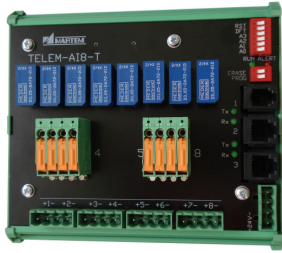


TELEM-AI8-T analog input RTU module



The TELEM family RTU module TELEM-AI8-T with 8 analog differential analog inputs is used for measure 8 analogue values. Module bases on 32-bit ARM CPU. Interfaces to other equipment are RS-232 or RS-422. Data exchange protocol IEC 60870-5-1-101. Time synchronization is possible with synchronization pulse through GW6 device and over protocol.

Features

- Time tagged measurements for quick changes
- ADC self calibration
- Periodical measurements
- Configuration / parameterization with IEC protocol at the same line with data communication
- 22 bit A/D resolution
- Daisy- chain master – slave connection for up to 15 same type modules using RS- 422 interface and up to 45 different type modules
- Self diagnostics and supervision simultaneously with data acquisition

Technical data

Number of differential analog inputs	8
User configurable input ranges	+/- 5 mA, +/-10mA, +/-20 mA, 4...20mA for every input separately
Form of transferred measurements	Normalized
Measurement accuracy	0,1 % (automatically scaled)
Resolution	22 bit
Acquisition time	100 ms per channel
Input circuit galvanic isolation from mechanical earth and electrical earth and between different inputs	Yes
Analogue input circuit DC impedance	100 Ohms

Installation, terminals and environment

Weight	310 g
Mounting	DIN 35
Dimensions (WxHxD)	140 x 125 x 60
Terminals for signal	MVSTBWA 2,5/4-ST
Terminal for power	MVSTBWA 2,5/4-ST
Terminal for communication	RJ4/4 (RS232); RJ12 (RS422)
Over voltage protection	IEC-60255-4, 2,5 kV pulse protection IEC-60255-5, 2 kV DC on
Disturbance	IEC-61000-3-2, 61000-6-2, 6100-6-4
Ambient temperature in operation	-20...+50 °C
Indication	1 for running indication, 1 for alert indication
Built in clock with backup capacitor	Yes

Power requirements

Supply voltage	9-30 V DC, 4 VA
----------------	-----------------

Configuration

Configuration of TELEM-AI8-T is configured using **TELEM 2000** software. All 8 analog inputs are configured independently.

Communication ports configurable parameters and general settings

Communication speed	200 - 115200 bps
Link Address	1 - 255
ASDU address	1 - 255
Object's base address	0 - 65500
Communication mode	Online
Type of periodical analog measurements	Spontaneous per./Request
Time synchronization enabled	Yes
ADC self calibration	Yes

Configuration parameters for analog inputs

In use	Yes/No
Input signal range	0...5; 0...10; 0...20 +/-5 mA +/-5; +/-10; +/-20; 4...20 mA
Filtration coefficient determines the averaging time	1 - 65535 ms
Zero zone If the value is in this range around the zero, it is transferred as zero	0,01 - 100 % 0,5 %
Dead Band 1 for events without time tag Min. interval for events	0,01 - 100 % 2 % 1 - 65535 ms
DeadBand2 for time tagged event. If this value change takes place within specified time period, then two events are created with min and max values of this time period	0,01 - 100 %
Time interval for Dead band 2	1 - 65535 ms
Time interval for periodical time tagged values	1 - 65535 sec