



analog output module, Modicon TM5, 2O, +/-10V, 0 to 20mA, 16bits

TM5SAO2H

Main

Range of product	Modicon TM5		
roduct or component type Analog output module			
Analogue output number	2		
Analogue output resolution	15 bits + sign, +/- 10 V 15 bits 0 20 mA		

Complementary

Range compatibility Modicon LMC058 Modicon M258 Product compatibility Logic controller Motion controller Motion controller Motion controller Analogue output type Current 020 mA Voltage +/- 10 V 610.352 nA, 020 mA Colour White Response time <= 1 ms Minimum output impedance 1 Ohm Sampling duration 50 ms Measurement error < 0.045 % of full scale +/- 10 V at 25 °C < 0.045 % of full scale 020 mA at 25 °C Temperature coefficient 0.015 %FS/°C, analogue output type: current 0.015 %FS/°C, analogue output type: voltage Non-linearity < 0.007 %FS/°C, analogue output type: voltage Non-linearity < 0.007 %FS/°C, analogue output type: voltage Type of cable Isolation No insulation between channels 500 Vrms AC insulation between channel and bus Supply Internal [Us] rated supply voltage 24 V DC -1520 % Local signalling 1 LED green for power supply 1 LED red for power supply 2 LEDs yellow for output status Current consumption 2 mA at 5 V DC bus 50 mA at 24 V DC input/output Maximum power dissipation in W 1.21 W Maximum power dissipation in W 1.21 W	oomplemental y			
Analogue output type Current 020 mA Voltage +/- 10 V Measurement resolution 305.176 μV, +/- 10 V 610.352 nA, 020 mA Colour White Response time <= 1 ms	Range compatibility			
Voltage +/- 10 V	Product compatibility			
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Non-linearity	Measurement error			
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Isolation	Non-linearity			
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1 LED red for power supply 2 LEDs yellow for output status Current consumption 2 mA at 5 V DC bus 50 mA at 24 V DC input/output	[Us] rated supply voltage	24 V DC -1520 %		
50 mA at 24 V DC input/output	Local signalling	1 LED red for power supply		
Maximum power dissipation in W 1.21 W	Current consumption			
	Maximum power dissipation in W	1.21 W		
Marking CE	Marking	CE		

Net weight 0.025 kg

Environment

Standards	CSA C22.2 No 213 UL 508 CSA C22.2 No 142 IEC 61131-2			
Product certifications	cULus C-Tick GOST-R CSA			
Ambient air temperature for operation	055 °C without derating (horizontal installation) 060 °C with derating factor (horizontal installation) 050 °C (vertical 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	1 gn at 8.4150 Hz on DIN rail 3.5 mm at 58.4 Hz on DIN rail			
Shock resistance	15 gn for 11 ms			
Resistance to electrostatic discharge	4 kV on contact conforming to IEC 61000-4-2 8 kV in air conforming to IEC 61000-4-2			
Resistance to electromagnetic fields	1 V/m 22.7 GHz conforming to IEC 61000-4-3 10 V/m 802000 MHz conforming to IEC 61000-4-3			
Resistance to fast transients	1 kV (I/O) conforming to IEC 61000-4-4 1 kV (shielded cable) conforming to IEC 61000-4-4 2 kV (power lines) conforming to IEC 61000-4-4			
Surge withstand	0.5 kV differential mode conforming to IEC 61000-4-5 1 kV common mode conforming to IEC 61000-4-5			
Electromagnetic compatibility	EN/IEC 61000-4-6			
Disturbance radiated/conducted	CISPR 11			

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.9 cm
Package 1 Width	5.9 cm
Package 1 Length	10.4 cm
Package 1 Weight	38 g
Unit Type of Package 2	S02
Number of Units in Package 2	42
Package 2 Height	15 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	1.95 kg

Contractual warranty

Warranty

23-Oct-2024

18 months

Sustainability Screen Premium

Green PremiumTM **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-CO₂ 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

⊘	Reach Free Of Svhc	
9	Toxic Heavy Metal Free	
②	Mercury Free	
⊘	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		

23-Oct-2024

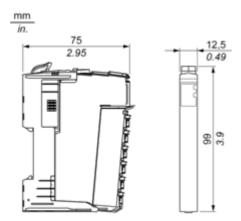
Product datasheet

TM5SAO2H

Dimensions Drawings

TM5 Slice

Dimensions

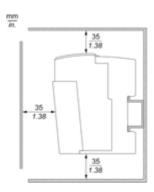


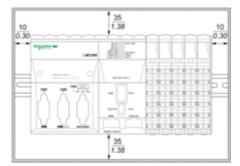
TM5SAO2H

Mounting and Clearance

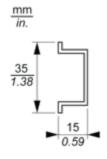
TM5 System

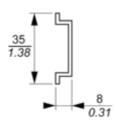
Spacing Requirements

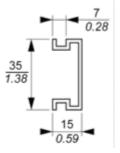




Mounting on a DIN Rail







Product datasheet

TM5SAO2H

Connections and Schema

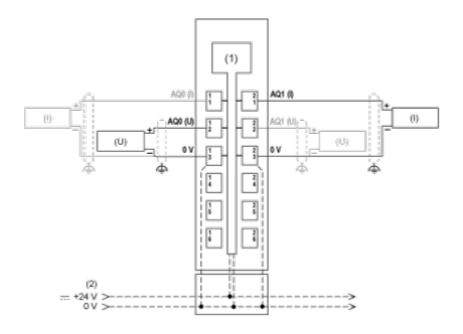
TM5 System Wiring Recommendations

Wire Sizes to Use with the Removable Spring Terminal Blocks

mm in.	0.35		ß		
	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 2AO ±10V/0-20mA 16 Bits

Wiring Diagram



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