

Product data sheet

Specifications



analog input module, Modicon TM5,
2I, temperature probe PT100,
PT1000, 16bits

TM5SAI2PH

**Product availability: Non-Stock - Not normally stocked in
distribution facility**

Main

Range of Product	Modicon TM5
Product or Component Type	Analog input module
Product Compatibility	Logic controller Motion controller
Range Compatibility	Modicon M258 Modicon LMC058
Analogue input number	2

Complementary

Measurement resolution	0.1 °C
Color	White
Temperature coefficient	0.004 %FS/°C temperature probe
Supply	Internal
[Us] rated supply voltage	24 V DC -15...20 %
Analogue input type	Temperature probe - 200...850 °C Pt 100/Pt 1000
Analogue input resolution	16 bits
Type of Cable	Shielded cable
Measurement error	< 0.037 % of full scale - 200...850 °C Pt 100/Pt 1000 25 °C
Non-linearity	0.00015 %FS temperature probe
Common mode rejection	> 95 dB
Typical current consumption	2 mA 5 V DC 46 mA 24 V DC input/output
Power dissipation in W	1.11 W
Isolation between channels	None
Isolation between channels and bus	500 Vrms AC
Local signalling	1 LED green power supply 1 LED red power supply 2 LEDs green input status
Housing Colour	White
Height	3.9 in (99 mm)
Width	0.5 in (12.5 mm)
Depth	3.0 in (75 mm)
Product Weight	0.055 lb(US) (0.025 kg)

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Environment

IP Degree of Protection	IP20
Marking	CE
Product certifications	CULus CSA GOST-R C-tick
Standards	UL 508 CSA C22.2 No 142 IEC 61131-2 CSA C22.2 No 213
Ambient air temperature for operation	32...131 °F (0...55 °C) without derating horizontal installation 32...140 °F (0...60 °C) with derating factor horizontal installation) 32...122 °F (0...50 °C) vertical installation)
Ambient air temperature for storage	-13...158 °F (-25...70 °C)
Relative humidity	5...95 % without condensation
Operating altitude	0...6561.68 ft (0...2000 m)
Pollution degree	2
Vibration resistance	1 gn 8.4...150 Hz) on DIN rail 3.5 mm 5...8.4 Hz) on DIN rail
Shock resistance	15 gn 11 ms

Ordering and shipping details

Category	US1PC1222532
Discount Schedule	PC12
GTIN	3595864074757
Returnability	No
Country of origin	AT

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	0.787 in (2.000 cm)
Package 1 Width	2.362 in (6.000 cm)
Package 1 Length	4.134 in (10.500 cm)
Package weight(Lbs)	1.411 oz (40.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	97
Package 2 Height	5.906 in (15.000 cm)
Package 2 Width	11.811 in (30.000 cm)
Package 2 Length	15.748 in (40.000 cm)
Package 2 Weight	9.259 lb(US) (4.200 kg)

Contractual warranty

Warranty (in months)	18
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Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)



Environmental footprint

Total lifecycle Carbon footprint	46 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	1 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	45 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.1 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile

Use Better



Materials and Substances

Packaging made with recycled cardboard	No
Packaging without single use plastic	Yes
EU RoHS Directive	Compliant By Exemption
REACH Regulation	Free of Substances of Very High Concern above the threshold
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
PVC free	Yes

Use Longer



Lifetime extension

Repair	No
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Use Again



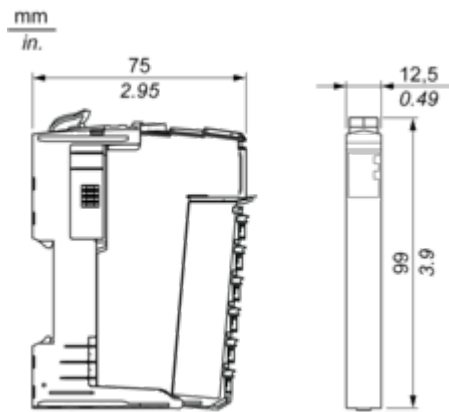
Repack and remanufacture

Recyclability potential, in %	0
Circularity Profile	End of Life Information
Take-back	No
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Dimensions Drawings

TM5 Slice

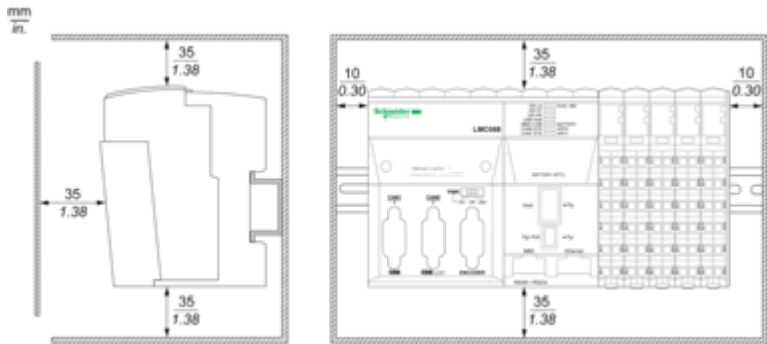
Dimensions



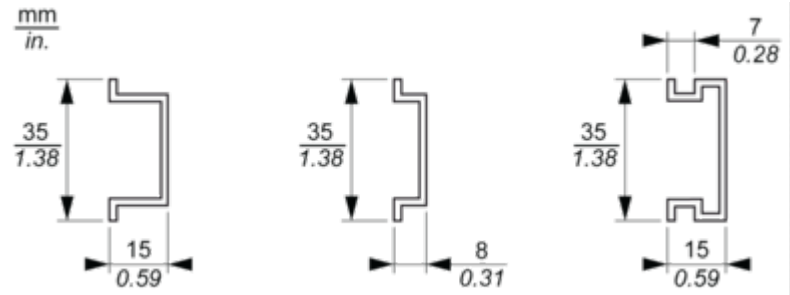
Mounting and Clearance

TM5 System

Spacing Requirements



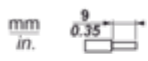
Mounting on a DIN Rail



Connections and Schema

TM5 System Wiring Recommendations

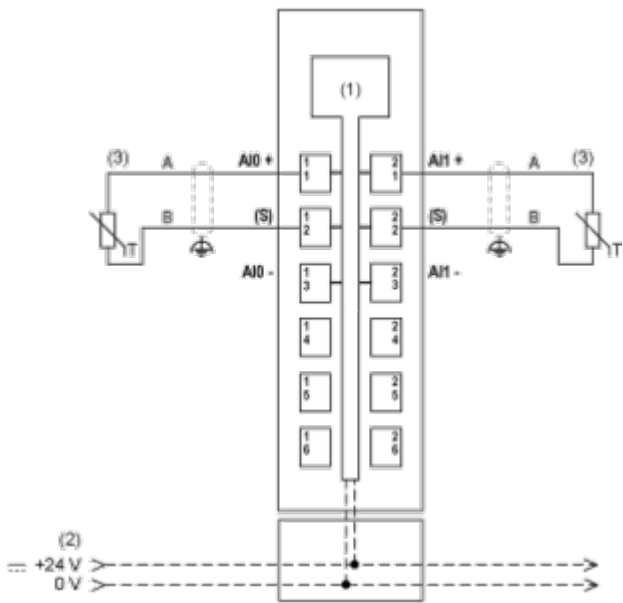
Wire Sizes to Use with the Removable Spring Terminal Blocks

				
mm ²	0,08...2,5	0,25...2,5	0,25...1,5	2 x 0,25...2 x 0,75
AWG	28...14	24...14	24...16	2 x 24...2 x 18

Electronic Module 2AI PT100/PT1000 16 Bits

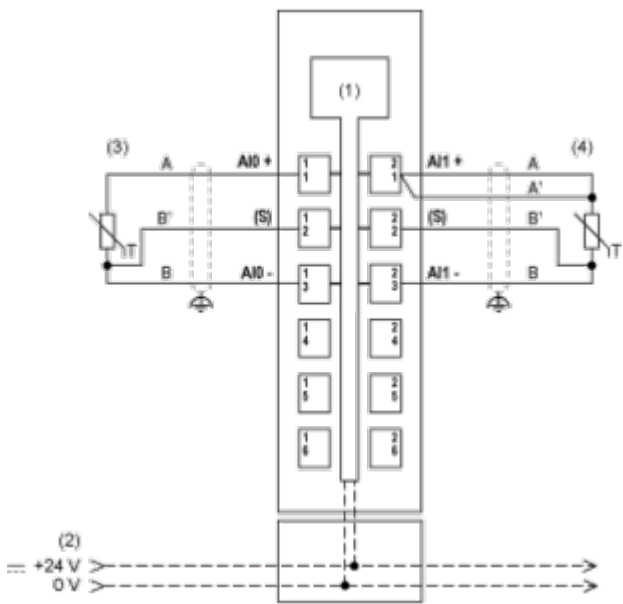
Wiring Diagrams

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