Product data sheet Characteristics

TM5SAI2PH

analog input module - 2I - temperature probe PT100/PT1000 - 16 bits



Main

Range of product	Modicon TM5 Analog input module	
Product or component type		
Analogue input number	2	
Analogue input type	Temperature probe - 200850 °C Pt 100/Pt 1000	
Analogue input resolution	16 bits	

Complementary

Range compatibility	Modicon LMC058	
Nange compatibility	Modicon M258	
Product compatibility	Motion controller Logic controller	
Measurement resolution	0.1 °C	
Colour	White	
Measurement error	< 0.037 % of full scale, - 200850 °C, Pt 100/Pt 1000 at 25 °C	
Temperature coefficient	0.004 %FS/°C, analogue input type: temperature probe	•
Non-linearity	0.00015 %FS, analogue input type: temperature probe	·
Type of cable	Shielded cable	
Isolation	No insulation between channels 500 Vrms AC insulation between channel and bus	
Supply	Internal	
[Us] rated supply voltage	24 V DC -1520 %	
Common mode rejection	>= 95 dB	
Local signalling	2 LEDs green for input status 1 LED red for power supply 1 LED green for power supply	
Current consumption	46 mA 24 V DC input/output 2 mA 5 V DC bus	
Power dissipation in W	<= 1.11 W	
Marking	CE	
Product weight	0.025 kg	

Environment

Standards	CSA C22.2 No 142	
	IEC 61131-2	
	UL 508	
	CSA C22.2 No 213	
Product certifications	CSA	
	C-Tick	
	CULus	
	GOST-R	
Ambient air temperature for operation	050 °C (vertical installation)	
	060 °C with derating factor (horizontal installation)	
	055 °C without derating factor (horizontal installation)	
Ambient air temperature for storage	-2570 °C	
Relative humidity	595 % without condensation	
IP degree of protection	IP20 conforming to IEC 61131-2	

Pollution degree	2 conforming to IEC 60664		
Operating altitude	02000 m		
Storage altitude	03000 m		
Vibration resistance	3.5 mm (f= 58.4 Hz) DIN rail 1 gn (f= 8.4150 Hz) DIN rail		
Shock resistance	15 gn for 11 ms		
Resistance to electrostatic discharge	8 kV in air conforming to EN/IEC 61000-4-2 4 kV on contact conforming to EN/IEC 61000-4-2		
Resistance to electromagnetic fields	10 V/m 802000 MHz conforming to EN/IEC 61000-4-3 1 V/m 22.7 GHz conforming to EN/IEC 61000-4-3		
Resistance to fast transients	2 kV power lines conforming to EN/IEC 61000-4-4 1 kV shielded cable conforming to EN/IEC 61000-4-4 1 kV I/O conforming to EN/IEC 61000-4-4		
Surge withstand	1 kV common mode conforming to EN/IEC 61000-4-5 0.5 kV differential mode conforming to EN/IEC 61000-4-5		
Electromagnetic compatibility	EN/IEC 61000-4-6		
Disturbance radiated/conducted	CISPR 11		

Offer Sustainability

Sustainable offer status	Not Green Premium product		
RoHS (date code: YYWW)	Compliant - since 1039 - Schneider Electric declaration of conformity		
REACh	Reference not containing SVHC above the threshold		
Product environmental profile	Available		

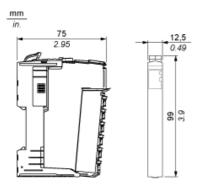


Product data sheet Dimensions Drawings

TM5SAI2PH

TM5 Slice

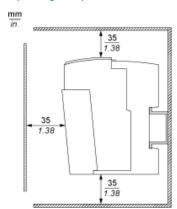
Dimensions

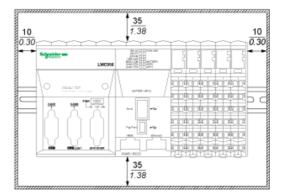


TM5SAI2PH

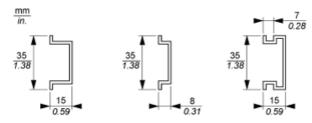
TM5 System

Spacing Requirements





Mounting on a DIN Rail



Product data sheet Connections and Schema

TM5SAI2PH

TM5 System Wiring Recommendations

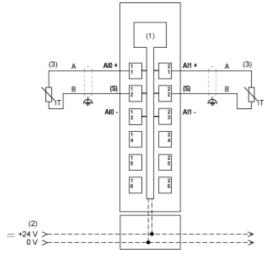
Wire Sizes to Use with the Removable Spring Terminal Blocks

	mm in.	0.35		1		
		mm²	0,082,5	0,252,5	0,251,5	2 x 0,252 x 0,75
Γ		AWG	2814	24 14	2416	2 x 242 x 18

Electronic Module 2AI PT100/PT1000 16 Bits

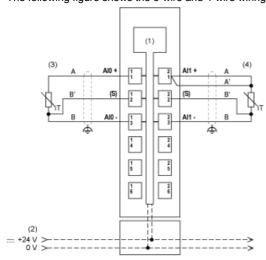
Wiring Diagrams

The following figure shows the 2-wire wiring diagram:



- (1) Internal electronics
- (2) 24 Vdc I/O power segment integrated into the bus bases
- (3) 2-wire sensor
- (S) Sensor

The following figure shows the 3-wire and 4-wire wiring diagram:



- (1) Internal electronics
- (2) 24 Vdc I/O power segment integrated into the bus bases
- (3) 3-wire sensor
- (4) 4-wire sensor
- (S) Sensor