

# Smoke detector Type C

## Ei6500-SA2-R / Ei6500-SA2-O



### Application

The Supercom Ei6500-SA2-R or -SA2-O is a smoke detector for remote inspection in accordance with the inspection method C defined in DIN 14676-1. The smoke detector works on the scattered light principle and triggers an alarm as soon as smoke has entered the optical smoke chamber. The built-in piezo-electronic horn alarms with a sound level of at least 89 dB(A) at a distance of three meters.

As soon as there are no more smoke particles in the smoke chamber, the smoke detector is automatically reset and the alarm is switched off.

### Feature

The remote inspection of the detector SA2-O is done with the unidirectional wM-Bus radio or via the bidirectional Sontex radio for the SA2-R. Both radio transmissions send the following status information of the detector:

- Device type, serial number of the radio module, manufacturer ID
- Commissioning date
- Obstacle detection system status, detector removed, installation and environmental status, battery, sound generator and sensor status
- Distance to the next obstacle during the last installation
- Time and date of the system
- Dirt level of the smoke chamber
- Date of the last sound generator test
- Incidents since the last readout: test button activated, real alarm, dismounting (frequency and duration)

## **Dirt compensation**

The smoke detector has an automatic dirt compensation feature. This means that the sensitivity of the smoke chamber adapts to its degree of dirt and thereby significantly reduces the probability of false alarms.

## **Power-Up LED**

During commissioning (turning the detector onto the baseplate), an LED indicates that the warning indicator has been successfully switched on. Installation is complete when the green LED flashes 30 seconds after the test button is pressed (for 2 minutes, every 8 seconds, 5 times in succession).

## **Mute function**

False alarms can be muted for a period of 10 minutes using the test button. A beep sound indicating a malfunction can also be muted for 12 hours.

## **Self-monitoring with error display**

The smoke detector automatically checks the functionality of its sensors, battery and electronics every 48 seconds. All detected faulty states are indicated by a combination of yellow LED error display and acoustic beep.

## **Monitoring of the sound generator**

The sound generator of the detector is regularly and automatically checked for full functionality.

## **Monitoring of the smoke inlets**

The Ei6500-SA2R /O is equipped with ultrasonic obstacle detection. This system regularly checks the smoke vents of the unit for dirt. It also monitors the area around the unit for obstacles within a radius of up to 0.5 meters that could prevent or slow down the smoke entering the detector. The occlusion and obstacle detection meet the requirements of DIN 14676-1, but the detection performance of the system is limited and depends on the size, shape, density and material of the objects present. The detection radius is automatically calibrated during installation to the location selected by the responsible installer.

## **Suitable for bedrooms**

During normal operation, there are no active, visible or audible indicators that could disturb the residents. The smoke detector is therefore particularly suitable for installation in bedrooms and children's rooms.

## Technical Data

<b>Sensor type</b>	Scattered light
<b>Mains power</b>	3V-Lithium-Battery
<b>Battery permanently installed</b>	yes
<b>Battery life time</b>	min. 10 Years
<b>Piezo sound level</b>	89 dB(A) at 3 m
<b>Test / Mute button</b>	yes
<b>Reduced test volume</b>	yes
<b>Networking possibility</b> - wired - radio	no no
<b>Mute in case of false alarm</b>	yes, 10 Minutes
<b>Dirt compensation</b>	yes
<b>Automatic self-monitoring</b>	yes
<b>Ready for use</b>	Power-Up LED during commissioning, afterwards without optical display
<b>Remote inspection</b>	Method C
<b>Communication Sontex Radio</b> Accessibility:  Frequency:	bidirectional (from 06:00 to 18:00 +1h in the night according to serial number, 7 days per week) 433.82 MHz
<b>Communication wM-Bus OMS</b> Accessibility:  Frequency:	unidirectional (data transmission every 120 seconds, 12 hours per day, 7 days per week) 868,95 MHz
<b>Encryption</b>	AES-128 (Sontex Radio Mode 5, OMS Mode 5 or Mode 7). Individual AES key downloadable from Sontex Exchange Platform
<b>ID-N°</b>	Unique ID per detector
<b>Operating / Storage temperature</b>	0 to + 40° Celsius / - 10 to + 40° Celsius
<b>Humidity</b>	15 % to 95 % rel., no condensation
<b>Weight</b>	320 g
<b>Dimension</b>	Diameter 136 mm x 66 mm
<b>Housing material</b>	Plastic polystyrene (HB-classified according to UL94, self-extinguishing)
<b>Degree of protection</b>	IP 20
<b>Mounting</b>	Mounting base with dowels and screws (included in delivery)
<b>Monitoring area</b>	≤ 60 m <sup>2</sup>
<b>Transmission standard</b>	EN 13757-4
<b>Standards</b>	EN 14604: 2005 + AC: 2008, DIN SPEC 91388:2019
<b>Approvals</b>	Kriwan 1772-Q-181135 / 1772-Q-191253

## Readout example with Software Tools Supercom

**Warning(s)** Head to radio communication fault  
Installation not complete

**Read SON-Smoke detector**

Supercom SA 2 O read on the 13.11.2019 13:48:09  
Radio address: 11112021  
Manufacturer ID: SON

**General information**

Date and time of the device 13.11.2019 13:47  
Communication with smoke alarm successful No

**Smoke alarm information**

Last test	-
Test counter	0
Alarm last date	-
Alarm counter	0
Last removal	-
Remove counter	0
Remove duration	0 min
Battery voltage	- V
Dust contamination	-
Sounder flag	-
Obstacle detection system status	-
End of life status	-
Installation	-
Environment	-
Distance to obstacle	-

**Warning(s)** Head to radio communication fault  
Installation not complete

**Read SA 2 R**

Supercom SA 2 R read on the 18.11.2019 14:17:22  
Radio address: 11112025  
Manufacturer ID: SON

**General information**

Date and time of the device 13.11.2019 13:47  
Communication with smoke alarm successful No

**Smoke alarm information**

Identification number	00000000
Last test	-
Test counter	0
Alarm last date	-
Alarm counter	0
Last removal	-
Remove counter	0
Remove duration	0 min
Battery voltage	- V
Dust contamination	-
Sounder flag	-
Obstacle detection system status	-
End of life status	-
Installation	-
Environment	-
Distance to obstacle	-

### Technical support

For technical support, please contact your local Sontex representation or Sontex SA directly.

Hotline Sontex: [support@sontex.ch](mailto:support@sontex.ch) +41 32 488 30 04

Modifications subject to change without notice.

DS\_SAC\_V01\_2008\_en

© Sontex SA 2020



Sontex SA  
Rue de la Gare 27  
CH-2605 [Sonceboz](http://www.sontex.ch)

Tel. +41 32 488 30 00  
[sontex@sontex.ch](mailto:sontex@sontex.ch)

[www.sontex.ch](http://www.sontex.ch)