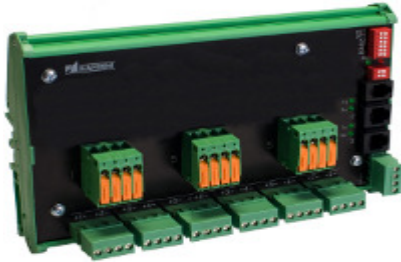


## TELEM-AI12-T analog input RTU module



The TELEM family RTU module TELEM-AI12-T with 12 analog differential analog inputs is used for measure 12 analogue values. Module bases on 32-bit ARM CPU. Interfaces to other equipment are RS-232 and RS-422. Data exchange protocol is IEC 60870-5-1-101. Time synchronization is possible with 1 second synchronization pulse and over protocol.

### Features

- Time tagged measurements for quick changes
- ADC self calibration
- Periodical measurements
- Configuration/parameter setting with IEC protocol at the same line with data communication
- 12 bit A/D resolution
- Daisy-chain master-slave connection for up to 15 modules using RS-422 interface

### Technical data

Number of differential analog inputs	12
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	12 bit
Acquisition time	100 ms per channel
Input circuit galvanic isolation from earth, power and communication circuits	Yes
Analogue input circuit DC impedance	Current input <100 Ohms

### Installation, terminals and environment

Weight	310 g
Mounting	DIN 35
Dimensions (WxHxD)	160 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	-30...+70°C
Indication	1 for running indication, 1 for alert indication
Built in real time clock with backup capacitor	Yes

## Power requirements

Supply voltage	20...72 (12...32 optional) V DC, 1 W
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## Configuration

Configuration of TELEM-AI12-T is configured using **TELEM-GWS** software. All 12 analog inputs are configured independently.

## Communication ports configurable parameters and general settings

Communication speed	200...115200 bps
Link Address	1...15
ASDU address	1...15
Object's base address	0...65500
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 %, default 0,5 %
Dead Band 1 for events without time tag	0,01...100 %, default 2 %
Min. interval for events	1...65535 ms
Time interval for periodical time tagged values	1...65535 sec