

SCU 2000 Sensor Control Unit

GmbH

LISTEC[®]

Lineare Sensor Technik



The sensor control unit **SCU 2000**, being the central control unit of the system, provides electric power to the **LIST** sensor cable, performs the cyclic addressing of the connected sensors, reads the measured temperature values and evaluates the data with reference to different criteria.

Should a given threshold be exceeded or fallen short of, an alarm is indicated via the various front panel indicators (LED's, audible alarm, alphanumeric display) and via a floating contact to a host computer or other transmission systems.

The area to be monitored by the **LIST** sensor cable can be divided into a maximum of 32 alarm sections. By using relay cards REL 3000 and setting software parameters, separate fire, fault, pre-alarm and minimum temperature alarm contacts can be activated for each section. The alarm thresholds for each alarm section, can be defined independently.

The **SCU 2000** can either be operated via the keyboard situated on the front panel or via a serial interface (RS232) attached to a terminal or a PC / notebook with the respective terminal program.

LISTEC GmbH also offers **LISTterm**, a software package allowing the comfortable setting of all system parameters.

For visualisation of system status, lists of messages and temperature values and for a graphic display of the temperature data, **LISTgraph II** is available.

DATA SHEET

Collective display (LED's) for

- Fire
- Further messages
- Operation
- Emergency supply
- Fault
- Temperature measuring

Clear text display

An illuminated, alphanumeric LC display consists of two lines with 20 characters each, for all system-messages in english. The front panel and system messages can be implemented in various languages with certain technical limitations.

Audible alarm

The SCU gives an audible alarm while unacknowledged fire- or fault-alarms are present.

Function keys

The SCU 2000 can be operated by 6 keys, with the following functions:

- Display of the last registered message with it's consecutive number, alarm section number and measuring point number.
- Paging forwards and backwards in the message list
- Selection of a test mode for display of system status and parameters
- Switching off the internal buzzer
- Acknowledge of messages and reset of the system

Key switch

Switching from normal operation mode to operator level for acknowledge and reset function.

Alarm criteria

Alarms are initiated when an absolute- or differential-alarm threshold is exceeded. A frost alarm can be generated if the temperature falls below a set threshold. All alarm thresholds can be programmed individually for each alarm section

Fault recognition

Faults in the sensor cable, e.g. a defective measuring point, are generally recognised and shown within 10 seconds (fire detection). Faults in the sensor controller, e.g. mains failure, are stored in the message list and set fault alarms.

System specifications

Number of measuring points

max. 312 (fire detection)
max. 1024 (temp. measurement)

Sensor cable length

max. 2.500 m, consisting of separate cable lengths

Connection cable length

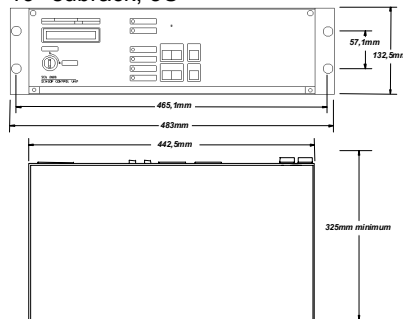
max. 500 m distance from sensor cable to control unit

Operating temperature

0°C ... +40°C
(-20°C with restrictions)

Dimensions

19"-subrack, 3U



Weight

SCU 2000/24	5,2 kg
SCU 2000/230	5,2 kg
SCU 2000/230/4h	7,0 kg
SCU 2000/230/72h	10,4 kg

Power supply

SCU 2000/24	24 V – 32 VDC
SCU 2000/230	230 VAC
	+10% / -15%
	50 / 60 Hz
SCU 2000/110	110 VAC
	+10% / -15%
	50 / 60 Hz

Uninterruptable power supply

Two versions are available:
/4h for 4 hours and
/72h for 72 hours bridging time, incorporated in the SCU 2000.

Power consumption

max. 3 W, in alarm mode

Outputs

One floating change-over contact each for collective-alarm and -fault:
Switching voltage: 150 VDC
125 VAC
Switching current: 1A max.
Switching power: 30W / 60 VA

Input

Reset-input, galvanically separated, for 5V-signal

Interface

RS-232 Serial-interface for programming parameters and interrogation of system data.

Connections

Lock-connectors for all connections are on the rear panel. The D-sub serial interface socket is on the inside of the front panel.

Extent of delivery

- Operating manual
- Installations guidelines
- Description of commands and system messages
- Technical manual
- Two keys for the key switch
- Pre-fabricated cables (5 m), for the connection for all rear panel sockets to terminal blocks, are included

Ordering information

Series 2000

for max. 2.500 m sensor cable, with alphanumeric LCD-display, 2 x 20 characters, 6 function keys

SCU 2000/24

SCU 2000/110

SCU 2000/110/4h

SCU 2000/110/72h

SCU 2000/230

SCU 2000/230/4h

SCU 2000/230/72h

Options

RP 2000/232

Rear panel module with RS-232-interface-port, incl. built-in opto-coupler.

REL 3000/B

Motherboard for the insertion of two relay cards (REL 3000/8 or REL 3000/16) into a control unit

REL 3000/8

Relay card with 8 floating change-over contacts, needs: REL 3000/B

REL 3000/16

Relay card with 16 floating change-over contacts, needs: REL 3000/B

CAB 19/9

19" 9U Wall-mount cabinet, built-up to house one Control Unit, includes: glass door, swing frame, terminal block;
W x H x D: 600 x 478 x 515 mm

CAB 19/12

19" 12U Wall-mount cabinet, built-up to house two Control Units, incl.: glass door, swing frame, terminal block;
W x H x D: 600 x 612 x 515 mm