• with voltage outputs, capacitive load, max.	1 μ F
• with current outputs, max.	500 Ω ; 600 Ohm if common-mode-voltage reduced to <1 V

	6ES7 432-1HF00-0AB0
Analog value creation	
Integrations and conversion time/resolution per channel	
• Resolution with overload area (bit including sign), max.	13 Bit
• Conversion time (per channel)	420 μ s; 420 μ s in the ranges 1 to 5 V and 4 to 20 mA; 300 μ s in all ranges
Settling time	
• for resistive load	0.1 ms
• for capacitive load	3.5 ms
• for inductive load	0.5 ms
Errors/accuracies	
Operational limit in overall temperature range	
• Voltage, relative to output area	+/- 0.5 %; +/- 10 V, 0 to 10 V, 1 to 5 V
• Current, relative to output area	+/- 1 %; +/- 20 mA, 4...20 mV
Basic error limit (operational limit at 25 °C)	
• Voltage, relative to output area	+/- 0.5 %; +/- 10 V, 0 to 10 V, 1 to 5 V
• Current, relative to output area	+/- 0.5 %; +/- 20 mA, 0 to 20 mA
Status information/alarms/diagnostics	
Substitute values connectable	No