



# analog input module, Modicon TM5, 2I, +/-10V, 0 to 20mA, 4 to 20mA, 12bits

TM5SAI2L

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

Price\*: 455.00 USD

# Main

Range of Product	Modicon TM5			
Product or Component Type	Analog input module			
Analogue input number	2			
Analogue input type	voltage +/- 10 V differential current 020 mA/420 mA differential			
Analogue input resolution	12 bits + sign +/- 10 V 12 bits 020 mA/420 mA			

# Complementary

Range Compatibility	Modicon M258 Modicon LMC058			
Product Compatibility	Logic controller Motion controller			
Measurement resolution	2.441 mV, +/- 10 V 4.883 μA, 020 mA/420 mA			
Color	White			
Input impedance	>= 20 mOhm voltage			
Load impedance ohmic	<= 300 Ohm current)			
Sampling duration	1 ms all inputs with filtering 300 µs all inputs without filtering			
Measurement error	< 0.08 % of full scale +/- 10 V +/- 10 V 25 °C < 0.08 % of full scale 020 mA/420 mA 25 °C			
Temperature coefficient	+/- 0.009 %FS/°C current +/- 0.006 %FS/°C voltage			
Non-linearity	< 0.025 %FS voltage < 0.05 %FS current			
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	> 70 dB			
Local signalling	1 LED green power supply 1 LED red power supply 2 LEDs green input status			

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

Current consumption	2 mA 5 V DC bus 33 mA 24 V DC input/output	
Maximum power dissipation in W	0.81 W	
Marking	CE	
Net Weight	0.055 lb(US) (0.025 kg)	

# **Environment**

Standards	IEC 61131-2 CSA C22.2 No 213 UL 508 CSA C22.2 No 142			
Product Certifications	CSA C-tick cULus GOST-R			
Ambient air temperature for operation	32131 °F (055 °C) without derating horizontal installation) 32140 °F (060 °C) with derating factor horizontal installation) 32122 °F (050 °C) vertical installation)			
Ambient Air Temperature for Storage	-13158 °F (-2570 °C)			
Relative humidity 595 % without condensation				
P degree of protection IP20IEC 61131-2				
Pollution degree	2 IEC 60664			
Operating altitude	06561.68 ft (02000 m)			
Storage altitude	0.00000000009842.5 ft (03000 m)			
/ibration resistance 1 gn 8.4150 Hz DIN rail 3.5 mm 58.4 Hz DIN rail				
Shock resistance 15 gn 11 ms				
Resistance to electrostatic discharge	4 kV on contact IEC 61000-4-2 8 kV in air IEC 61000-4-2			
Resistance to electromagnetic fields	0.9 V/m (1 V/m) 22.7 GHz IEC 61000-4-3 9.1 V/m (10 V/m) 802000 MHz IEC 61000-4-3			
Resistance to fast transients	1 kV IEC 61000-4-4 I/O) 1 kV IEC 61000-4-4 shielded cable) 2 kV IEC 61000-4-4 power lines)			
Surge withstand	0.5 kV differential mode IEC 61000-4-5 1 kV common mode IEC 61000-4-5			
Electromagnetic compatibility	EN/IEC 61000-4-6			
Disturbance radiated/conducted	d CISPR 11			

# Ordering and shipping details

Category	US1PC1222532	
Discount Schedule	PC12	
GTIN	3595864074719	
Returnability	No	
Country of origin	AT	

# **Packing Units**

Unit Type of Package 1	PCE
Number of Units in Package 1	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 1 Weight	1.376 oz (39.000 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	9.233 lb(US) (4.188 kg)	

# **Contractual warranty**

Warranty 18 months

# Sustainability Screen Premium

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >





Transparency RoHS/REACh

# Well-being performance

<b>Ø</b>	Reach Free Of Svhc	
<b>Ø</b>	Toxic Heavy Metal Free	
<b>Ø</b>	Mercury Free	
<b>9</b>	Rohs Exemption Information	Yes

# **Certifications & Standards**

Reach Regulation	REACh Declaration			
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration			
China Rohs Regulation	China RoHS declaration			
Environmental Disclosure	Product Environmental Profile			
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.			
Circularity Profile	End of Life Information			
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"			

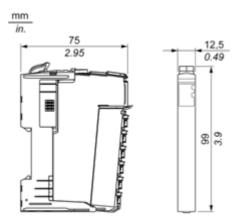
# **Product data sheet**

# TM5SAI2L

**Dimensions Drawings** 

# TM5 Slice

#### **Dimensions**

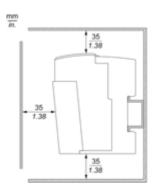


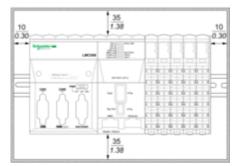
# TM5SAI2L

Mounting and Clearance

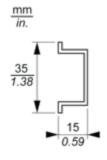
# TM5 System

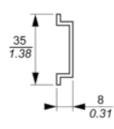
# **Spacing Requirements**

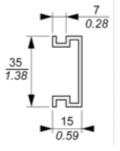




# Mounting on a DIN Rail







# Product data sheet

# TM5SAI2L

Connections and Schema

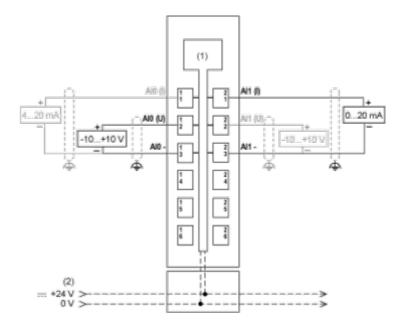
# TM5 System Wiring Recommendations

# Wire Sizes to Use with the Removable Spring Terminal Blocks

mm in.	0.35				
	mm²	0,082,5	0,252,5	0,251,5	2 x 0,252 x 0,75
	AWG	2814	2414	2416	2 x 242 x 18

# Electronic Module 2AI ±10V/0-20mA/4-20mA 12 Bits

#### Wiring Diagram



- (1) Internal electronics
- (2) 24 Vdc I/O power segment integrated into the bus bases
- (I) Current
- (Ú) Voltage