

Description

D-243 DC smoke alarms provide battery powered smoke detection and alarm functions within a single unit.

Advanced electronics in conjunction with a photoelectric smoke sensing chamber provide early detection of fire and high immunity against unwanted alarms.

D-243 DC smoke alarms are powered by a long-life lithium-ion battery and do not require a mains supply. Models with either user-replaceable and non-replaceable batteries are available.

Interconnectable D-243 DC smoke alarms use a wireless transmission path. Configuration into a closed group ensures that other units within radio signal range are not affected by a test or fire alarm occurring within the configured group.

The D-243 DC smoke alarm is suitable for general residential applications, and provides home owners and installers with an easy-to-install, long-life solution for life safety and property protection applications.



D-243 DC smoke alarm

Features

- Photoelectric smoke sensing chamber technology
- Loud 85 dB sounder to alert occupants
- Integrated indicator provides visual indication of an alarm condition
- Test and Hush features in a single button
- Test and Hush visual indicator
- Test button verifies battery and alarm operation
- Hush function temporarily silences unwanted alarms
- Smoke chamber fault audible and visual indication
- Hush function temporarily silences smoke chamber fault indication
- Low battery audible and visual warning indication
- Hush function temporarily silences low battery audible indication
- Interconnectable smoke alarms configurable into a closed group
- No limit for interconnectable units using the wireless transmission path
- Up to 10 years operation under normal conditions
- User-replaceable battery and non-replaceable battery models available
- Surface-mount device (SMD) circuit board design
- Attractive housing design, available with alternative top-cover styles
- Easy installation
- Low maintenance

Compliance

D-243 DC smoke alarms have the following compliance^a.

	EN 14604 ^b	VdS 3131 ^c	CE
D-243-07	✓	✓	✓
D-243-07Wi	✓	—	✓
D-243-07TR	✓	✓	✓

^a Third-party conformance assessment has not been undertaken.

^b EN 14604 *Smoke alarm devices*

^c VdS 3131 *VdS Guideline for Smoke Alarm Devices. Additional Requirements, Requirements and Test Methods*

Accessories

The following accessories are compatible with D-243-07Wi DC smoke alarms with wireless interconnection.

Description	Part number	Datasheet
Alarm remote control	D-243-07R	31-0084

Specifications

	D-243-07 D-243-07TR	D-243-07Wi
Power Supply		
Power source	DC 3 V	
Quiescent current	2 μ A	5 μ A
Quiescent condition indication ^a	Flashing red LED every 40 s	
Battery life expectancy	10 years	5 years
Low battery indication	Short audible signal every 40 s, synchronized with a single flash of the red LED, for 30 days	
Low battery hush indication ^b	Flashing red LED every 20 s	
Low battery hush time	10 h	
Alarm Condition		
Alarm response threshold	(0.08 ~ 0.15) dB/m	
Alarm condition audible indication output ^a	\geq 85 dB @ 3 m (0.5 s on / 0.5 s off)	
Alarm condition visual indication ^a	Flashing red LED every 1 s	
Alarm condition current	50 mA	65 mA
Alarm condition hush indicator	Device entering the Alarm condition: Flashing red LED every 1 s Interconnected devices configured as a closed group: Flashing red LED every 6 s	
Alarm condition hush time	9 min	
Test Condition		
Test condition audible indication output ^c	\geq 85 dB @ 3 m (0.5 s on / 0.5 s off)	
Test condition visual indication	Device under test: Flashing red LED every 1 s Interconnected devices configured as a closed group: Flashing red LED every 40 s	
Fault Condition		
Smoke chamber fault indication	Short audible signal every 40 s and a single flash of the red LED midway between the audible indications	
Smoke chamber fault hush indication	Flashing red LED every 20 s	
Smoke chamber fault hush time	10 h	
Wireless Interconnection		
Wireless radio interconnection operating frequencies	—	433 MHz, 868 MHz, 915 MHz
Number of interconnected devices	—	No limit within signal range
Maximum distance between interconnected devices ^d	—	500 m
Group mode configuration indication on master device	—	Flashing red LED every 0.5 s followed by a short audible signal
Group mode connection indication on slave device(s)	—	Flashing red LED every 0.5 s followed by a short audible signal
Group mode cancellation indication	—	Double flash of red LED together with two short audible signals
Group mode configuration timeout	—	50 s
Environmental		
Operating temperature	(0 ~ +55) °C	
Operating humidity	(10 ~ 95) % RH, non-condensing	
Storage temperature	(-25 ~ +80) °C	
Storage humidity	(0 ~ 98) % RH, non-condensing	
Miscellaneous		
Dimensions	Φ 100 mm x 36 mm	

^a Including all wireless interconnect devices configured in the same closed group.

^b Wireless interconnection feature is disabled during a low battery condition. Each unit will continue to function independently as a stand-alone smoke alarm.

^c Following completion of a Test, the audible test signal from interconnected devices may take up to 10 s to silence.

^d Distance in free air.

Ordering Information

	Top Cover Style 2	Replaceable Lithium Battery	Wireless Interconnection
D-243-07	✓	—	—
D-243-07Wi	✓	✓	✓
D-243-07TR	✓	✓	—