# Product data sheet Characteristics

# TM5SAI4AFS

Analog input module, Modicon TM5, FS, 2I, 4...20 mA, 24 bits





#### Main

Range of product	Modicon TM5
Product or component type	Analog input module
Analogue input number	4
Analogue input type	Current 420 mA differential
Analogue input resolution	24 bits 020 mA/420 mA

#### Complementary

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Range compatibility	Modicon LMC058 Modicon M258
Product compatibility	Logic controller Motion controller
Measurement resolution	1 μA, 420 mA
Colour	Red
Load impedance ohmic	<= 230 Ohm (current)
Input filtering	1 ms configurable by software 2 ms configurable by software 10 ms configurable by software 16.7 ms configurable by software 20 ms configurable by software 33.3 ms configurable by software 40 ms configurable by software 66.7 ms configurable by software
Sampling duration	7 Ms 14 Ms 20 Ms 25 Ms 40 Ms 48 Ms 62 Ms 5 ms, analogue input type: all inputs without filtering
Measurement error	< 0.08 % of full scale 420 mA at 25 °C
Temperature coefficient	+/-0.005 %FS/°C, analogue input type: current
Non-linearity	0.003 %FS, analogue input type: current
Type of cable	Shielded cable
Isolation	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 for power supply 1 LED red for power supply 4 LEDs green for input status
Current consumption	2 mA at 5 V DC bus 38 mA at 24 V DC input/output
Maximum power dissipation in W	0.25 W 1.7 W
Marking	CE
Net weight	0.068 kg

#### Environment

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Standards	UL 508 ISO 13849-1 IEC 61508 IEC 61511 EN 50156-1 IEC 62061
Product certifications	CSA CULus
Ambient air temperature for operation	040 °C (vertical installation) 055 °C (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	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 EN/IEC 61000-4-2 8 kV in air conforming to EN/IEC 61000-4-2
Resistance to electromagnetic fields	1 V/M 22.7 GHz conforming to EN/IEC 61000-4-3 10 V/m 802000 MHz conforming to EN/IEC 61000-4-3
Resistance to fast transients	1 KV (I/O) conforming to EN/IEC 61000-4-4 1 KV (shielded cable) conforming to EN/IEC 61000-4-4 2 kV (power lines) conforming to EN/IEC 61000-4-4
Surge withstand	0.5 KV differential mode conforming to EN/IEC 61000-4-5 1 kV common mode conforming to EN/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 Weight	68 g	
Package 1 Height	3 cm	
Package 1 width	6 cm	
Package 1 Length	10.5 cm	

## Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EVEN RoHS
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	₫Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
PVC free	Yes