



BOSCH
Invented for life

Wireless Smoke Detector for Social Alarm



- ▶ **Battery power supply**
- ▶ **Button for self-check**
- ▶ **Easy connection to the unit**
- ▶ **Local optical and acoustical alarm**
- ▶ **Battery monitoring**

In the event of smoke caused by a fire, the Wireless Smoke Detector issues a local, high-volume intermittent tone. At the same time, it signals the danger by sending a wireless transmission to the Carephone which then triggers an alarm via the telephone network.

This means that specific action to fight the fire is already possible at an early stage. Furthermore, endangered persons can be brought to safety in time. Smoke detectors have their technical limitations and do not necessarily react to all situations: gas, flames, heat and when hemmed in by dense black smoke.

System Overview

The Wireless Smoke Detector is operated in combination with Bosch Carephones 10, 12 or 52+.

It consists of three parts:

1. Smoke sensor
2. Radio transmitter module
3. Joint power supply

The Wireless Smoke Detector is particularly suitable for early fire detection when smoke develops. It detects visible, light-colored smoke which frequently occurs before flames develop or temperature rises. When it detects a fire, the smoke sensor emits a loud, penetrating, acoustic alarm into the surroundings until the fire is discovered and as long as the smoke detector can function. At the same time, the radio transmitter module sends an alarm to the Carephone.

Functions

The radio transmitter module is accommodated in the base of the Wireless Smoke Detector. Both modules are powered from a shared battery.

The optical smoke sensor uses the scattered light principle. A light transmitter and photo diode are housed in a measuring chamber in such a way that no light is able to fall on the photo diode. Scattered light is only produced if smoke particles penetrate this chamber. The light beam is reflected by the smoke particles and recorded by the photo diode. The evaluation electronics will generate an alarm if the recorded levels exceed a specific threshold. A test button located on the detector can be used to trigger an alarm. This can be used to check that the local alarm and alarm signaling via the Carephone are functioning correctly.

The use of radio technology eliminates the need to lay cables. Installation is restricted to securing a mounting plate with two screws.

Certifications and Approvals

CE
R&TTE 1999/5/EC
LVD 73/23/EEC
EMC 89/336/EEC
EN 50130-4
EN 300220-2
EN 301489-3 V1.4.1
EN 50371
EN 60950-1

Installation/Configuration Notes

Installation

The Wireless Smoke Detector is only suitable for residential rooms. The installation location must lie within reception range of the Carephone and radio signal must be securely received. The Wireless Smoke Detector is generally installed on the ceiling. Installation height is approximately of 2 to 4 m.

Programming

The Wireless Smoke Detector has individual coding, which must be registered with the Carephone.

Parts Included

Quantity	Component
1	Wireless Smoke Detector
2	Flat-head screws
2	Screw anchors
1	Installation and operating instructions

Technical Specifications

Wireless Smoke Detector GIRA

Operating voltage	9 VDC
Battery type	IEC 6LR61, PP3 battery
Battery durability	approx. 1 year
Battery failure signal	Simultaneous LED and sound alarm displays in a 45-second cycle
Operating temperature	5 °C to + 45 °C
Storage temperature	- 5 °C to + 60 °C
Dimensions	Ø 110 x 45 mm
Weight (without battery)	Approx. 120 g
Protection type	IP 42
Mounting	2 screws

Smoke sensor

Detection principle	scattered light principle
Alarm duration	Local alarm: until alarm criterion (smoke) no longer exists. One wireless signal per fire event
Functional test	alarm triggering by test button
Optical display	Red LED flash (if without sound, indicates the unit is operational)
Sound display	Loud pulsing alarm sound, approx. 85 dB(A)

Radio transmitter module

Transmission frequency	869,2125 MHz
Bandwidth	25 kHz
Modulation type	FSK (frequency shift keying)
Modulation hub of the transmitter	± 3 kHz
Transmission power	5 mW
Range in free field	approx. 200 m
Code signaling to the Carephone	Bosch protocol

Ordering Information

Wireless Smoke Detector

CRS-CP-WSD

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