

# Ionisation smoke alarm with 9V backup battery Cat SD100



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# Ionisation smoke alarm with 9V battery backup

## Cat No. SD100

**Introduction** The SD100 is a 240V mains powered smoke alarm that uses ionisation smoke sensing technology. The alarm has a 9V battery backup system for double safety.

### Features and benefits

Feature	Application	Benefit
Removable mounting plate	Termination and plate mounting can be undertaken while the alarm itself is out of the way. The alarm can be stored securely away from building work prior to commissioning.	Faster and easier installation. Secure protection of alarms prior to commissioning.
Multiple base mounting options	The SD100 smoke alarm has standard 84mm mounting centres, conduit box centres and numerous other mounting holes as standard	Faster and easier installation in any scenario.
Surface mount design	No part of the SD100 smoke alarm protrudes into the ceiling, requiring only a small hole for cables to be drawn through.	Faster and easier installation. Fewer mistakes in sizing and positioning of cable hole.
Tunnel terminals, including a loop	Direct cable termination into the alarm with no need for terminal blocks, junction boxes, flying leads or additional cable protection in the ceiling space.	Faster and easier termination. Less scope for termination errors.
Surface wiring option	Meets surface wiring applications without the need for additional mounting plates.	A simpler and more cost effective surface mount option.
Aesthetic good looks	Minimises the impact of the product when mounted on the ceiling by offering clean, stylish design.	Minimises visual impact and enhance householder satisfaction.
Interconnection of up to 20 SD Series smoke alarms	Effective alarm warning of an entire area covered by all alarms if one unit detects smoke. Different types of SD Series alarm can be used to match particular requirements of certain areas in an installation.	Early warning can save lives. Maximises protection through matching alarm types with the environment.
Visual function LED light indicators	Green LED glows - main power (230-240V) on. Red LED flashes one every 40-60 sec - smoke alarm & battery are functioning correctly. Red LED flashes rapidly - smoke is detected.	Easy diagnosis of alarm status.
Large test button	Regular tests ensure the alarm is functioning correctly. The large concave test button makes testing easy – tests can be simply & safely activated with a broom, without having to climb onto something in order to get within reach.	Maximises safety by encouraging householders to test regularly (and safely).
Dust cover included	Dust protection during construction or redecoration.	Prevent dust contamination.
Hush or silence feature incorporated into the test button	Simply press the button for 3 sec when non-hazardous sources (like cooking) cause the alarm to sound.	Convenience during nuisance alarming.
Easy 9V battery access via hinged lid and finger slot	9V batteries need replacing occasionally, so the SD100 make this easy, including a finger slot next to the battery. Mains 240V power is automatically isolated when the battery compartment is accessed.	Encourages replacement and therefore safety.
5 year warranty	The long warranty period provided by Schneider Electric endorses our faith in the range.	Peace of mind for installers and householders.

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### FAQs

- *What is the best way to test a smoke alarm?*

We recommend only two methods:

1. Pushing the test button tests all circuitry and should be part of any installation procedure and a householder's routine.
2. Canned smoke is the best smoke test option. All smoke tests that can be carried out on-site are not very reliable and most are not safe, but canned smoke is the most reliable and the safest. Using other methods to generate smoke can be dangerous and can lead to a false negative result, ie. the smoke alarm does not go into alarm mode even though there is nothing wrong with it.

**Note:** All PDL SD Series smoke alarms are smoke tested in the factory as part of the manufacturing process.

- *Can I over-tighten the smoke alarm mounting plate?*

Yes, and this can lead to intermittent mains connection due to the base being twisted out of its correct shape. Try unwinding mounting screws slightly or using opposite, outside mounting centres where possible.

- *Positioning of smoke alarms and nuisance alarming*

Smoke alarms can alarm unnecessarily, causing a nuisance. This usually occurs because of the location of the alarm and the following points should be noted:

1. Smoke alarms can be affected by electrical noise from other devices. Avoid locating smoke alarms near fluorescent light fittings or near electronic products without C-tick EMC approval. Note that all SD Series smoke alarms have C-tick EMC approvals.
2. Locating smoke alarms near bathrooms can lead to nuisance alarms because the smoke alarm can detect steam particles in the air.

Refer to the instruction leaflet for further information on smoke alarm locations.

### SD100 applications and usages

Technology	The SD100 uses radioactive material, Americium 241 – one micro curie (around 1 / 5000 of a gram) to ionize the atoms of air. The ionized air particles allow a small and steady flow of current across the detection chamber. When smoke particles are present, the ions are neutralized and the current flow is reduced, triggering the alarm.
Advantages	Are sensitive to fast flaming fires, which produce small smoke particles. Will provide earlier warning than photoelectric alarm in these conditions.
Disadvantages	Slower to repond to large smoke particles associated with smouldering fires.
Where to use	Dining rooms Non-smokers bedrooms Hallways Living rooms without open fires
Where not to use	Bathrooms Kitchens Garages Small confined apartments

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### Specifications

Main Power Source:	230-240V a.c. 50Hz	Inter-connecting:	20 PDL SD series alarms over 150 metres maximum
Secondary Power Source:	9V d.c. Carbon Zinc or Alkaline battery	Horn Level:	85dB at 3 meters minimum
Operating Current:	35mA	Visual Indicators:	Green LED for Mains Power ON Red LED for Warning and Low Battery indication
Battery Life:	1 year approximately	Approvals:	Listed by Scientific Services Laboratory
Sensing Type:	Ionisation. Americium 241 – one micro curie (around 1 / 5000 of a gram)	Complies with:	AS3786:1993 AS3100:1997
Operating Temperature:	5°C to 45°C	Certificate of Suitability:	CS00253V
Ambient Humidity:	10% to 90%		

### Approvals

The PDL SD100 smoke alarm has been tested to AS3786:1993 and AS/NZS3100:1997 by Scientific Services Laboratory and holds Australian Electrical Authority Certificate of Suitability CS00253V. Additionally, the SD100 has been third party accredited by both SSL and Quality Assurance Services (QAS). The SD100 is approved to carry the following marks:



### Ordering Information

Catalogue Number	SD100
Description	Ionisation smoke alarm with 9V battery backup
Trade Price* (each)	\$79.52 (ex. GST)
Product availability	In stock
Carton Quantities	Inner carton 1 Outer carton 6

\* Pricing is current as of 1 November 2002, but is subject to change without notice.



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