

SCU 3000 Sensor Control Unit

GmbH

LISTEC

Linear Sensor Technik



The sensor control unit **SCU 3000**, 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, alpha-numerical display, audible alarm) 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, prealarm and minimum temperature alarm contacts can be activated for each section. The alarm thresholds for each alarm section, can be defined independently.

The **SCU 3000** 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.

The **SCU 3000** can be equipped with an internal modem on request.

DATA SHEET

Collective display (LED's) for

- Fire
- Fault
- Measuring points disabled
- Test
- Alarm outputs disabled
- Measuring cycle
- Data transmission

Clear text display

An illuminated, alphanumeric LC display consists of two lines with 40 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 3000 can be operated by 12 keys, with the following functions:

- Display of the last registered message with it's consecutive number, alarm section number and measuring point number.
- Paging backwards in the message list
- Continuous temperature display of a single measuring point
- Message list print-out (only with optional printer interface)
- Complete or partial print-out of the temperature list (only with optional printer interface)
- Switching off the audible alarm
- Display / change the differential threshold
- Display / change the absolute threshold
- Display / change the system time
- Selection of a test mode for display of system status and parameters
- Disable a measuring point or the alarm outputs
- 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. All alarm thresholds can be programmed individually for each alarm section

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

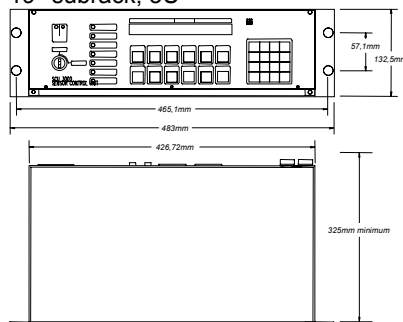
max. 500 m distance from sensor cable to control unit

Operating temperature

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

Dimensions

19"-subrack, 3U



Weight

SCU 3000/24	5,2 kg
SCU 3000/230	5,2 kg
SCU 3000/230/4h	7,0 kg
SCU 3000/230/72h	10,4 kg

Power supply

SCU 3000/24	24 V – 32 VDC
SCU 3000/230	230 VAC
	+10% / -15%
	50 / 60 Hz
SCU 3000/110	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 3000.

Power consumption

max. 3 W, in alarm mode

Outputs

One floating change-over contact for collective alarm and for collective 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, messages and temperature values. Special protocols are available on request.

It is advisable to equip the SCU 3000 with a opto-coupler if it is to be permanently connected to a host system

Printer interface

Optional SCU 3000 interface (CENTRONICS) to print out message and temperature lists

Modem

The modem can be used for remote diagnostics and interrogation of system data and parameters

Connections

Lock-connectors for all connections are on the rear 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 of rear panel sockets to terminal blocks, are included. (CENTRONICS and RS-232 cables are not included)

Ordering information

Series 3000

for max. 2.500m sensor cable, with alphanumeric LCD-display, 2 x 40 characters, 12 function keys, numerical keyboard

SCU 3000/24
SCU 3000/110
SCU 3000/110/4h
SCU 3000/110/72h
SCU 3000/230
SCU 3000/230/4h
SCU 3000/230/72h

Options

See data sheet V6012.