







GENERAL CHARACTERISTIC

The SC-16 device is dedicated to visual (by LED) indicating of information received by its binary inputs. In particular it can be: signals informing about trips or any other disturbances occuring within supervised station which are critical to quick assessment of situation by the staff. SC-16 is freely programmable device – each diode can be assignet to any input or group of inputs. Also, each signal can be multiplied by relay outputs of the device.

The device cooperates with substation telecontrol system and is equipped with event recorder. SC-16 is equipped with fiber-optic communication port, RS-485 or Ethernet for communication with supervision system purposes. The communication is fulfilled by following protocols: ZEG (with SMiS software) or IEC 60870-5-103. Optionally protocols MODBUS or DNP-3 are also available.

MAIN FEATURES

- 16/24/32/40 isolated channels for disturbance signalling purposes (binary inputs), 16 RGB LED diodes
- 8/16 relay outputs in order to pick-up and multiply telecontrol signals
- lack of auxilliary voltage or supply module failure signalled by NC watchdog contact
- binary inputs in order to remote guitting of visual or acoustic signals
- flush-mounted aluminium enclosure of dimensions 144/144/141 mm
- back-up auxilliary voltage by additional supply module
- input/output modules equipped with plug-in connectors
- input signals can be grouped up to 15 signals per group
- input signal can be programmable delayed
- possibility of extension by 16/24/32/40 inputs
- possibility of equipment in additional multiplying relays
- multiplying relays can be grouped up to 15 signals per group
- set of buttons in order to test alarms ex.: ALARM, FAILURE, AL1, AL2, FIRE, BREAK-IN
- ALARM ON/OFF button to block acoustic signals
- · ALARM C button to quitt acoustic signals

TECHNICAL DATA

Rated supply voltage	110-230 V DC/AC
	or other on request
Burden in supply module	<30VA
No. of inputs	16-40
Insulation	optical
Inputs rated voltage	Uin=220 V DC/AC
	or other on request
Inputs burden	0,3W
Settable time delay	25s
Time resolution	1 ms
No. of communication ports	4

- fiber-optic ST / IEC 870-5-103
- RS485
- Ethernet
- USB

Weight 2kg Ambient temperature $-5 \div +40^{\circ}\text{C}$

PRINCIPLE OF OPERATION

SC-16 is freely programmable device which indicates particular status by panel of light indicators or relay outputs. Received signals can be grouped or indyvidually assignet to visual indicators, relay outputs or quitting buttons. Input signals are excited by voltage occurrence or drop. Input signal can programmable delayed up to 25 sec. Disturbance is signalled by blinking light of frequency 2 Hz. Acoustic signal blocks possibility to quitt optical indication. Quitting the optical indication is possible only if acustic signal was prior quitt. If the disturbance still last, the optical indicator turns into continous light mode. If disturbance vanished, after quitting the indicator goes out and does not light until next disturbance. Each of disturbance channel can be assignet to any substation signal: acoustic, ALARM, FAIL, AL1, AL2.