

SOC-8

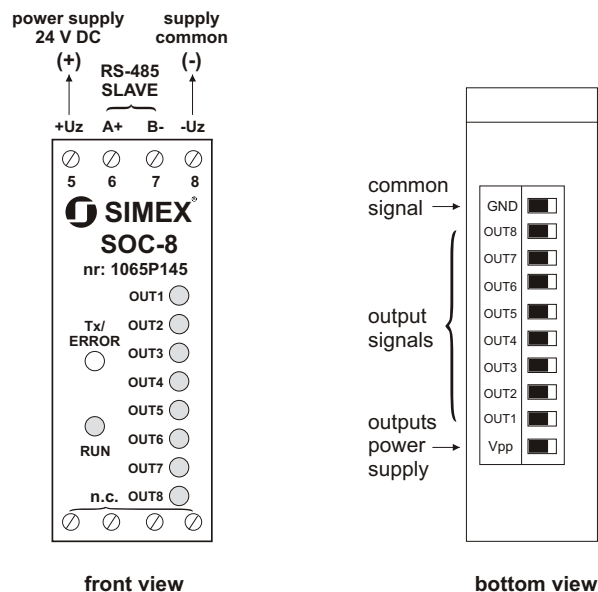
- ▣ binary outputs module
- ▣ open collector type outputs
- ▣ RS-485 / Modbus RTU
- ▣ LEDs for module operation and Modbus transmission signalling



The **SOC-8** binary outputs module is used to control the low-power output devices via the RS-485 connection. It finds application in distributed control and visualization systems. It can directly control, for example, contactors, relays, light bulbs and other DC loads with the 24V control (supply) voltage and the 0,5A current (maximum). Galvanic separation of all outputs ensures safe operation of the master system, without the risk of damage caused by dangerous overvoltage. All **SOC-8** operating functions, available via the RS-485, can be implemented from any typical visualization software or, for instance, with a suitably **MultiCon CMC-99** controller.

- output lines connected by means of the socket-plug connectors,
- galvanic separation of the outputs from the module supply voltages,
- signalling of outputs' logic status,
- signalling MODBUS correct operation and transmission.

Connection terminals



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. Outputs are placed on bottom side of the module. Connect the common signal and the polarization voltage (GND and Vpp) on the outputs' side. It is recommended that those signals be separated from the module supply voltage (i.e. by using the PS-series separate power supply adapters manufactured by SIMEX). The load control is effected by closing the common signal (GND) contact which is connected to the **SOC-8** module. 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. Red LEDs marked “OUT1” ÷ “OUT8” signalize active state of outputs. Pay special attention for permissible currents of outputs, and the sum of all currents.

Ordering

SOC-8

Technical data

- Power supply voltage:** 24 V DC typical
- Maximum supply voltage fluctuations:** from +16 V DC to +30 V DC
- Current consumption:** 20 mA typical
- Number of independent OC outputs:** 8
- Signalling of output state:** LED light when output is active
- Max output current:**
 - 0.5A / single output, max. 2 active outputs
 - 0.2A / single output, all outputs active
- Galvanic separation:** all 8 outputs are galvanically isolated from module supply and RS-485 interface
- Communication interface:** RS-485
- 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
- Storage temperature:** -10°C ÷ +70°C
- 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