



SIAi-8

analogue inputs module

8 independent analogue inputs (voltage or current)

RS-485 / Modbus RTU

galvanic separation of the inputs from the module supply voltages

LEDs for module operation and Modbus transmission signalling

input signals connected by means of the socket-plug connectors

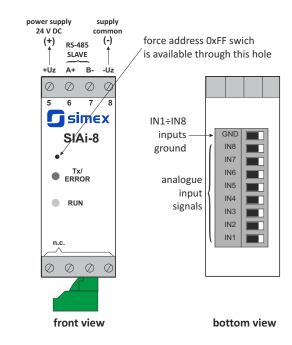
Module **SIAi-8** allows to measure analog values from 8 current (or voltage) inputs via the RS-485 connection, with speed rate about 10 Hz (every channel). Measurement results can be internally recalculated due to one of available characteristics: linear, square or user definable multipoint (max. 20 points length). It finds application in distributed control and visualization systems.

Standard functions of Modbus transmission allow to changing of device address or detect its type. All **SIAi-8** operating functions, available via the RS-485, can be implemented from any typical visualization software or, for instance, with a suitably **MultiCon** controller.

TECHNICAL DATA

Power supply	16V ÷ 30V DC (24V DC typical); external fuse (required): T - type, max. 1 A
Current consumption	55 mA typical
Inputs	8 independent analogue inputs: current 0-20 mA; 4-20 mA or voltage 0-10 V; 2-10 V; 0-5 V; 1-5 V
Measurement accuracy	± 0.25% ± one digit
Galvanic separation	all 8 inputs are galvanically isolated from module supply and RS-485 interface
Communication interface	RS-485, 1200 ÷ 115200 bit/s, 8N1, Modbus RTU
Number of modules	max. 128 in a single network
Data memory	non-volatile memory, EEPROM type
Operating temperature	0°C ÷ +50°C (standard), -20°C ÷ +50°C (option)
Storage temperature	-10°C ÷ +70°C (standard), -20°C ÷ +70°C (with option 08)
Humidity	max. 90%, non-condensing
Protection class	IP 20 (housing and connection clips)
Case	on the 35 mm strip; material: ABS
Dimensions	101 x 22,5 x 80 mm
Weight	120 g max.

TERMINALS CONNECTION



CONNECTION AND PRINCIPLE OF OPERATION

Connect the supply voltage to the module (+Uz, -Uz, typically 24V DC) and two wires RS-485 (A+, B-) communication interface. Module inputs are located on the lower edge of the case (look: bottom view).

Directly after power on the device is signalling its normal operation flashing green LED, marked "RUN" (about 2 times/sec.). Short flashes of LED marked "TX/ERROR" signalize activity of RS-485 interface, and permanent light of this LED means malfunction of the device.

Module makes the measurements from eight inputs in cycles.

ORDERING

