S-DIAS Analog Output Module
AO 026

with 2 outputs (voltage/current switchable)

The S-DIAS AO 026 analog output module has two galvanically isolated outputs with a resolution of 16 bits, which can be switched between voltage and current outputs. The supply of the analog outputs is realized with an external +24 V supply.

Analog Output Voltage Specifications

	Number of channels	2	
	Output range	-10 ... +10 V	0 ... +10 V
	Output value	-30,000 ... +30,000	0 ... +60,000
	Output range over range	-10.8 ... +10.8 V	0 ... +10.8 V
	Output value over range	-32,400 ... +32,400	0 ... +64,800
	Resolution	16-bit (ca. 0.3 mV/LSB)	16-bit (ca. 0.15 mV/LSB)
	Refresh time of all channels	≥ 250 µs (depending on the cyclic time)	
	Output voltage capacity	maximum 2 mA	
	Allowable capacitive load	maximum 100 nF	
	Short circuit protection	yes	
	Settling time	200 µs typical for C < 100 nF (99.9 % of the end value)	
	Galvanic isolation	yes (500 V)	
	Output precision	±0.04 % of maximum output value	

Analog Output Current Specifications

	Number of channels	2	
	Output range	0-20 mA	4-20 mA
	Output value	0-60,000	12,000-60,000
	Output range over range	0-20.2 mA	3.8-20.2 mA
	Output value over range	0-60,600	11,400-60,600
	Resolution current	16-bit (ca. 0.3 µA/LSB)	
	Refresh time of all channels	≥ 250 µs (depending on the cyclic time)	
	Settling time	200 µs typical for L < 0.5 mH at 50 Ω 200 µs typical for L < 5 mH at 500 Ω	
	Load	maximum 500 Ω	
	Allowed output inductivity	maximum 0.5 mH at 50 Ω maximum 5 mH at 500 Ω	
	Cable break monitor	yes	
	Galvanic isolation	yes (500 V)	
	Output precision	±0.17 % of maximum output value	

Electrical Requirements

	External +24 V supply	+18-30 V DC	
	Current consumption external (+24 V supply) without load of the analog outputs	typically 45 mA	maximum 55 mA
	Current consumption external (+24 V supply) with load of the analog outputs	typically 82 mA	maximum 95 mA
	Voltage supply from S-DIAS bus	+5 V	
	Current consumption on the S-DIAS bus (+5 V supply)	typically 60 mA	maximum 65 mA
	Voltage supply from S-DIAS bus	+24 V	
	Current consumption on the S-DIAS bus (+24 V supply)	-	-

Article Number and Miscellaneous

	Article number	20-010-026
	Dimensions	12.5 x 104.2 x 72 mm (W x H x D)
	Standard	UL 508 (E247993)
	Approvals	UL, cUL, CE, UKCA

Environmental Conditions

	Storage temperature	-20 ... +85 °C	
	Environmental temperature	0 ... +55 °C	
	Humidity	0-95 %, non-condensing	
	Operating conditions	pollution degree 2 altitude up to 2000 m	
	EMC resistance	in accordance with EN 61000-6-2 (industrial area)	
	EMC noise generation	in accordance with EN 61000-6-4 (industrial area)	
	Vibration resistance	EN 60068-2-6	3.5 mm from 5-8.4 Hz 1 g from 8.4-150 Hz
	Shock resistance	EN 60068-2-27	15 g
	Protection type	EN 60529	IP20

Notes