

S-DIAS Digital Input Module DI 169



with 16 digital inputs

The S-DIAS digital input module DI 169 is equipped with 16 counter inputs for Open-Collector outputs. The actual input signal can be read (use as digital input - earthing switching).

To suppress noise in the signal lines, input filters are provided.

Digital Input Specifications

Number	16	
Input signal	GND switching	
Pull-up voltage	typically +24 V	maximum +30 V
Collector current	typically 2.5 mA	maximum 3.5 mA
Saturation voltage	maximum 1 V at 3 mA	
Residual current	maximum 200 µA	
Input delay	50 µs low pass 1. order	
Input frequency	maximum 1 kHz	
Counter frequency	1 kHz in normal counter mode resp. 4 kHz in incremental counter mode with 4-edge analysis	
Status display	LED (green) lights when the input signal < 1 V	

Counter Functionality

Channel	16	8
Operating modes	counter mode	1-/4-edge analysis
Resolution	8-bit	

Electrical Requirements

Voltage supply from S-DIAS bus	+5 V		+24 V	
Current consumption on the S-DIAS bus	typically 38 mA	maximum 43 mA	typically 40 mA (at +24 V)	maximum 56 mA (at +30 V)

Article Number and Miscellaneous

Article number	20-006-169
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