

F-SDM100 Wireless Smoke User Manual	Version	Security
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	F-SDM100	9 pages

Wireless Smoke Detector System User Manual



[Xiamen Four-Faith Communication Technology Co., Ltd.](#)

Add: Floor 11, Area A06, No 370, chengyi street, Jimei, Xiamen

Tel: +86 592-5907276 Fax: +86 592-5912735

Web: <http://en.four-faith.com>




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Chapter1 Introduce

1.1 Overview

F-SDM100 is a smoke detector which supports LoRaWAN™ standard, and it added wireless transmission and wireless group net function based on traditional smoke detector, and can realize remote monitor and management. The product can be used in security protection and fire protection.



1.2 Feature

- Power supply: battery.
- Maximum battery life: more than 2 years.
- Low voltage battery prompt.
- Wireless group net; Wireless transmission.
- Support LoRaWAN™ standard, application can be extended.
- Band: 433MHz/470MHz/780MHz/868MHz/915MHz.
- Transmission distance: >2km.
- High accuracy: smoke and temperature detection.
- Tamper alarm and fire alarm.
- Regular self-detection; report electricity and device status; system intelligent management.

1.3 Specification

Operating temperature:	-10°C - 55°C (14°F - 131°F)
Operating humidity:	10%- 95%, relative humidity, no condensation
Idle current	<18uA
Transmitted power	20dBm
Receive sensitivity	-140dBm
Modulation mode	LoRa™
Maximum transmission distance	>2000m (open space and no obstacle)
Size	88.5mmX72.5mmX10mm
Low voltage battery prompt	≤7V
Band	433MHz/470MHz/780MHz/868MHz/915MHz (optional)
Alarm current	≤105mA
Battery working life	≥2 years

Chapter2 Description

2.1 Smoke detector

Wireless smoke detector is a household smoke detection alarm, belong to the photoelectric smoke fire detection alarm which can work independently, it can be used in fire protection or security protection.

When the field smoke concentration reaches the alarm threshold or the test button keep pressed, the LED of alarm will change from the long time flashing once to flashing rapidly, and sound alarm will be sent at the same time. When the smoke concentration is lower than the alarm threshold or the test button is released, the alarm will return to the normal state (no lock alarm status, the LED restored to long time flashing once, sound disappeared).

2.2 Network

- **Alarm test**

There is a test button above the smoke detector, the sound-light will be triggered if you pressed it more than 3 seconds. At the same time, the device will also report the alarm messages to server.

- **Anti-prying alarm**

If the smoke detector device is not installed in place or is pry, it will be triggered alarm immediately. The platform will be aware of the prying of the device immediately.

- **Off-line alarm**

The device will report data to the platform regularly every 8 hours. If the device no data has been reported for one day, the off-line alarm will be triggered.

- **Smoke detection alarm**

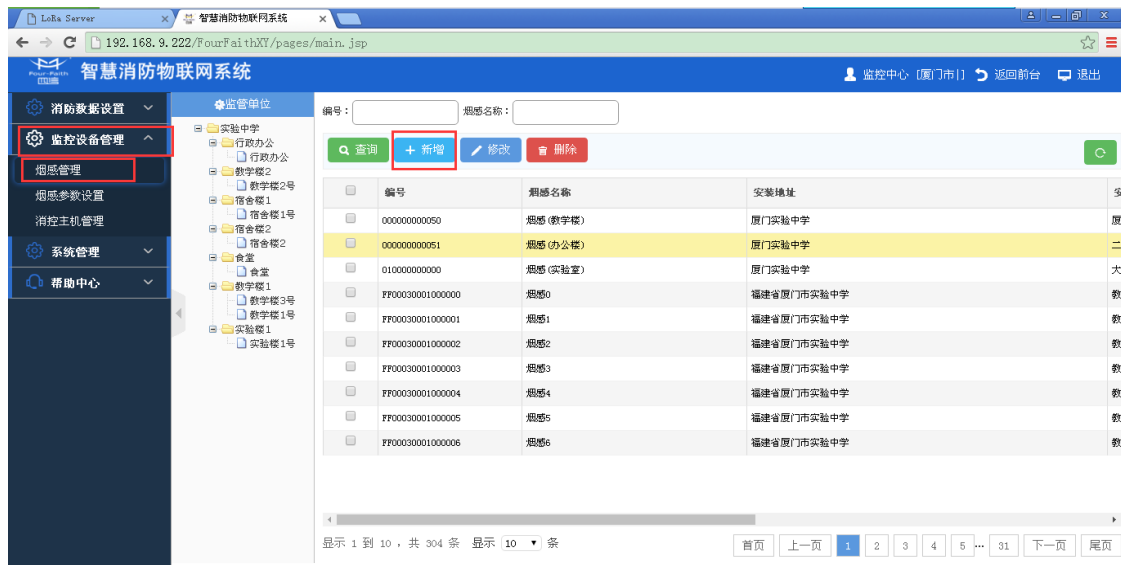
When the device monitoring the smoke concentration reaches the alarm threshold, it will be triggered alarm and sent the alarm messages to the platform at the same time.

2.3 Platform instruction

Step 1: After unpacking, put the battery into the battery slot of the device.

Step 2: Register the ID on the back label of the device to the platform.





Step3: After confirming the base station is working normally, press the test button to test whether the smoke detector is connected the platform normally. If the connection is OK, the smoke detector will appear as an icon in the map module of the platform.

