

C-DIAS Temperature Sensing Module

CAI 088



with 8 temperature inputs -50 °C →+150 °C

This analog input module is used to record temperatures from -50 °C to +150 °C with a PT 100 temperature sensor.

Analog Channel Specifications

Number of channels	8	
Measurement range	-50 °C to +150 °C	
Sensor range	80.31 Ω – 157.31 Ω	
Measurement value	0 – 4000	an open input returns 4095
Resolution	12-bit	
Conversion time per channel	≥ 14 μs	
Applicable sensor type	PT 100	
Input filter	0.5 s	low pass class 3 system
Precision of Analog channel measurement	±0.7 % of maximum measurement value	

Electrical Requirements

Voltage supply from C-DIAS bus	+5 V and +24 V	
Current consumption of C-DIAS bus (+5 V supply)	typically 10 mA	maximum 20 mA
Current consumption of C-DIAS bus (+24 V supply)	typically 50 mA	maximum 70 mA

Miscellaneous

Article number	12-009-088	
Hardware version	1.x	
Standard	UL (E247993)	
Connector set	CKL 042, article number: 12-600-042	

Environmental Conditions

Storage temperature	-20 – +85 °C	
Operating temperature	0 – +60 °C	
Humidity	0 – 95 %, non-condensing	
EMC stability	in accordance with EN 61000-6-2 (industrial area)	
Shock resistance	EN 60068-2-27	150 m/s²
Protection type	EN 60529	IP20