

## Smoke Detector SM\_SD

### Introduction

This product satisfies the standards of the established European and national guidelines. Conformity has been proved; the relevant documents are in the manufacturer's possession. We kindly request the user to respect this operating manual to preserve this condition and to ensure safe operation. In case of questions, please consult your reseller. Germany: +49-40-2269291-0

### Prescribed use

The smoke detector works on a scattered-light principle and detects extremely small quantities of smoke particles that get into the housing of the smoke detector. The smoke detector is designed for a stationary operation in connection with an external alarm unit or alarm system. The power supply is also external, e.g. through an alarm system. The product may only be used in dry and dust-free rooms without natural vapour or smoke emission (like in kitchens or near fireplaces). The smoke detector serves for an early detection of smoke development in private living rooms and bedrooms and will switch an integrated all-or-nothing relay at every smoke detection.

The relay is potential-free and has a make-and-break contact that can be connected to a free alarm loop of an alarm system. The maximum switching capacity of the relay is 24V DC 3A / 10V AC 3A and must not be exceeded. A remote control output will also be activated emitting a switching voltage of about 8V DC in case of an alarm and having a maximum capacity of 10 mA.

A flashing red diode indicates that the smoke detector is active. Any other use than the one described above damages the product. Moreover, this involves dangers, such as short-circuit, fire, electric shock, etc.

No part of the product may be modified or rebuilt. Always observe the safety instructions ("Warning!") and technical data. Repair may only be carried out by qualified personnel who are familiar with the hazards involved and the relevant regulations.

The SF 104 is a sensor for the GENEREX SENSORMANAGER, for configuration of this sensor please refer to the CS121/SENSOR MANAGER user manual.

### Installation

The smoke detector may only be installed by an expert.

#### a) Selecting the location

Always place the smoke detector on the ceiling in the middle of the room if possible, because the air in the room circulates best in this place. The distance to the walls must not be less than 60 cm. You should absolutely avoid installing the smoke detector in gables or corners.

#### b) Assembly

Use the assembly plate as a drilling template and mark the drilling holes. Fasten the assembly plate with matching screws. Warning! Before drilling, make sure that there are no electric lines or cables in the drilling zone.

#### b) Connecting the smoke detector

Note! Before you begin, de-energise the alarm central and secure it against unauthorised switching! The smoke detector can be connected with modular terminals inside the housing. Lead the connecting cable from the alarm central through one of the three larger drill holes in the assembly plate.

- Assignment of the power supply lines:

red: +10 to +15 V DC

black: GND (ground / -)

- Assignment of the relay outputs:

white: make contact, open at rest (N/O=normally open)

blue: common central contact, (COM=common)

green: break contact, closed at rest (N/C=normally closed)

- Additional switching output in case of an alarm

yellow: Remote; 8V DC switching output (max. 10 mA) against ground (GND)

Place the smoke detector with the locating catches on the assembly plate in the correct orientation and then turn it counter-clockwise until the markings match.

After installing the smoke detector and putting the alarm central into operation, the red diode in the smoke detector will light up once about every 22 sec. as an operation control.

The SM\_SD comes with an appropriate cable for the SENSORMANGER. Connect this cable directly into the SENSOR MANAGER Input 1-4, open your web-browser and connect to your CS121/SENSORMANAGER. Click the "SensorManager" button in the CS121 configuration menu and enter the settings in the "Sensor Manager Inputs" configuration.

Sensor Manager Inputs			Sensor Manager Inputs		
Input	Location	NC Contact	Input	Location	NC Contact
1	Smoke SD	<input checked="" type="checkbox"/>	3	Digital Input 3	<input type="checkbox"/>
2	Digital Input 2	<input type="checkbox"/>	4	Digital Input 4	<input type="checkbox"/>

Click the "Events/Alarms" button in the CS121 configuration menu and add a designated job in the "Event Editor" for the event "SensorMan Input 1 Not Normal".

### Event Editor

Event: 'SensorMan Input 1 Not Normal'

Event Jobs for 'SensorMan Input 1 Not Normal'						
			Job Type	When	Parameter 1	Parameter 2
1	Edit	Del	Test	Log	0	Smoke Sensor Alarm !
2	Edit	Del	Test	Log	0	new job

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The SM\_SD does not need an external power supply. The device is supplied by the SENSORMANAGER.

For further information about the CS121/SENSORMANAGER SETUP, please refer to the CS121/SENSORMANAGER user manual.

### Maintenance / false alarm

Apart from self-tests that should be done from time to time, the smoke detector is absolutely maintenance free. Only clean it with a wet, soft cloth without detergents or carefully vacuum the smoke chamber with a vacuum cleaner and a brush from the exterior to remove dust. It is not necessary to open the housing. Vapour or dust may lead to a false alarm. In case of a false alarm, check that there is really no source of fire. Air the room or clean the exterior of the smoke chamber with a vacuum cleaner to remove the dust. Warning! The smoke detector must not be covered with paint and/or wallpapers or films.

The alarm will stay active until the chamber in the housing is smoke-free again. The smoke detector will then automatically switch to the supervision mode.

Warning! The smoke detector only warns you in case of a fire and cannot prevent a fire. If you smoke in bed, or if children are left alone in the apartment, no effective protection against a bigger fire is possible.

- The perception of the smoke alarm may be impaired by medicines or other drugs even if the alarm signal is very loud.
- The triggering of the smoke detector may be impaired by unfavourable draughts or in case of fires without smoke development.

In order to attain the highest possible warning function, we recommend using several smoke detectors (one smoke detector per room).

### Self-test

After the installation you should check the function with a test gas. (You can also simulate this with cigarette smoke). When smoke enters the detector, the alarm will be triggered and the diode will begin to flash after about 5 sec. Blow the smoke away from the smoke detector and the light indication (alarm) will be de-activated. If there is no alarm after this test, the installation or the system must be checked by an expert.

### Smoke detection / alarm

If smoke enters the housing of the smoke detector, the alarm central will be activated. The red diode begins to flash independently and serves for locating the active detector.

### Technical data

Power supply: 10 to 15 V DC  
 Power consumption: Standby: 4mA  
 Alarm: 50 mA  
 Operating temperature: 0°C to +50°C  
 Rel. humidity of air: max. 90% +/-5%  
 Dimensions (H x W): 79 mm x 84 mm  
 Weight: about 140 g  
 Relay: two-way-switch  
 24V DC / 3A  
 10V AC / 3A, Remote: 8V DC /10 mA