

S-DIAS Absolute Pressure Input Module

DM 811



with 1 absolute pressure inputs
1 PT100 temperature input
8 digital inputs

The S-DIAS DM 811 absolute pressure input module has one absolute pressure input with a measurement range of 0-1600 mbar, one PT100 temperature input 0-300 °C and eight digital inputs (+24 V/3.7 mA/0.5 ms).

Absolute Pressure Input Specifications

Number	1
Pressure sensor type	absolute pressure sensor
Measurement range	0-1600 mbar
Measurement value	0-1600
Resolution	12-bit (ca. 0.4 mbar/LSB)
Conversion time for all channels	1 ms
Input filter hardware	typically 1 kHz, low pass 3rd order system
Input filter software	configurable
Measurement precision	±0.25 % of scale end value, i.e. ±4.0 mbar for 25 °C ambient temperature with offset and gain comparison ±1.00 % of scale end value, i.e. ±16.0 mbar for 0-50 °C ambient temperature without offset and gain comparison
Calibratable	yes (2-point comparison)
Maximum overpressure	4 bar

Temperature Input Specifications PT100

Number	1	
Measurement range	100.0-212.1 Ω	
	PT100	
	0-300 °C	
Resolution	0.1 °C	
Conversion time per channel	1 ms	
Cable break monitor	yes	
Input filter hardware	typically 1 kHz	low pass 3rd order system
Input filter software	configurable	
Precision of analog channel measurement	±0.5 % of maximum measurement value	

Digital Input Specifications

Number	8	
Input voltage	typically +24 V	maximum +30 V
Signal level	low: < +5 V	high: > +15 V
Input current	3.7 mA at +24 V	
Input delay	typically 0.5 ms	

Electrical Requirements

Voltage supply from S-DIAS bus	+5 V	
Current consumption on the S-DIAS bus (+5 V power supply)	typically 60 mA	maximum 65 mA
Voltage supply from S-DIAS bus	+24 V	
Current consumption on the S-DIAS bus (+24 V power supply)	typically 20 mA	maximum 25 mA

Article Number and Miscellaneous

Article number	20-008-811	
Dimensions	12.5 x 104.2 x 72 mm (W x H x D)	
Standard	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

Notes

