



## SCU 800

## $\delta$ -LIST Control Unit

GmbH

<sup>®</sup>  
LISTEC

Lineare Sensor Technik



The sensor control unit SCU 800 is the central supervisory element which provides up to two  $\delta$ -LIST sensor cables with power, performs the cyclic addressing of the connected sensors every 10 seconds, acquires the temperature values measured by each sensor and evaluates the data with reference to various criteria.

A fire alarm is generated if either a given maximum threshold is exceeded, or if an increase in temperature takes place within a certain time (differential evaluation). The two thresholds (set-points) can be set individually for each of the attached sensor cables.

The measurement resolution of  $0,1^\circ$  gives the system a high sensitivity. The tried and tested algorithms used in the evaluation eliminate false alarms due to natural temperature variations.

Alarms are indicated by LEDs on the front-panel and via floating contacts to a fire terminal station (fire control panel), host computers or other transmission systems. Hereby, alarms generated by the two sensor cables are signalled individually.

Resetting takes place via an external signal from the fire terminal station or by pressing the front-panel mounted reset button.

The serial RS-232 interface can be used for programming and setting of system parameters. LISTEC<sup>®</sup> GmbH offers the terminal software LISTterm for this purpose.

## DATA SHEET

For the visualisation of the system status, message- and temperature-lists, as well as a graphic display of the temperature and alarm data, **LISTgraph II** is available.

Alternatively, a SCM 4000 (Sensor Control Master) can be used to connect and control several SCU 800 from a central point via a RS-485 interface or a 20 mA current loop (TTY-interface).

### General:

#### **Collective display (LED's) for**

- Fire cable A
- Fire cable B
- Fault
- Operation
- Temperature measurement
- Data transmission

#### **Alarm criteria**

Alarming due to the exceeding of an absolute- or a differential-threshold (set-point). All thresholds are individually settable for each sensor cable.

#### **Fault recognition**

Sensor cable faults, such as the malfunctioning of a sensor or a cable break, are recognised and indicated within one measuring cycle, generally

within 10 seconds. Faults in the control unit are registered in the internal message list and are signalled immediately.

#### **Interface**

RS-232 Serial-interface for programming parameters and interrogation of system data. Optionally a RS-485 interface or TTY-current loops are available for master/slave systems.

#### **Connections**

All connections take place inside the unit via terminals. The RS-232 interface, 9 pin D-Sub female, is accessible once the unit is opened.

### System specifications:

#### **Number of measuring points**

Max. 99 sensors per cable connection

#### **Sensor cable length**

Max. overall length of the sensor cable, including connection cables, may not exceed 250 m per sensor cable connection. The sensor cable may consist of separate cable pieces

#### **Delivery extent:**

- Quick Start Manual
- CD with data sheet, operation manual, description of commands and system messages, installation guidelines

## Series 800

### **SCU800-03**

for max. 2 x 250 m sensor cable with LED display

**Continuous operating temperature:**  
0°C .. +40°C

**Dimensions:** 260 x 150 x 90 mm

**Housing material:** aluminium

**Weight:** 1,9 kg

**Power supply:** 21 – 29 V<sub>DC</sub>

**Power consumption:** 1,8 W

#### **Outputs:**

Floating change-over contacts with space for user defined supervisory resistors:

Fire alarm 2 relays (1 per cable)  
Fault alarm 1 relay (fail safe)

Switching voltage: 48 V<sub>DC</sub> / 32 V<sub>AC</sub> max.  
Switching current: 250 mA max.  
(resistive load)

#### **Input:**

5 V<sub>DC</sub> reset input, galvanically isolated

### **SCU800/8**

for max. 2 x 250 m sensor cable with LED display

**Continuous operating temperature:**  
0°C .. +40°C

**Dimensions:** 260 x 150 x 90 mm

**Housing material:** aluminium

**Weight:** 2,3 kg

**Power supply:** 21 – 29 V<sub>DC</sub>

**Power consumption:** 2,1 W

#### **Outputs:**

Floating change-over contacts with space for user defined supervisory resistors:

Fire alarm 8 zonal relays  
Fault alarm 1 relay (fail safe)

Switching voltage: 48 V<sub>DC</sub> / 32 V<sub>AC</sub> max.  
Switching current: 250 mA max.  
(resistive load)

#### **Input:**

5 V<sub>DC</sub> reset input, galvanically isolated

### **SCU800/16**

for max. 2 x 250 m sensor cable with LED display

**Continuous operating temperature:**  
0°C .. +40°C

**Dimensions:** 260 x 150 x 90 mm

**Housing material:** aluminium

**Weight:** 2,3 kg

**Power supply:** 21 – 29 V<sub>DC</sub>

**Power consumption:** 2,1 W

#### **Outputs:**

Floating change-over contacts with space for user defined supervisory resistors:

Fire alarm 16 zonal relays  
Fault alarm 1 relay (fail safe)

Switching voltage: 48 V<sub>DC</sub> / 32 V<sub>AC</sub> max.  
Switching current: 250 mA max.  
(resistive load)

#### **Input:**

5 V<sub>DC</sub> reset input, galvanically isolated