

## SLI-8

- ▣ multi counters module
- ▣ 8 independent voltage inputs
- ▣ RS-485 / Modbus RTU
- ▣ LEDs for module operation and Modbus transmission signalling



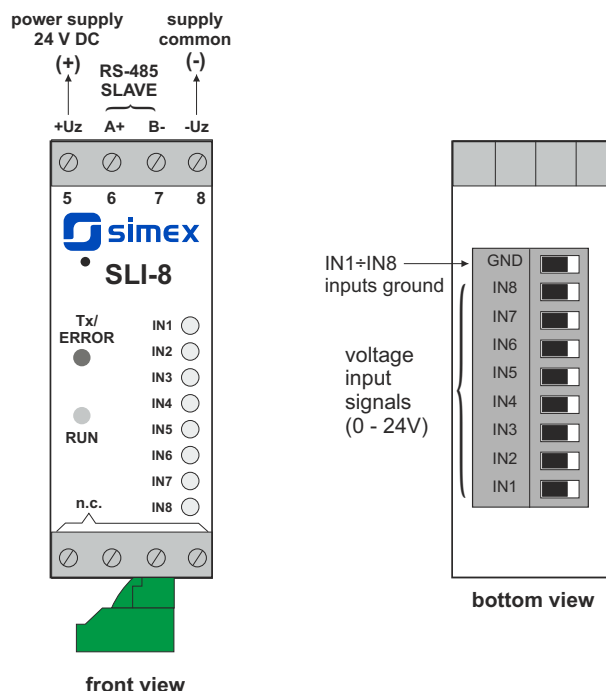
Multi counters module **SLI-8** allows to counting of pulses delivered to 8 isolated binary inputs independently. All counters are 32 bit long and can be read and cleared by user at any time. Occurrence of HIGH state on particular input is signalled by green LEDs marked IN1 to IN8. Incrementation of 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 CMC** controller.

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

### Connection terminals



### Technical data

**Power supply voltage:** 24V DC typically  
**Maximum supply voltage fluctuations:** from +16V DC to +30V DC  
**External fuse:** T - type, max. 1 A  
**Current consumption:** 20 mA typical  
**Number of independent inputs:** 8 binary  
**Input levels:** LOW state: 0V  
HIGH state: 24V (min. 8V)  
**Minimum duration of LOW and HIGH state:** 50  $\mu$ s  
**Counters capacity:** 4 294 967 295 (32 bits)  
**Galvanic separation:** all 8 inputs are galvanically isolated from module supply and RS-485 interface  
**Communication interface:** RS-485, 8N1  
**Transmission protocol:** Modbus RTU  
**Baud rate:** 1200 ÷ 115200 bit/sec.  
**Number of modules in a single network:** max. 128  
**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)  
**Installation method:** on the 35 mm strip  
**Case dimensions:** 101 x 22,5 x 80 mm

### 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