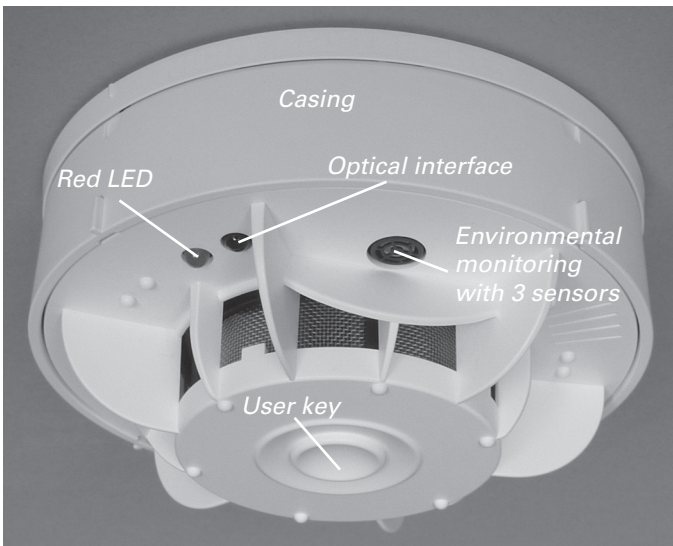


# Techem radio frequency smoke alarm 2

## Product description



DE

EN

RU

TR

Optical smoke alarm (SA) to protect private accommodation units in residential buildings.

## Brief overview: What to do if ...

In the following table we introduce you to important smoke alarm signals and explain how you should behave in the different situations. – All steps are explained in detail later (see column 4: What must I do next?).

Signal tones	Optical display	Deactivate signal tones	What must I do next?
Loud alarm tone	Red LED flashes every 2 seconds	Press the user key	<b>See page 22:</b> Alerting
2 short, quiet signal tones every 10 minutes	Red LED flashes 2x every 30 seconds	Press the user key	<b>See page 29:</b> Environmental monitoring
3 short, quiet signal tones every 5 minutes	Red LED flashes 1x every 5 seconds	Press the user key	<b>See page 30:</b> Defect/ damage

## General information

### Product description / intended use

The **Techem radio frequency smoke alarm 2** is used to **recognise fires early** and for local **acoustic alerting** in the private area and in the housing industry. – **It is not suitable for applications above and beyond this.**

The radio frequency smoke alarm 2 operates using a tested, permanently integrated long-term lithium battery. – It can be muted by pressing the user key.

The high-quality smoke alarm (in the following referred to as SA) meets the latest technical requirements. It warns you of smouldering fires and fires with smoke development in good time, thus providing a considerable gain in safety. – This warning function is very important as the sense of smell is inactive when you sleep. In order to ensure that this function is maintained, always ensure that any smoke arising in the event of fire can reach the smoke alarms unhindered. – **Therefore you must not change the installation locations under any circumstances whatsoever!** For your own safety switch off fans and/or ventilation systems that cause powerful flows of air, because it is possible that any smoke that develops will not reach the smoke alarm in good time or even not at all.

**!** Under certain conditions, the radio frequency smoke alarm is not suitable for warning people with a hearing impairment. – In this case, please refer to your landlord or property administration.

## Target group

These operating instructions are intended for flat occupants in whose flat the Techem radio frequency smoke alarm 2 is installed.

## Safety instructions

- The SA is supplied with a permanently installed battery with sufficient capacity for the full period of use. – **Changing the battery is not necessary** and also **non-permissible**.
- You are not allowed to open the SA, to submerge it in water (danger of short-circuits), to destroy it or to dispose of it in normal household waste.

## How do I use these operating instructions?

These operating instructions are part of Techem radio frequency smoke alarm 2. – Please read the document carefully and keep it during the entire operating life of the device. Should you move, please pass the instructions on to the next tenant.

## How does the smoke alarm (SA) work?

### Normal operation

Under normal operating conditions, the smoke alarm need not be operated:

User key	Red LED
No operation necessary	Is not illuminated

### Alerting

If fire smoke develops in the ambient air, the device alerts with a loud alarm signal:

Signal tone	Red LED
Triggers a loud warning tone (1 second on, 1 second off)	Flashes every 2 seconds

### Deactivation

To switch the alarm off for 15 minutes, also in case of false or spurious alarms, press the user key until the alarm signal is silent and the short signal tone sounds:

User key	Red LED
Press the user key until the loud warning tone is silenced	Continues to flash every 2 seconds

- ! During the 15 minute deactivation period, the smoke alarm does not recognise any smoke and therefore does not trigger any alarms.

After expiry of the deactivation, the smoke alarm automatically returns to standard operation mode.

## Spurious alarms

Spurious alarms often have the following causes:

- Dust due to construction work or cleaning work,
- Sawing and grinding work,
- Steam,
- Cooking vapours,
- Temperature fluctuation (= condensation of humidity),
- Welding and separation work,
- Soldering and other high-temperature processes.

- ! In order to avoid spurious alarms and/or soiling the smoke alarms, please observe the information in the section "What to do when carrying out renovation work?"

## How can I test the smoke alarm?

The smoke alarm fundamentally checks itself and its environment. – However, we further **recommend** that you **check** the device yourself **at least once a year**.

Extra SA servicing is not required.

### Checking smoke alarms

Check the functionality of the smoke alarm by pressing the user key until you can hear the signal tone:

User key	Signal tone	Red LED
Press the user key until the test alarm rings (1 second on, 1 second off)	Test alarm with reduced volume	Flashes every 2 seconds

**!** Never use a naked flame or other smoke to test the smoke alarm.

**If no signal tone rings when the user key is pressed, the SA is faulty. – In this case, please refer as fast as possible to the**

**Techem Hotline: 0 1802/00 1264**

(6 cents / call from German landlines, max. 42 cents / minute from German mobile phones).

When checking, please also check

- whether the casing is damaged.
- whether fire smoke can reach the smoke alarms unhindered.

This can be hindered, for example, by the later installation of room partitions or virtually ceiling-high cupboards, shelves or curtains. – If necessary, reinstallation or new installation must take place in this case.

Ensure the minimum clearance to walls, furnishings and fittings and so forth is at least 60 cm (in very confined spaces, e.g. in hallways the Techem technician can alter the required minimum clearance setting in the radio frequency smoke alarm when installing the device). The minimum distance to objects (normally = 60 cm) comes from standards requirements (= 50 cm) + measuring tolerance (= 10 cm).

- whether the SA is fully covered or partially covered or taped.
- whether the individual rooms are used differently. **Minimum installation requirement:** Install smoke alarms in bedrooms including children's bedrooms as well as in hallways and rooms that serve as escape routes.
- whether smoke alarms are very dusty or, for example, are heavily soiled by cobwebs. The smoke inlets (grey grating) must be free.
- whether fluorescent tubes, fireplaces, stoves, ventilators, air-conditioning and/or ventilation devices have been installed later in the vicinity of the smoke alarms.

**In case of variances, please refer as fast as possible to the Techem Hotline: 0 18 02/00 12 64**

(6 cents / call from German landlines, max. 42 cents / minute from German mobile phones).

## Special case: SA with deactivated environmental monitoring

If in extremely rare cases (e.g. in extremely cramped hallways) the environmental monitoring function of the radio frequency smoke alarm had to be deactivated completely by Techem during installation, this will be stated clearly on a sticker (“Jährliche Sichtprüfung” = “Yearly visual inspection”) on the user key.



**!** In that case, the mandatory yearly check must be carried out manually – as described on pages 24 and 25.

## What should I do when renovating?

**!** You may neither mask the smoke alarm nor cover it. Moreover, you may neither paint over the SA nor subject it to soiling due to work which gives off large quantities of dust.

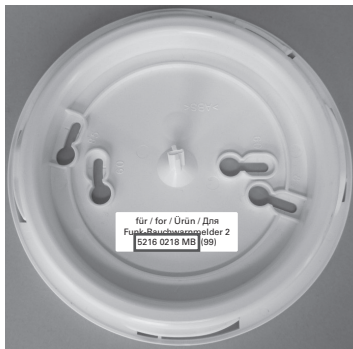


Before you commence renovation work, you must disassemble the SA:

- 1** For this purpose, turn the SA casing anti-clockwise manually.
- 2** Then remove it downwards from the assembly plate.
- 3** Mark the SA on the back with the room designation so that you can re-install it correctly after renovation.

After renovation, you must re-install the SA again **at the same place in the same room**:

- 4** For this purpose, compare the series number (8-digit device no. and 2-digit test mark) on the assembly plate label and on the back of the SA (e.g.: 5216 0218 MB).



- 5 Place the device on the assembly plate with a slight anti-clockwise turn and then turn it clockwise without using too much force until it engages.

After reassembly, the device returns automatically to normal operation mode. – Check the functionality of the smoke alarm by pressing the user key until you can hear the test alarm signal.

- ! The smoke alarm may be disassembled for a **maximum of 2 weeks**. After completion of the renovation work, restore the functionality of the SAs as fast as possible. If they are disassembled for longer, servicing work from Techem is necessary and may be subject to charges.

## What should I do if the smoke alarm's environmental monitoring is activated?

- ! If the smoke alarm's environmental monitoring is activated, the cause must be rectified as fast as possible. Causes of malfunction include, for example, all kinds of items in the vicinity of the smoke alarm (e.g. lamps, openly laid electrical cables, room partitions, very high cupboards / shelves). –The minimum gap from items must be 60cm – measured from the outer edge of the SA. In extremely confined rooms, for example in hallways, it is possible for the Techem technician to set a lesser minimum clearance in the radio frequency smoke alarm during installation.

Further causes of malfunction include painting over, masking or covering the smoke alarm.

After you have rectified the cause of malfunction, please press the user key and move away from the SA within 10 seconds so that the malfunction notification can be switched off at the SA.

If you are unable to rectify the cause of malfunction, please refer as fast as possible to the

**Techem Hotline: 0 18 02/00 12 64**

(6 cents / call from German landlines, max. 42 cents / minute from German mobile phones).

For safety reasons, keep the doors open to rooms with functional smoke alarms until the cause of malfunction has been rectified.

The activation of environmental monitoring is signalled as follows:

Signal tone	Red LED
2 short, quiet signal tones every 10 minutes	Flashes twice every 30 seconds

How to deactivate the environmental monitoring signal tone for 3 days:

User key	Signal tone	Red LED
Press the user key until a short acknowledgement tone sounds	Short acknowledgement tone	Flashes twice every 30 seconds

After deactivation for 3 days has been made three times, deactivation is then only possible for one day at a time.

## What should I do if the smoke alarm fails or is damaged?

- In case of failure or damages to the smoke alarm, the device must be replaced as soon as possible. Please refer without delay to the **Techem Hotline: 0 1802/00 1264** (6 cents / call from German landlines, max. 42 cents / minute from German mobile phones). – Do not try to repair faulty smoke alarms. There are no exchangeable parts (e.g. batteries). For safety reasons, keep the doors open to rooms with functional smoke alarms until the faulty smoke alarms are exchanged.

Failure is signalled as follows:

Signal tone	Red LED
3 short, quiet signal tones every 5 minutes	Flashes once every 5 seconds

How to deactivate the failure signal tone for 3 days:

User key	Signal tone	Red LED
Press the user key until a short acknowledgement tone sounds	Short acknowledgement tone	Flashes once every 5 seconds

After deactivation for 3 days has been made three times, deactivation is then only possible for one day at a time.

## How should the SAs be correctly assembled?

**!** Fire smoke must be able to reach your smoke alarm unhindered. Please observe this especially when making structural alterations and installations in your apartment. If somehow possible, the SAs must be located at least 60 cm away from all items. In case of ceiling-high furniture, each section of the room should be equipped with a smoke alarm.

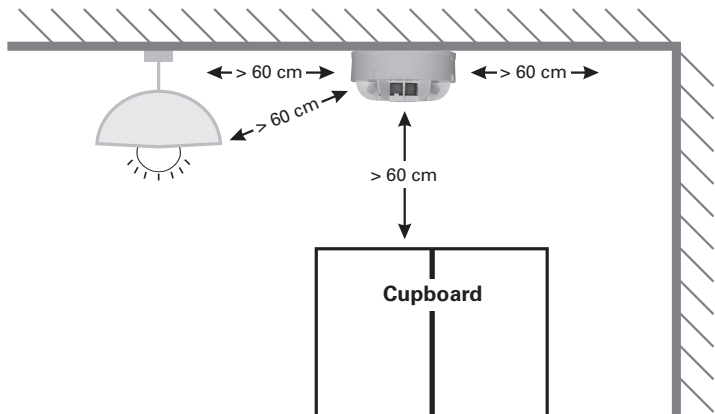
**If changing the room use** (e.g. a living room becomes a bedroom), the existing installation must be **checked** with regard to adherence to the regulations and adapted as necessary.

This is also valid if sound propagation is hindered, e.g. through large room partitions or noise-dampening materials.

If it becomes necessary to install the smoke alarm somewhere else, please contact your landlord or your property management representative. The smoke alarms should only be installed by a specialist. The service technician will stipulate the installation location in accordance with the valid regulations. Please neither disassemble nor move the smoke alarm of your own accord.

The **distance** from lamps, openly laid electrical cables, room partitions, walls, binding beam projections, ceiling girders, corners of rooms, etc. must be at least **60 cm**. – Please make sure to observe this if making changes to your furnishings.

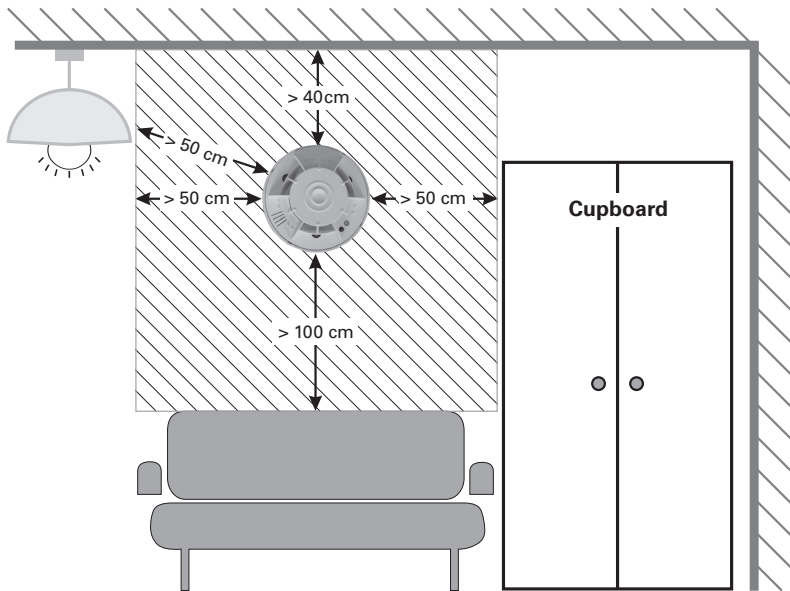
**In case of narrow conditions, for example in the hallway, the value for environmental monitoring can be reduced!**



If it becomes necessary to install the smoke alarm somewhere else, please contact your landlord or your property management representative.

## Wall installation

If a radio frequency smoke alarm is installed **on one of your walls** (see drawing below): In that case, do not **permanently** fit any objects anywhere inside the hatched area. Ensure also that an area of at least 50 cm around the smoke alarm and into the room remains free of any obstructions. The only **exception** is the clearance to the ceiling: min. 40 cm.



## Technical data

Version:	With integrated 868 MHz radio frequency module for integration in the Techem radio frequency system data III and Techem Smart System
Sensor systems:	Photo-optical diffused light process
Signal evaluation:	Thanks to process-controlled setpoint tracing, sensitivity also remains constant when the smoke boxes are soiled or dusty over the course of the years, which cannot be avoided
Check:	<ul style="list-style-type: none"><li>• Manual: activation of the user key</li><li>• Automatic: can be remote accessed via the radio-controlled interface</li><li>• Automatic testing can hardly be heard</li></ul>
Environment and permeability monitoring:	Regular and automatic tests whether smoke can penetrate the detector unhindered <ul style="list-style-type: none"><li>• Permeability of the smoke penetration openings</li><li>• Covers / masking</li><li>• Relevant obstacles in the surroundings of 60 cm around the smoke alarm</li></ul>
Acoustic alerting:	<ul style="list-style-type: none"><li>• In case of fire alarm at least 85 dB(A)</li><li>• For manual check: approx. 75 dB(A)</li><li>• For failure notification: approx. 75 dB(A)</li></ul>
Display:	LED red for fire alarm and failure



User key:	<ul style="list-style-type: none"><li>• For manual check</li><li>• For deactivating an acoustic failure notification for 3 days</li><li>• To switch off the alarm for 15 min.</li></ul>
Power supply:	<ul style="list-style-type: none"><li>• Permanently installed lithium battery</li><li>• 10 years battery lifespan + 1 year reserve</li><li>• Acoustic and optical signalling when the battery capacity is exhausted</li><li>• Following a battery failure message, the safe operation of the devices is guaranteed for at least 30 further days</li></ul>
Installation:	<ul style="list-style-type: none"><li>• On ceilings and roof pitches</li><li>• 6 m max. room height</li><li>• 60 m<sup>2</sup> max. monitoring area</li><li>• Wall installation for special applications</li></ul>
Conformity:	<ul style="list-style-type: none"><li>• DIN EN 14604 2005 + AC 2008</li><li>• CE1772-CPD-100459</li></ul>
Authorisations:	<ul style="list-style-type: none"><li>• KRIWAN 1772-CPR-100459</li><li>• vfdb [GFPA: German Fire Protection Association] 14-01</li></ul>
IP protection class:	IP 32
Operating temperature:	+5 °C to +45 °C, temporarily -10 °C to +60 °C
Dimensions (D x H):	129 mm x 59 mm

Techem  
radio frequency smoke alarm 2



Techem Energy Services GmbH herewith declares that the radio frequency smoke alarm 2 meets the basic requirements and relevant regulations of Directive 1999/5/EC (R&TTE) and Standard EN 14604.

**CE** 1772 <sup>11</sup>  
**1772-CPD-100459**  
**Fire protection**

**Manufacturer:**

**Atral-Secal GmbH, Schlangenbader Straße 40,  
D-65344 Eltville-Martinsthal**

**At your service 24 hours per day. Our Techem Hotline can take your call at any time of day or night: 0 1802/00 1264 (6 cents/call from German landlines, max. 42 cents/minute from German mobile phones).**





