Gira smoke alarm device Dual/VdS

The first home smoke alarm device with double safety via two identification processes united in one product: smoke detection and heat detection



# Gira smoke alarm device Dual/VdS

Twice as safe with measurement of both temperature and scattered light



Gira smoke alarm device Dual/VdS, 9 V variant (III.: 1:1)

#### Gira smoke alarm device Dual/VdS

The new Gira smoke alarm device Dual/VdS is equipped with two identification processes, thus achieving double the level of safety. It optically identifies small smoke particles before the situation becomes hazardous and dangerous for people. In addition thermal sensors measure temperature changes within the room; in this way various types of fire such as smouldering fires or liquid fires can be more rapidly registered and securely identified. Alarm behaviour can also be better controlled in areas with unavoidable disturbance factors such as kitchen vapours, dust and electrical interference.

The Gira smoke alarm device Dual/VdS detects smoke accumulation according to the principle of scattered optical light with processor controlled signal evaluation. The smoke alarm device Dual/VdS detects the build-up of heat with the additional thermal sensor.

Both sensors of the Gira smoke alarm device Dual/VdS continuously measure the optical and thermal values in the special surroundings. An 'intelligent' monitoring module checks these values and thus detects possible impurities in the air of the room. Soiling of the smoke chamber is compensated for by the drift compensation of the alarm device. This avoids false alarms, whereby a high level of fire sensitivity is still guaranteed.

The thermal sensors make the smoke alarm device Dual/VdS an optimal device even in areas with unavoidable accumulation of smoke, such as kitchens. In such cases the optical smoke detection can be switched off for 15 minutes if cooking produces an unusual amount of vapours. The thermal sensors still guarantee reliable fire protection in the room. The function button is pressed until the signal tone is heard (after 2 seconds) to switch off smoke detection. The button is positioned for easy accessibility at the centre of the device so that it can be pushed from below with a broomstick for example. After 15 minutes the Gira smoke alarm device Dual/VdS then again checks the optical values in the environment in addition to the thermal conditions. In cases of danger the device triggers an alarm.

The Gira smoke alarm device Dual/VdS can be networked with up to 40 further Gira smoke alarm devices Dual/VdS. When the smoke alarm device detects the dangerous accumulation of smoke or heat, a signal is transmitted to all further smoke alarm devices and an alarm is triggered throughout the whole building.

Thanks to its disassembly safeguard the Gira smoke alarm device Dual/VdS is also highly suitable for installation in kindergartens, commercial properties and rental properties. The disassembly safeguard can be optionally activated on the mounting plate.

Thereafter a tool is needed for opening the locking mechanism, for maintenance work for example.

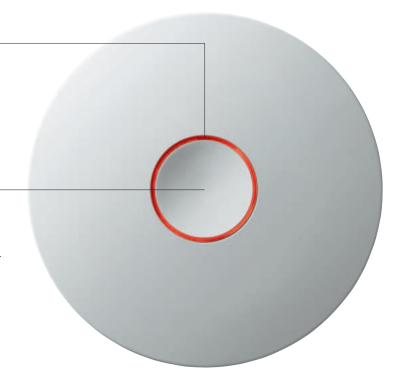
The Gira smoke alarm device Dual/VdS can be checked manually with a function test. Here the function button is pressed for at least four seconds. The smoke alarm device operates correctly if the signal tone is heard after a short acknowledgement tone and the ring indicator is active. If the function button is pressed again (until the acknowledgement tone) the test terminates.

### LED display

The red ring indicator on the device flashes at various intervals or continuously lights up according to whether the function test is being applied to the device, whether the device is soiled or is signaling an alarm.

## Function button \_

The function button enables optical smoke detection to be deactivated for 15 minutes, and in addition is used for implementing the test function.



### Variants, product range

### Networking possibilities

# Gira smoke alarm device Dual/VdS, 9 V variant

The Gira smoke alarm device Dual/VdS is supplied with power via a 9 V monoblock battery. The automatic function test regularly tests the power supply and functions of the device. If the battery voltage drops below a defined point, the smoke alarm device signals for 30 days that the battery has to be replaced. The smoke alarm device is completely functional during

this period. The integrated twilight sensor switches off the battery warning signal in darkness.

Up to 40 devices can be networked via the 2-wire cable.

Installation as individual device



Networking of a maximum of 40 devices via the 2-wire cable



# Gira smoke alarm device Dual/VdS, 230 V variant

Operation of the Gira smoke alarm device Dual/VdS can be via an existing 230 V mains supply. Up to 40 devices can be networked via the 230 V supply.

# 230 V base for the Gira smoke alarm device Dual/VdS

For the battery-operated Gira smoke alarm device Dual/VdS a 230 V base is optionally available for retrofitting.

Networking of a maximum of 40 devices via the 230 V cable



#### Radio module/VdS

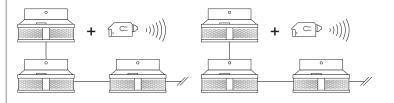
The smoke alarm device Dual/VdS can be optionally expanded either with a radio module or a relay module.

When equipped with a radio module, the Gira smoke alarm device Dual/VdS can be integrated into the Gira radio bus system. A transmission range of 100 m (free field) can be achieved per radio module. If a smoke alarm device with radio module is programmed as a repeater, the range can be broadened even further. In addition it is also possible to integrate the new Gira smoke alarm device Dual/VdS with radio module into already existing installations equipped with Gira smoke alarm devices modular/VdS with radio modules.

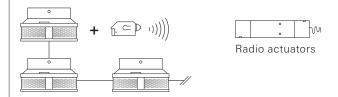
Networking of a maximum of 40 devices via a radio bus system



Combined networking of a maximum of 40 devices total



Combined networking of a maximum of 40 devices with the Gira radio bus system, e.g. blinds, light or alarm



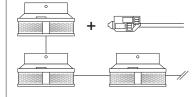
Muting via a radio transmitter [max. of 14 devices can be taught in] following local alarm signalling for approx. 10 minutes



### Relay module

Equipped with a relay module, the Gira smoke alarm device Dual/VdS can be connected to external alarm devices, such as a horn or warning light. In addition, alarm and fault messages, e.g. on a TeleCoppler or alarm control unit, can be switched or forwarded via a push button interface to the KNX/EIB system.

Integration of additional devices such as EIB push button interface, TeleCoppler or horn via the relay module



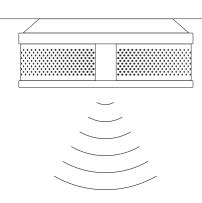
# Radio diagnosis tool for Gira smoke alarm device Dual/VdS with radio module

The Gira radio diagnosis tool enables the checking of Gira smoke alarm devices Dual/VdS from the floor or from outside of the room, for example from stairways. It consists of the radio diagnosis USB box and the radio diagnosis software 1.0 in German and English. Data transmission is carried out without removing the device.

The Gira radio diagnosis tool significantly simplifies the checking of Gira smoke alarm devices. Devices installed in flats can be conveniently checked from stairways without the flats having to be entered. This makes the tool especially interesting for building owners and housing associations. In addition, smoke alarm devices installed at high heights can be checked from the floor without effort. For recording of data, the optionally available radio module for the Gira smoke alarm device Dual/VdS is awakened from battery-saving sleep mode.

The following can be read out: pollution severity, current smoke chamber value, battery condition information (good, average, bad or as voltage value), temperature (heat alarm), serial number, start-up time and last alarms. The data are received wirelessly via the radio diagnosis USB box. In addition, recording the data serves as documentation for the electrical trade

They are analysed with the radio diagnosis software 1.0 that can be used on-site on a laptop for example. The software can be operated intuitively and is not only for data analysis but also for documentation. This enables analysis over longer periods of time, helpful for example with the analysis of disturbance factors. The Gira radio diagnosis tool for the Gira smoke alarm device Dual/VdS is characterised by a high level of interference resistance, and false alarms cannot be triggered.

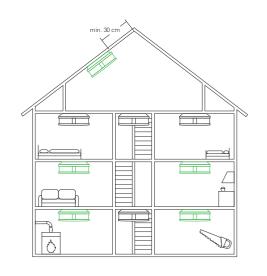




Mounting sites in a house

In buildings with several storeys, a smoke alarm device should be installed on at least every storey and in every bedroom. In larger houses, several networked smoke alarm devices can be used in order to cover the entire living area. If smoke and/or heat is detected by a smoke alarm device, it triggers an alarm and activates all the connected smoke alarm devices which then also issue an alarm.

In this way all occupants in the house are awakened in the bedrooms by the networked smoke alarm devices, for example when a smoke alarm device in the cellar detects smoke and/or heat



Minimum

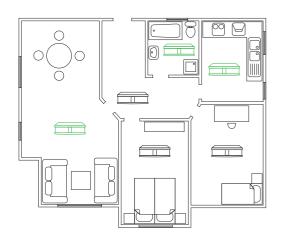


optimum protection

### Mounting sites in a flat

The Gira smoke alarm device Dual/VdS can be installed in all rooms thanks to the new dual technology, even in kitchens and bathrooms. The advantage here: the smoke detection function of the device can be deactivated to avoid false alarms resulting from rising smoke. It is preferable to install smoke alarm devices in front of or inside bedrooms so that occupants are alarmed in cases of fire.

The Gira smoke alarm device Dual/VdS has optimum detection characteristics when mounted in the middle of the room under the ceiling. If this is not possible, observe a minimum distance of 50 cm to the wall. A smoke alarm device can monitor a room with a maximum of 60 m² area and a maximum room height of 6 m.



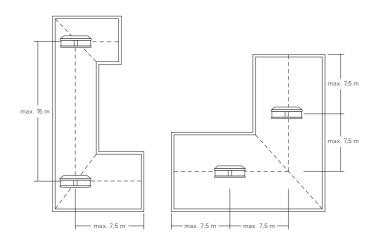


optimum protection

### Special room geometries

In L-shaped rooms or corridors the smoke alarm devices should be installed on the mitred lines.

In the case of large L-shaped rooms, each section is regarded as a separate room.



### Unsuitable mounting sites

In order to avoid false alarms, do not mount the smoke alarm device:

- directly to a metal surface
- closer than 6 m to heating air outlets
- closer than 50 cm to fluorescent lamps and energy saving lamps
- closer than 1 m to air-conditioning and ventilation shafts, as air flow may prevent smoke and/or heat getting to the sensor
- in rooms higher than 6 m
- closer than 30 cm to a roof apex
- in rooms with temperatures below +5°C or above +55°C

# **GIRA**

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# Technical data Smoke alarm device Dual/VdS, 9 V variant

- Rated voltage: 9 V DC
- Battery failure signal: 60 sec. cycle, 30 days
- Optical display: red ring indicator
- Acoustic alarm indication: Piezo primary detector, intermittent
- Volume: approx. 85 dB (A) at 3 m
- Volume in test operation: approx. 73 dB (A) at 3 m
- Housing dimensions:
  125 x 48 mm (Ø x H)
- Plastic material: PC-ASA
- Operating temperature: +5 °C to +55 °C
- Storage temperature:-20 °C to +65 °C
- Weight (without battery): approx. 213 g
- Protection type: IP 42
- Networking of up to 40 Gira smoke alarm devices Dual/VdS possible

Type plate on the smoke alarm device Dual/VdS

# Battery for smoke alarm device Dual/VdS

9 V alkaline block battery (included in scope of supply)

- Model: DURACELL PLUS/6LR61
- Service life approx. 5 years, with radio module approx.
   2 years

9 V lithium block battery (can be used optionally)

- Model: ULTRALIFE/U9VL-J
- Service life approx. 10 years, with radio module approx.
  5 years

## Smoke alarm device Dual/VdS, 230 V variant

Identical with Gira smoke alarm device Dual/VdS 9 V variant, excepting:

- Rated voltage: 230 V AC
- Optical display with voltage applied: green LED
- Housing dimensions: 125 × 72 mm (Ø × H)
- Weight: approx. 266 g

# 230 V base for the smoke alarm device Dual/VdS

- For retrofitting a 9 V Gira smoke alarm device Dual/VdS to a 230 V variant
- Enables operation via an existing 230 V mains supply
- Networking of up to 40 Gira smoke alarm devices
   Dual/VdS possible

#### Relay module

- Relay contact alarm:2-way switch, zero-voltage
- Switching voltage: max. 30 V AC/DC
- Switching current: max. 1 A AC/DC
- Relay contact fault:2-way switch, zero-voltage
- Switching voltage: max. 30 V AC/DC
- Wire diameter: 0.6 to 0.8 mm<sup>2</sup>
- No additional current consumption in switched condition

#### Radio module/VdS

- Power supply: via 9 V battery or 230 V base of smoke alarm device
- Transmission frequency: 433.42 MHz, ASK
- Transmission range: typically 100 m (in free field)
- Temperature range: +5 °C to +55 °C
- Protection class: IP 20 Type plate on the radio module

# Radio diagnosis tool for Gira smoke alarm device Dual/VdS with radio module

- Enables the checking of Gira smoke alarm devices Dual/VdS from the floor or from outside of the room, for example from stairways
- Radio diagnosis USB box
- Radio diagnosis software 1.0 in German and English (Windows XP, Windows Vista or Windows 7 with Microsoft .Net Framework 3.5 installed

### Product range

Gira smoke alarm device Dual/VdS, 9 V variant, pure white: Order No. 2330 02

Gira smoke alarm device Dual/VdS, 230 V variant, pure white: Order No. 2334 02

230 V base, pure white: (for retrofitting 9 V variant to 230 V variant) Order No. 2331 02

Radio module/VdS: Order No. 2341 00

Relay module: Order No. 2340 00

Radio diagnosis tool: Order No. 2333 00

Subject to technical modifications

Further information is available from the Gira catalogue or at www.gira.com