

**Honeywell**  
THE POWER OF **CONNECTED**

Professional Home Safety



X-Series Smoke and Heat Alarms



## Battery Powered Smoke and Heat Alarms

XH100, XS100, XS100T

# Fire Safety in Residential Accommodation



## The dangers of fire

Every year there are an average of 2.5 million fires across Europe. These range in severity and causes, but each one incurs either financial or personal losses. On average, more than 25,000 people die from fires in Europe each year, and 500,000 people are injured.

In the UK alone, deaths from fires have fallen by more than 60% since the introduction of smoke and heat alarms in the mid 1990's. Homes with a working smoke or heat alarm have been found to have a death rate that is 50% lower than homes without one. The longer people spend inside a burning building, the less their chance of survival is as they begin to suffer from smoke inhalation and could become trapped. Smoke and heat alarms give that vital extra time before these dangers occur, and give you the advised three minutes to get out of a burning building.<sup>1</sup>

Smoke and heat alarms offer an early warning system that works. Research has found that for every £1 spent on an alarm, more than £50 is saved in fire related costs.<sup>2</sup>

<sup>1</sup> Source: California State Fire Department

<sup>2</sup> Source: European Child Safety Alliance

## Who is at risk?

Without proper and adequate warning, everyone is at risk of injury or death from a fire, especially at night when your sense of smell can be diminished. Children are particularly at risk as they often don't react quickly enough to the dangers of fire.

## The Dangers of Fire

### Data and facts



EVERY YEAR there are an average of **2.5 MILLION FIRES** ACROSS EUROPE

Every **3rd** VICTIM is a CHILD!



**70%** of ASSET DAMAGES are caused by smoke

Almost half of all FIRES start



IN PRIVATE LIVING AREAS



**95%** of fire victims **DIE** from smoke poisoning

EACH YEAR IN EUROPE **25,000** PEOPLE DIE FROM FIRES

Honeywell





# X-Series Smoke & Heat Alarms Range

## Detection principles

A fire can be detected using various different technologies; however, the priority is always to maximise the detection speed, whilst avoiding false alarms. Using a range of alarm types, ensures accuracy and speed in detection rates to a broader range of fires giving crucial escape time.



## Regulations

In England and Wales, a house built after 1992 must have a mains operated smoke or heat alarm on every level of the building. Landlords and their agents have a duty of care to their tenants to ensure the property is safe. In older houses it is advisable to install smoke or heat alarms.<sup>3</sup>



In Scotland, a house must have at least one smoke or heat alarm, preferably optical, installed in the principal habitable room (normally the lounge / living room) and in circulation spaces such as hallways and landings, and at least one heat alarm in the kitchen, all must be interconnected.



In Northern Ireland, there must be a smoke or heat alarm in the principal habitable room (normally the lounge/living room) and a heat alarm in each kitchen.



<sup>3</sup> Source: UK government

## Honeywell's expertise

Honeywell is one of the biggest manufacturers of commercial fire protection systems. Worldwide, more than 20 million commercial fire alarms are sold under Honeywell's brands Esser, Gent, Notifier and others. These commercial systems are typically being used in larger public and private buildings, for example hotels and offices. Honeywell has more than 50 years experience in this area. This experience has been used to develop highly reliable smoke and heat alarms for the residential area.

### XH100 Heat Alarm



Thermal Sensor



Kitchens



10 year life & warranty

### XS100 Optical Smoke Alarm



Optical Sensor



Bedrooms  
Lounges



10 year life & warranty

### XS100T Optical Thermal Smoke Alarm



Optical and Thermal Sensor



- Escape routes
- Bedrooms
- Lounges



10 year life & warranty

# X-Series Smoke and Heat Alarm Advantages



**XH100**  
Heat Alarm



**XS100**  
Optical Smoke Alarm



**XS100T**  
Optical Thermal Smoke Alarm

Honeywell smoke and heat alarms have been optimised for use by professionals dealing with residential fire protection. Offering simple installation and maintenance they have been designed to meet the needs of housing associations and larger private households.

## GENERAL DESCRIPTION

### High reliability

- **Multi-criteria detection:** Intelligent algorithm combines optical and heat detection for increased detection speed across a broad range of fires, producing less false alarms (XS100T)
- Third party certified by BSi to EN14604:2005/AC:2008 (XS100T, XS100) respectively BS5446 Part 2 (XH100)
- **Optical detection:** Accurate and rapid detection of fires using responsive optical sensors (XS100)
- **Heat detection:** Combines fast response time and minimum false alarms in areas with dust or fumes like kitchens (XH100)
- **Sealed housing:** to protect from adverse environmental conditions
- **Automatic self-checks:** built in functional tests every 10 seconds for peace of mind
- **Dirt compensation:** false alarm immunity as device self adjusts to most contamination



### Tamper-proof

- Sealed in battery lasts for ten years
- Self-locking mounting plate. X-Series alarm can only be removed with a tool



### Appealing design

- Low profile discrete design
- Integrates well into residential environment



### Easy to install

- One or two hole installation / flexible hole positions
- Device switches on when slid onto mounting plate
- Optional tamper proof feature locks device on mounting plate



### Low total cost of ownership

- Ten year life and warranty
- Maintenance free – no parts to change



### Easy to use

- Clearly visible status indication LEDs: Power, Alarm, Fault
- Easy sleep feature – ability to deactivate LED flash in bedrooms
- Loud 85dB audible alarm
- Large button – can be easily pressed with a broom stick from floor level
- Alarm hush
- Fault hush – no repetitive beeps
- Clean, intuitive user interface

### Applications

X-series delivers enhanced safety in the home, apartments, leisure accommodation, guest houses and vehicles.



Homes



Apartments



Leisure accommodation and guest houses



### Complete solution

All X-Series alarms can be interconnected wirelessly for increased safety by using the wireless plug-in module XW100. Honeywell's X-Series alarms are available as a complete range of fire and Carbon Monoxide solutions for customers looking for advanced safety systems.

# User interface

**Low profile shape**

**Loud sounder output**

**Big, easy to press button**

- Fault hush
- Alarm hush
- Reduced sound level test

**Separate indicators for each unit status**

- 360° visual alarm
- Power (optional LED deactivation for less disturbance at night)
- Fault
- Wireless (if separately sold XW100 module is installed)

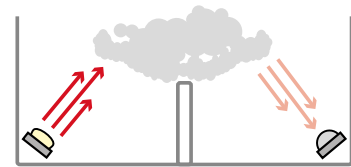
**Multi criteria, heat and optical detection**

- Increased response speed
- Broader range of fire types detected quickly
- Reduced false alarms

# Sensing technologies

## XS100 Optical Smoke Alarm

Our Smoke Alarm uses an optical chamber, which “looks” for smoke as an indicator for a fire.



## XH100 Heat Alarm

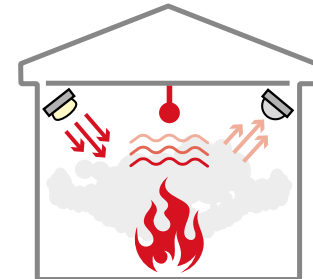
Our Heat Alarm uses a thermal sensor, which measures the change of temperature as an indicator for a fire. It is triggered at a temperature of 58°C. This makes the alarm best suited for areas with high levels of dust or fumes, such as kitchens and garages.



## XS100T Optical Thermal Smoke Alarm

Our multi-criteria smoke alarm combines and optical with a thermal sensor. Signals from these sensors are combined using an intelligent algorithm to improve reaction speed, whilst reducing the number of false alarms.

Using two sensor types in one device makes it capable to detect all fire types like slow burning and fast flaming.



TECHNICAL SPECIFICATION	
<b>RELIABILITY</b>	
Detection principle	XS100T - Multi-criteria: Optical and Thermal XS100 - Optical XH100 - Thermal
Third party approvals	XH100 - BSi to BS5446-2, CE XS100 and XS100T - BSi to EN14604:2005/AC:2008, CE
Other compliances	RoHS, REACH, R&TTE, EMC
Self-test function	Yes
Lifetime/Warranty	10y/10y
<b>OPERATING ENVIRONMENT</b>	
Temperature	-10°C to +55°C
Humidity	Up to 95% non condensing at 40°C
IP rating	IPX2D
<b>ELECTRICAL AND INTERCONNECTION</b>	
Power supply	Long-life Lithium Battery, 3V, Sealed-in

<b>Wireless Interconnection</b>	A separately sold wireless plug-in module XW100 is available
<b>Alarm Scan</b>	Compatible with X-Series Alarm Scan App available on Google Play and Apple iTunes store
<b>USER INTERFACE</b>	
<b>Visual indicator</b>	<b>Power:</b> Green LED - optional deactivation <b>Alarm:</b> Red LED - large surface <b>Fault:</b> Yellow LED
<b>Audible</b>	>85dB @ 3m, Distinct “Fire” alarm sound
<b>Button</b>	Test with reduced sound level Alarm hush, Fault hush (24h)
<b>PRODUCT</b>	
<b>Size</b>	Ø 116 x 42 mm
<b>Weight</b>	185 g
<b>PACKAGING</b>	
<b>Type</b>	Carton box with euro hole
<b>Dimensions</b>	119 x 119 x 55 mm
<b>Scope of supply</b>	Unit Mounting kit: Screws + plugs User/Installer manual

# Smoke and Heat Alarms - Where to Install?



## Where to install?\*

Positioning a smoke or heat alarm in the right place is important to increase detection rates and reduce false alarms. Smoke is hotter than air, so is forced upwards towards the ceiling. Choosing the correct unit for the correct room reduces false alarms.

The X-Series offers a flexible range for different rooms – protecting multiple areas and offering enhanced safety protection via a wireless interconnection module. *See page 4*

### XH100 Heat Alarm

The XH100 detects fast increases in temperature and is not affected by fumes or smoke particles. It's therefore ideal for kitchens.

### XS100 Optical Smoke Alarm

The XS100 provides accurate detection of smoke particles and is therefore ideal for most living areas e.g. lounge or bedroom.

### XS100T Optical Thermal Smoke Alarm

Combined thermal and optical sensors provide faster response times to a broader range of fires, whilst reducing false alarms. Ideal protection for hallways and stairs.

Consult your local building regulations to find out how many and which variant of smoke or heat alarm is required. It is strongly recommended that you place an alarm in rooms where you spend a lot of time, for example bedrooms or living rooms.

## Fast installation

X-Series smoke alarms don't need wiring when installing them; simply install the mounting plate first using supplied plugs and screws, then slide the alarm onto it which automatically activates the alarm.

X-Series smoke alarms are preferably mounted on ceilings but can also be fixed to walls if required.

### Mounting options:

Screw, two holes, or  
Screw, one centre hole.



### Tamper proof:

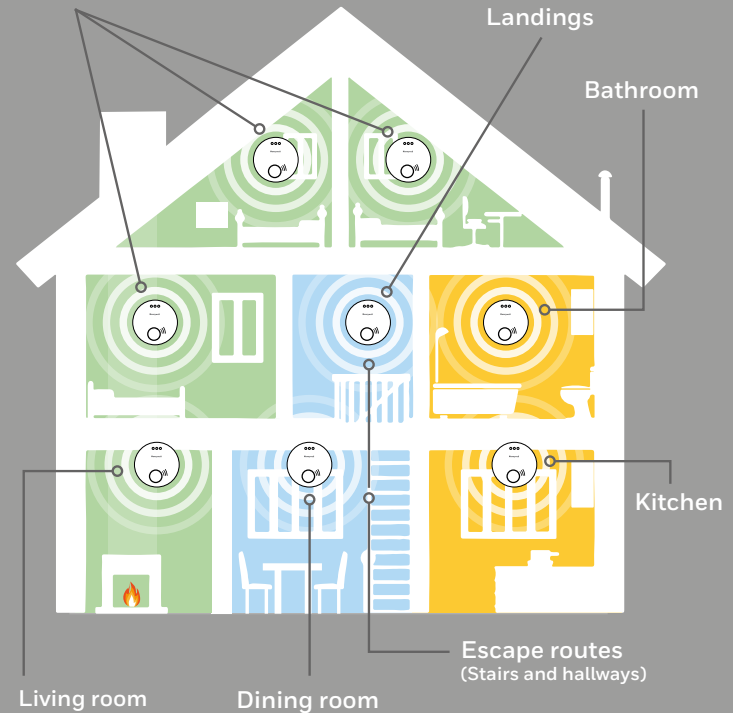
For additional tamper resistance the locking/replace tab can be removed. The alarm can then only be removed using a suitable tool.

#### PLEASE NOTE


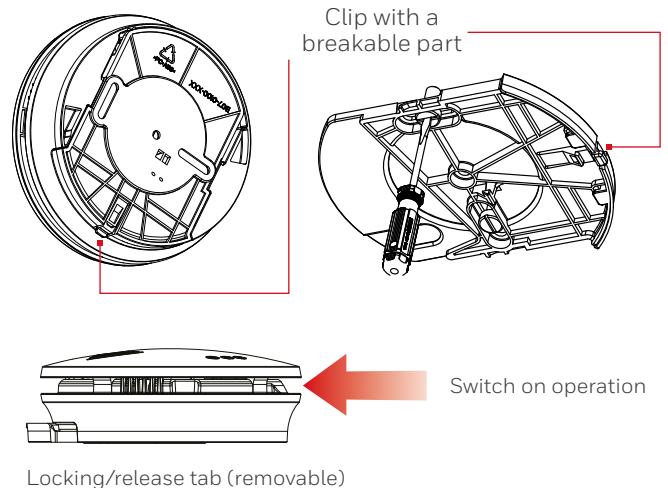
\* It is the responsibility of the installer to ensure the product is installed in line with the current regulations. If in doubt please consult a competent professional installer.

## Installation Guidance\*

Where people sleep



XH100 Heat Alarm	XS100 Optical Smoke Alarm	XS100T Optical Thermal Smoke Alarm	XW100 Wireless module
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# How we add value

## Smoke and Heat Alarms

## X-Series Alarms



### Multi-criteria detection (XS100T)

Optical smoke alarms use an optical chamber to "see" the smoke. Certain fire types are recognized with some delays only. Multi-criteria detection therefore adds a thermal sensor and uses an intelligent algorithm to improve reaction speed, and reduce the number of false alarms. Using two sensor types in one device makes it capable to detect all fire types like slow burning and fast flaming.



### Low profile design

Honeywell's low profile design utilising rounded corners, sleek round design and low profile height make the unit seem a lot smaller than it really is. Honeywell have employed design agencies and end user market research to select the best suitable concept.



### Full ten year lifespan and warranty

Honeywell's full product lifespan warranty is one of the most comprehensive in the industry. This is backed up with more than 50 years of fire alarm experience producing some of the most reliable alarms in the market. Honeywell is one of the few companies in the market to offer a full ten year lifespan and ten year warranty on its smoke and heat alarms.



### Independent 3rd party certification and Q-Label

All residential smoke alarms being sold in the EU must be certified by a 3rd party, for example VdS, against EN14604 which is the standard for residential smoke alarms. This sets the minimum requirements for smoke alarms to be sold, whether it is for DIY or professional use. The Q-Label is a voluntary additional 3rd party certification, which is granted to high quality smoke alarms. Smoke alarms with the Q-Label are tested for long-life, minimised false alarms, increased protection against adverse environmental conditions and have a sealed battery with at least 10 years lifetime.



### CE mark

The CE mark affixed to this product confirms its compliance with the European Directives which apply to the product and, in particular, its compliance with the harmonised specifications of standard EN 14604 relating to Construction Products Directive 89/106/EEC.



### BSI Kitemark

The BSI Kitemark is a product or service certification mark that shows it has been tested independently and audited to ensure it meets the appropriate standards of quality and safety.



### NF mark

The NF – Smoke Alarm Devices mark provides assurance as to safety and consistent quality inspected by experts. Through its rigorous and exhaustive inspections (holder's quality management system, product inspections, audits and monitoring tests, etc.), the NF mark represents a comprehensive guarantee for consumers that the certified products are compliant. The NF - Smoke Alarm Devices mark confirms the product's compliance with certification rules NF 292.



### Automatic self-adjustment / self checks

Honeywell's smoke and heat alarms have been fitted with an automatic self test function which ensures the unit is functioning properly. Every ten seconds, the unit tests critical systems to ensure accurate alerts are delivered rapidly once a fire is detected.



### Clearly visible alarms

Honeywell have integrated a set of clearly visible LED lights into the perimeter of the unit, ensuring the alarm can be seen from all angles. This feature greatly helps people who have hearing troubles so may not hear the alarm.



### Dirt compensation

Honeywell's unique dirt compensation ensures that nuisance alarms are kept to a minimum. By not confusing dust with smoke, the X-Series smoke and heat alarms only sound when a hazard is detected.



### Sealed housing

Honeywell's X-Series alarms all have sealed housings. It protects the electronics from adverse environmental conditions like humidity, and improves reliability and lifetime. We have been successfully using this technology for many years in our commercial smoke alarms, which are being used in harsh conditions like warehouses.



### Alarm hush

There might be situations where the unit is in full alarm, and you want to mute the 85dB loud alarm sounder, e.g. when the situation is under control. Pressing the button on the unit will mute the sounder for a couple of minutes, whilst the alarm light will keep on flashing as long as the alarm detects a threat.



### Fault hush

A typical fault occurs when the alarm warns of an almost depleted battery. The alarm will start to beep once per minute accompanied by a flashing fault light. The Fault Hush allows you to mute the sounder for 12 hours, giving you time to address the fault. This period can be extended several times.



### Reduced sound level test

Alarms should be tested regularly to ensure they are working properly. After pressing the Test button, the alarm will start the self-test procedure, flashing all lights and sounding the alarm. We have reduced the sound level for this test function considerably from the full alarm level of 85 dB to protect your hearing. By keeping the button pressed, the full alarm level will sound.



### Tamper-proof

Professional landlords want to ensure that installed alarms cannot be deactivated by their tenants. Our X-Series alarms all have sealed batteries which cannot be removed by the end user. Also, once installed, a tool (screwdriver) is required to switch the unit off.



### Maintenance free operation

All Honeywell X-Series alarms have lifetime batteries – there is no additional cost for replacement parts or labour to fit them. The only maintenance required is occasional cleaning of the product.



### Interlink

Interlink provides the ability to connect several alarms to an alarm system. If one of the units goes into alarm, all other units will sound as well. This considerably improves safety, especially in larger properties. All X-Series alarms can be upgraded to connect wirelessly.

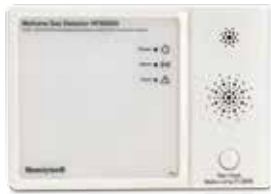


### X-Series Alarm Scan app

The Honeywell X-Series Alarm Scan App allows wireless instant transfer of logged Alarm and Fault events, as well as the general device status from all enabled X-Series Alarms to iOS or Android smart devices. The app works with all X-Series devices marked with the Alarm Scan logo, including optionally installed wireless modules.



# Our Home Safety Product Range



## HF500 Hard-wired flammable gas alarm

The HF500 alarms are designed to deliver a complete solution for the detection of LPG (Liquefied Petroleum Gas) and Natural Gas/Methane.

Optimised for use by professionals dealing with flammable leak detection, HF500 is ideally suited for use in private or social housing as well as other forms of residential care.



## e<sup>2</sup>sense Battery flammable gas alarm

e<sup>2</sup>sense is the most convenient way to detect Natural Gas, Propane, Butane, LPG and LNG. It is compact and light on the pocket in more ways than one.



## SF340 Series hard-wired carbon monoxide alarm

The SF340 Series is a range of reliable, hard-wired Carbon Monoxide alarms with battery back-up. They are designed for use in all domestic and light commercial environments.



## X-Series Alarm Scan app

The X-Series Alarm Scan App is designed for professional landlords, gas engineers, plumbers and other service providers responsible for ensuring the safety of tenants or carrying out initial installations of X-Series alarms. It helps with annual maintenance checks or boiler servicing and provides an easy way to confirm incident reports. Installers or landlords can demonstrate compliance or offer an added-value service that can help build their reputation as a professional and reliable service provider.

The app allows anyone who owns an X-Series device\* in their home to see more in-depth information about the state of the alarm and keep safety concerns under control.

Available on Google Play<sup>®</sup> and iTunes<sup>®</sup>.



Alarm Scan

\*Compatible with X-Series devices marked with the Alarm Scan App logo.

## Dedicated local support

Honeywell provides a UK based Customer Support Centre, which is available Monday to Thursday from 08:30 to 17:00 and Friday from 08:30 to 15:30. Our team is happy to answer any queries on our products and can be contacted on

Tel: (01202) 645 577



## X-Series battery powered carbon monoxide alarms

Our X-Series battery powered CO alarm range offers a seven or ten year maintenance-free lifetime.

Three models provide different display options designed to enhance safety in critical situations, including a patent pending alarm evacuate visual indication.



## X-Series wireless module

All Honeywell X-Series alarms can be wirelessly interconnected using the XW100 plug-in module. This means that if one X-Series Carbon Monoxide, smoke or heat alarm triggers an alarm, all interconnected units will give an audible alarm as well.

This is especially useful, when living in a large or multi-story dwelling where the alarm may be triggered in another part of the building.

### Please Note:

While every effort has been made to ensure accuracy in this publication, no responsibility can be accepted for errors or omissions. Data may change, as well as legislation, and you are strongly advised to obtain copies of the most recently issued regulations, standards, and guidelines. This publication is not intended to form the basis of a contract.

ORDER INFORMATION							
Part no	Barcode	Batch Size	Minimum Order Quantity	Detection	Available Languages	Product Description	
XH100-EN-A	5 027526 402274	50	100	Thermal	English	Battery Heat Alarm	
XS100-EN-A	5 027526 402250	50	100	Optical	English	Battery Optical Smoke Alarm	
XS100T-EN-A	5 027526 402267	50	100	Optical +Thermal	English	Battery Optical Thermal Smoke Alarm	

### Professional Home Safety

www.homesafety.honeywell.com  
www.honeywellanalytics.com.

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