

## Gira smoke alarm device Dual Q

The Gira smoke alarm device Dual Q sounds the alarm when dangerous smoke formation is detected and fulfils the increased Q-Label quality requirements. The Gira smoke alarm device Dual Q is a combined heat and smoke detector, thanks to its ability to measure both temperature and scattered light.

# Gira smoke alarm device Dual Q

## Protecting you and your home



Gira smoke alarm device Dual Q with 230 V base

## Gira smoke alarm device Dual Q

The Gira smoke alarm device Dual Q is equipped with two identification processes, which achieves twice the level of safety. It optically identifies small smoke particles before the situation gets too precarious and dangerous for people. In addition, thermal sensors measure temperature changes within the room. In this way, various types of fire such as liquid fires can be registered more rapidly 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 Q detects smoke accumulation according to the principle of photoelectric scattered light measurement with processor-controlled signal evaluation. The Gira smoke alarm device Dual Q detects the build-up of heat with the additional thermal sensor. Both sensors of the Gira smoke alarm device Dual Q 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 ambient air. Soiling of the smoke chamber is compensated for by the drift compensation of the alarm device. This avoids the triggering of false alarms, while guaranteeing a high level of fire sensitivity.

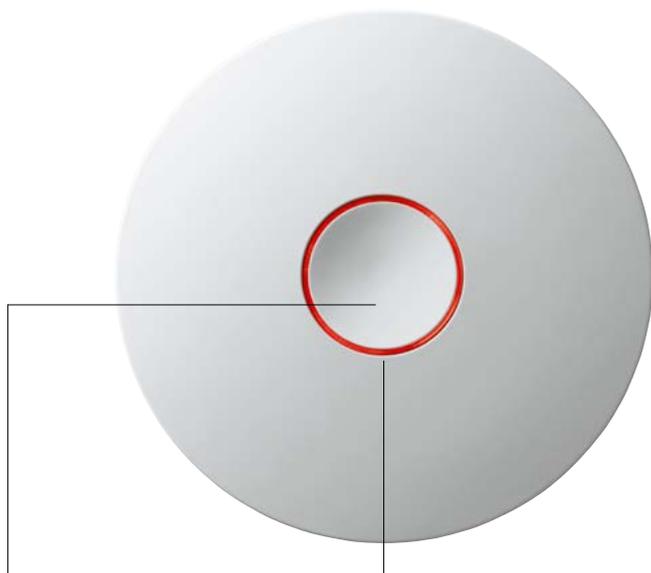
The thermal sensors make the Gira smoke alarm device Dual Q an ideal device even in areas with unavoidable accumulation of smoke, such as kitchens. In such cases the optical smoke detection using photoelectric scattered light measurement can be switched off for 15 minutes if cooking produces an unusual amount of vapours. The thermal sensors still guarantee reliable fire protection in the room. The function button is pressed until a signal tone is emitted (for 1 second) to switch off smoke detection using photoelectric scattered light measurement. The button can be easily reached in the middle of the device so that it can be operated from below with a broomstick for example. After 15 minutes the Gira smoke alarm device Dual Q then again checks both the optical values and the thermal conditions in the room. In case of danger the device triggers an alarm.

Altogether, up to 40 Gira smoke alarm devices Dual Q can be networked. 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 across all of the networked devices.

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 Q 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.

The Gira smoke alarm device Dual Q signals that the device will have to be replaced 30 days in advance. The device remains completely functional during this period.



### Function button

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

### 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 signalling an alarm.



Gira smoke alarm device Dual Q with 230 V base, view from below

Gira smoke alarm device Dual Q with 230 V base, side view

**Gira smoke alarm device Dual Q**  
Options, product range

**230 V operation**

The Gira smoke alarm device Dual Q can be operated via the existing 230 V mains supply.

40 devices can be networked via a separate conductor.

**Networking options with the radio module**

If equipped with an optional wireless module, the Gira smoke alarm device Dual Q can be integrated into the Gira eNet system using the Gira eNet wireless converter. A transmission range of 100 m (free field) can be achieved per wireless module.

If a smoke alarm device with wireless module is programmed as a repeater, the range can be expanded even further. In addition, it is also possible to integrate the Gira smoke alarm device Dual Q with wireless module into already existing installations equipped with Gira Dual/VdS smoke alarm devices with wireless modules.

**Networking options with the KNX module**

The optional KNX module enables the Gira smoke alarm device Dual Q to be connected to the KNX system. If the device registers fire or smoke accumulation, the module forwards the signals to the KNX system, which can then react intelligently to the risk

of fire. The KNX module is supplied with electricity via the KNX line. As many devices as desired can be connected.

**Networking options with the relay module**

Equipped with an optional relay module, the Gira smoke alarm device Dual Q 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 to the KNX system via a push button interface.

**For retrofitting**

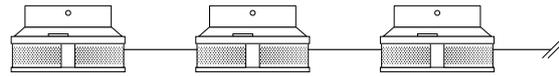
The Gira smoke alarm device Dual Q is supplied with power from a 9 V monoblock battery. The automatic function test regularly tests the power supply and functions of the smoke alarm device. If the battery voltage drops below a defined point,

the smoke alarm device signals that the device has to be replaced for 30 days.

The smoke alarm device remains completely functional during this period. The integrated twilight sensor switches off the battery warning signal in darkness.

**Gira smoke alarm device Dual Q**  
Networking options

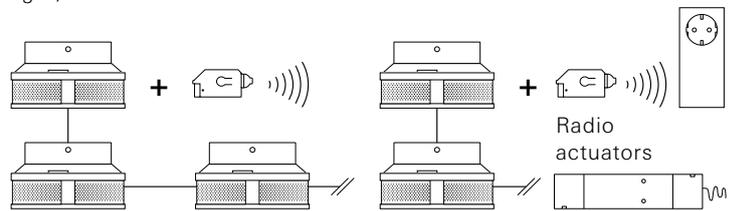
Networking of up to 40 devices via a separate conductor



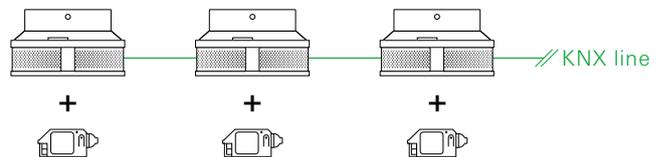
Networking of a maximum of 40 devices via a wireless bus system



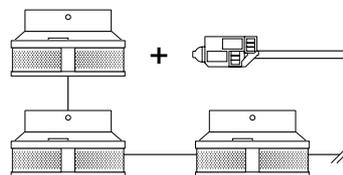
Combined networking of up to 40 devices using the Gira eNet system, by means of the Gira eNet wireless converter, e.g. blinds, light, or alarm



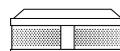
Networking in any desired quantity via the KNX system



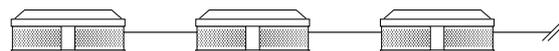
Integration of additional devices such as a push button interface, TeleCoppler, or horn via the relay module



Use as individual device



Networking of up to 40 devices via the 2-wire cable



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

The Gira radio diagnosis tool enables Gira smoke alarm devices Dual Q to be checked from the floor or from outside the room, for example from stairways. It consists of the radio diagnosis USB box and the radio diagnosis software 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 particularly useful for building owners and housing associations. In addition, smoke alarm devices installed at difficult heights can be checked from the floor without effort. The optional radio module for the Gira smoke alarm device Dual Q is awakened from battery-saving sleep mode to record data.

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 is 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 which 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 with the examination of disturbance factors for example. The Gira radio diagnosis tool for the Gira smoke alarm device Dual Q is characterised by a high level of interference resistance, and false alarms cannot be triggered.

### Technical data Gira smoke alarm device Dual Q

- power supply: 230 V base for Gira smoke alarm device Dual Q
- acoustic alarm signal: at least 85 dB (A)
- optical display: Ring indicator (red LED)
- dimensions: 125 x 48 mm (dia. x H) 125 x 72 mm (dia. x H) (incl. 230 V base)
- installation height: max. 4.50 m
- plastic material: PC/ASA
- operating temperature: -5°C to +55°C
- storage temperature: -20°C to +65°C
- weight: approx. 270 g approx. 345 g (incl. 230 V base)
- protection type: IP 42
- area of application: pursuant to DIN 14676
- standards: DIN 14604
- networking of up to 40 Gira smoke alarm devices Dual Q possible
- only for retrofitting: power supply: from the battery of the smoke alarm device
- permanently installed 9 V lithium monoblock battery
- battery life: at least 10 years
- battery failure signal: 60 sec. cycle, 30 days
- 230 V base for Gira smoke alarm device Dual Q
- enables operation of the 9 V device via an existing 230 V mains supply
- networking of up to 40 Gira smoke alarm devices Dual Q possible via extrawire in 230 V cable
- rated voltage: 230 V AC
- optical display with connected mains voltage: green LED
- KNX module for Gira smoke alarm device Dual Q
- power supply: KNX via connection and branch terminal 0595 00
- temperature range: -5°C to +50°C

The KNX module enables the smoke alarm device Dual Q to be connected to a KNX system. Configuration and commissioning from ETS 3. Various communication objects are available, such as:

- alarm
- auxiliary unit alarm (for networking several smoke alarm devices via KNX)
- wired alarm (wired networking of several smoke alarm devices)
- signal transmitter (to switch on signalling tone)
- status messages
- fault messages

### Relay module for Gira smoke alarm device Dual Q

- 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 for Gira smoke alarm device Dual Q

- power supply: from 3 V lithium battery type (CR2/3 AA) (included in the scope of supply)
- transmission frequency: 433.42 MHz, ASK
- transmitter range: typically 100 m (in free field)
- temperature range: -5°C to +55°C

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

- enables the Gira smoke alarm devices Dual Q to be checked from the floor or from outside the room, for example from stairways
- radio diagnosis USB box
- radio diagnosis software in German and English (Windows XP, Windows Vista, Windows 7 with Microsoft Net Framework 3.5 installed)

### Product range

Gira smoke alarm device Dual Q with 230 V base, pure white glossy  
Order No. 2337 02

Gira smoke alarm device Dual Q pure white glossy (for retrofitting the 9 V device)  
Order No. 2337 02

Radio module Dual Q:  
Order No. 2347 00

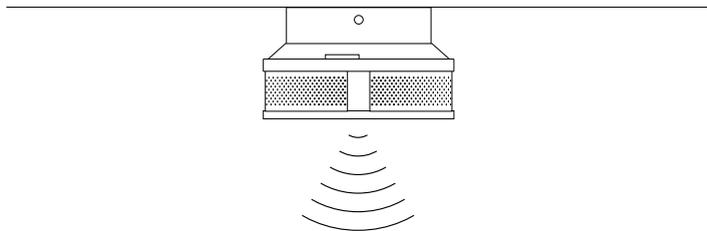
KNX module:  
Order No. 2343 00

Relay module:  
Order No. 2340 00

Radio diagnosis tool:  
Order No. 2333 00

Subject to technical modifications.

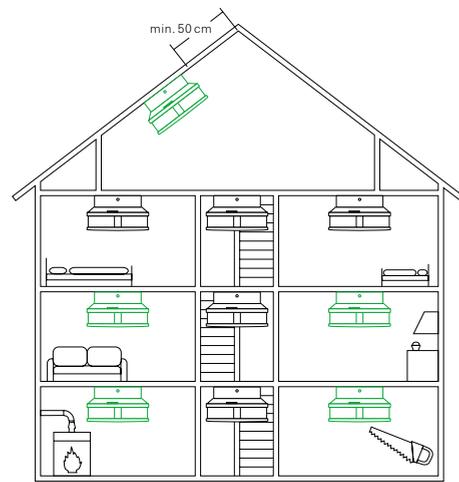
Additional information can be found at [www.katalog.gira.de/en](http://www.katalog.gira.de/en)



### Installation 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 Gira smoke alarm devices Dual Q can be networked and used 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 of the connected smoke alarm devices which then also issue an alarm.

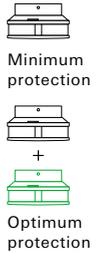
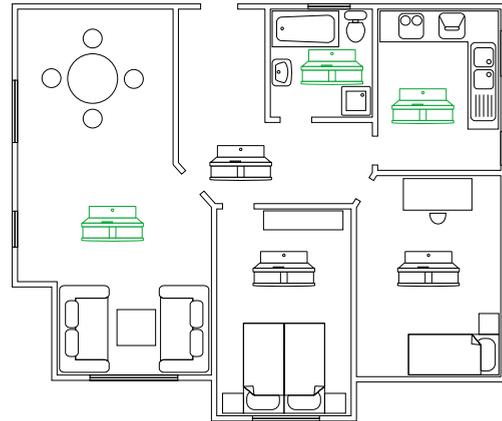
In this way all occupants in the house are awakened in the bedrooms by the networked smoke alarm devices, for example when a smoke alarm device in the cellar detects smoke and/or heat.



### Installation sites in a flat

The Gira smoke alarm devices have optimum detection characteristics when mounted on the ceiling in the middle of the room. 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 area of 60 m<sup>2</sup> and a maximum room height of 4.50 m.

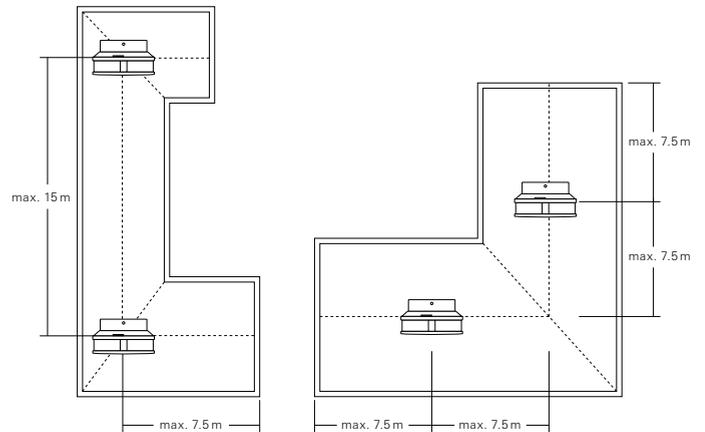
Thanks to its new technology, the Gira smoke alarm device Dual Q can be installed in any room – even in kitchens and bathrooms. The advantage: the smoke detection function of the device utilises photoelectric scattered light measurement and can be deactivated to avoid false alarms resulting from rising smoke. Installing smoke alarm devices in front of or inside bedrooms is preferable so that occupants are alerted in case of fire.



### Special room shapes

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

Each section of large L-shaped rooms is regarded as a separate room.



### Unsuitable installation sites

In order to prevent false alarms, do not mount a smoke alarm device:

- Directly on 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 from reaching the sensor
- In rooms higher than 4.50 m
- Closer than 30 cm to a roof apex
- In rooms with temperatures under - 5°C or above + 55°C

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