The analog input module romod 8 AI is used for connecting, measuring and signaling of up to eight analog sensor values. The sensors will be connected to the module via terminals.

The reference potential for the analog inputs is available at the GND terminals. For two AIs there is available one GND terminal in each case. All ground pins are connected to each other internally and to the GND of the power supply, as well.

Active signals (0-10V) as well as various passive sensor types (e.g. Pt1000, Ni1000) may be connected to the module.
If an input is configured for 0..10V signals, its value will be signalized by the concerned status LED of the channel in light / dark operating mode in green colour.
When using resistive sensors, a wire break of the sensor (open analog input) will be signalized by the LED of the channel in red color, otherwise it will be lit green dimmed.

Unused inputs should be configured for 0-10V signals and connected to GND potential.

Regarding the system configuration (addressing, maximum number of modules connected to a Modbus Master interface, installation, connection to the bus etc.), please follow the instructions in the chapter Configuration.

romod 8 AI		GND	24V AC/DC	GND für AIs		Ansteuerung der AI aktiv 0..10 VDC oder passiv							
AI Nr. 1-8						1	2	3	4	5	6	7	8
Klemme:						10	12	13	15	16	18	19	21
GND für AIs													
Klemme:			11	14 17 20									
Spannungsversorgung													
Klemme:		1	2										

Modbus-Anschluss	Klemme		
I-GND	3		
A (+)		4	
B (-)			5

Power supply: 24 V AC/DC, connection via terminals

Current consumption:
max. 40 mA (DC), 80 mA (AC)

Power dissipation
max. 1,0 W (DC), 1,9 W (AC)

Specifications AI's:
Resolution AI 10 Bits
Impedance 20 MOhm

Bus interface RS485

Supported baud rates
Autobauding, 9,600 Baud, 19,200 Baud, 38,400 Baud, 57,600 Baud

Bus cycle time individually depending on the baud rate and the number of data points that will be addressed

Configuration settings are stored in the internal EEPROM, max. number of write cycles up to 100,000 times (Memory uPC internally)

Protocol Modbus rtu (RS485), Serial Port Parameter Setting 8-N-1

Environmental conditions
Operating temperature 0...50°C
Transport and storage temperature 0...70°C
Relative humidity 10...90%, non-condensing

Protection class IP 20