

S-DIAS Analog Input Module

AI 084



with 8 current inputs

The S-DIAS AI 084 analog input module has eight current inputs with a 16-bit resolution.

The module supports the measurement ranges 0-20 mA and 4-20 mA.

Analog Current Input Specifications

Number of channels	8	
Measurement range	0-20 mA	4-20 mA
Measurement value	0-20000	4000-20000
Input type	differential input	
Current resolution	16-bit (circa 0.3 μ A/LSB)	
Conversion time for all channels	1 ms	
Common mode range	± 10 V	
Input resistance	typically 50 Ω	
Hardware input filter	typically 1 kHz low pass 3rd order system	
Input filter	configurable	
Cable break monitor	no	yes, adjustable via software between 0-4 mA (Default: 3 mA)
Short circuit monitor	20.25 mA	20.25 mA
Basic precision incl. calibration error, linearity and noise at 25 °C	± 0.30 % of maximum measurement value	
Temperature drift 0-60 °C	± 0.20 % of maximum measurement value	
Total measurement precision (0-60 °C)	$\pm 0,50$ % of maximum measurement value	

Electrical Requirements

Voltage supply from S-DIAS bus	+5 V	
Current consumption on the S-DIAS bus (+5 V power supply)	typically 50 mA	maximum 55 mA
Voltage supply from S-DIAS bus	+24 V	
Current consumption on the S-DIAS bus (+24 V power supply)	typically 32 mA	maximum 37 mA

Article Number and Miscellaneous

Article number	20-009-084	
Dimensions	12.5 x 104.2 x 72 mm (W x H x D)	
Normung	UL 508 (E247993)	
Approvals	UL, cUL, CE	

Environmental Conditions

Storage temperature	-20 ... +85 °C	
Environmental temperature	0 ... +60 °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