SLI-8

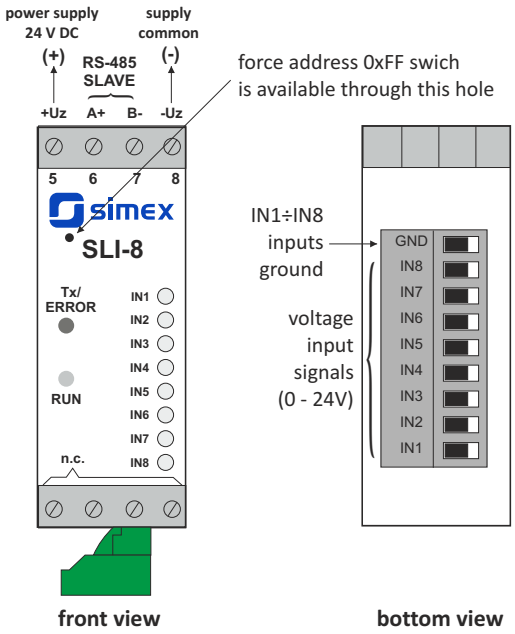
- **multi counters module**
- **8 independent voltage inputs**
- **RS-485 / Modbus RTU**
- **galvanic separation of the digital inputs from the module supply voltages**
- **internal digital filter**
- **signalling of input states and RS-485**
- **LEDs for module operation and Modbus transmission signalling**
- **input signals connected by means of the socket-plug connectors**

Multi counters module **SLI-8** allows to counting of pulses delivered to 8 isolated binary inputs independently. All counters are 32 bit long and can be read and cleared by user at any time. Occurrence of HIGH state on particular input is signalled by green LEDs marked IN1 to IN8. Incrementation of counter occurs after falling edge on particular input (input state changes from HIGH to LOW). It is essential that pulses have fulfill some time restrictions. These restrictions depend on settings of implemented internal digital filter, which allows to eliminate signal oscillations corresponding to contacts bouncing (of mechanical sensors).
Standard functions of MODBUS RTU protocol make internal registers (like: address, device ID, counters content etc.) accessible via RS-485 interface. All **SLI-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 **Current consumption**	16V ÷ 30V DC (24V DC typical); external fuse (required): T - type, max. 1 A 20 mA typical
Inputs	8 independent binary inputs; counters capacity: 4 294 967 295 (32 bits)
Input levels	low state: 0V; high state: 24V (min. 8V); min. duration: 50 µs
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



front view **bottom view**

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 voltage 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 (data flow between module and Master device) and permanent light of this LED means malfunction of the device. Module makes the measurements from eight inputs in cycles. While power off, current states of counters, filter state and device address are stored into EEPROM memory. After power on these values are restored and counters continue count from value stored while power off.

ORDERING

SLI-8-XX1

options:
00 : no options
08 : operating temp. -20°C ÷ +50°C