SIMEX®

SIAi-8

- ↻ **analogue inputs module**
- ↻ **8 independent analogue inputs (voltage or current)**
- ↻ **RS-485 / Modbus RTU**
- ↻ **LEDs for module operation and Modbus transmission signalling**
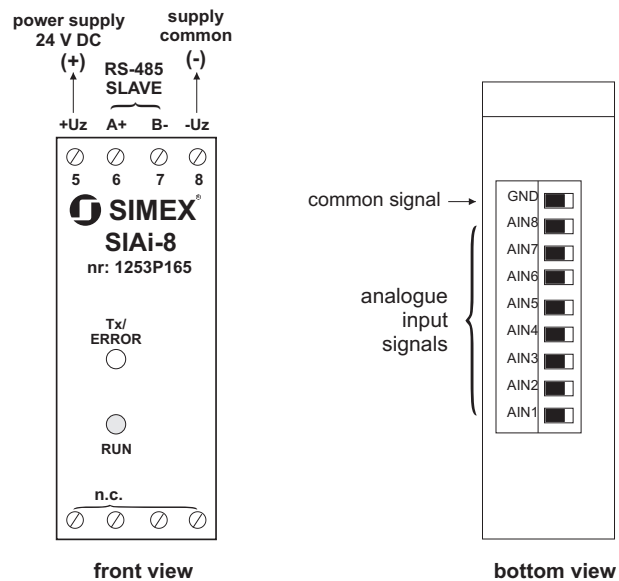
CE

Module **SIAi-8** is used to measuring values from 8 analogue inputs via the RS-485 connection. It finds application in distributed control and visualization systems.
Standard functions of Modbus transmission allow 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, from a suitably programmed SPA-99 operator panel.

- galvanic separation of the analogue inputs from the module supply voltages,
- signalling MODBUS correct operation and transmission,
- input signals connected by means of the socket-plug connectors.

Connection terminals

power supply 24 V DC (+)
supply common (-)
RS-485 SLAVE

+Uz   A+   B-   -Uz
5   6   7   8

SIMEX®
SIAi-8
nr: 1253P165

Tx/ERROR
○

○ RUN

n.c.

common signal →

GND
AIN8
AIN7
AIN6
AIN5
AIN4
AIN3
AIN2
AIN1

analogue input signals

front view   **bottom view**

Connection

Connect the supply voltage to the module (+Uz, -Uz) 24V DC typical and the two-wire RS-485 connection (A+, B-). Module inputs are located on the lower edge of the case (look: bottom view).
Directly after supply voltage being connected, the device will signal normal operation by a flashing (2 flashes per second) green LED marked as RUN. Short flashes of the red LED marked as TX/ERROR mean transmission over the RS-485 connection: data flow between module and Master device. Module makes the measurements from eight inputs in cycles.

Technical data

Power supply voltage: 24V DC typical
Maximum supply voltage fluctuations: from +16V DC to +26V DC
Current consumption: 55 mA typical
Number of independent analogue inputs: 8
Inputs: SIAi-8P: current 0-20 mA; 4-20 mA
              SIAi-8N: voltage 0-10 V; 2-10 V; 0-5 V; 1-5 V
Galvanic separation: all 8 inputs separated from the module supply and RS-485 connection signals
Communication interface: RS-485
Transmission protocol: Modbus RTU
Baud rate: 1200 - 115200 bit/sek.
Number of modules in a single network: max. 128
Operating temperature: 0°C ÷ +50°C
Storage temperature: -10°C ÷ +70°C
Humidity: max. 90%, non-condensing
Protection class: IP 20 (case and connecting terminals)
Installation method: on the 35 mm strip
Case dimensions: 101 x 22,5 x 80 mm

Ordering

SIAi-8X-001

type of inputs:
N : voltage inputs
P : current inputs

V.7.10.1