# SOC-8

- 🔹 **binary outputs module**
- 🔹 **open collector type outputs**
- 🔹 **RS-485 / Modbus RTU**
- 🔹 **LEDs for module operation**

  and Modbus transmission signalling

CE

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

front view

bottom view
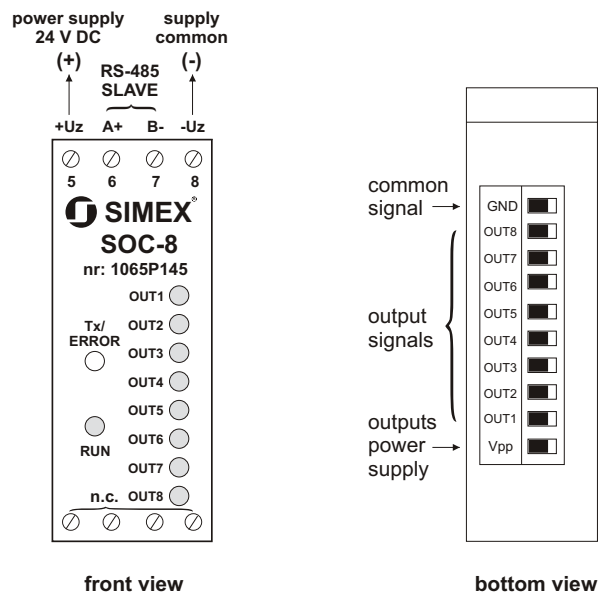
Connection and principle of operation

Connect the supply voltage to the module (+Uz, -Uz, typically 24V DC) and two wires RS-485 (A+, B-) communication interface. 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.

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

Ordering

SOC-8