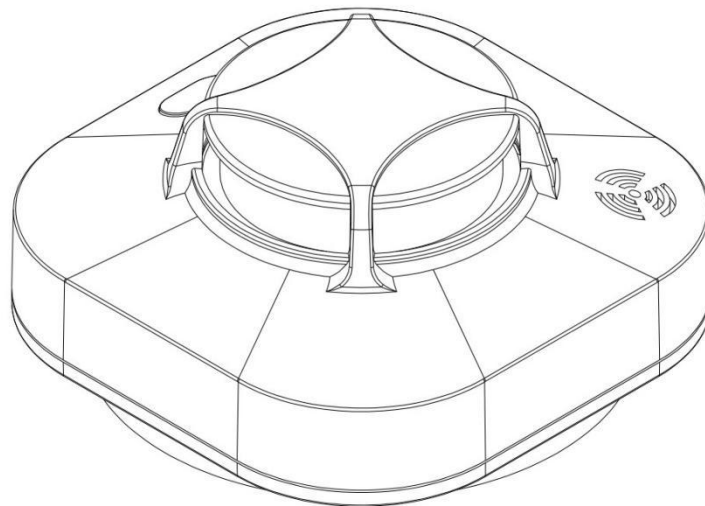




# HKT-SD300

## LoRaWAN Smoke Detector Specification



## Description

The HKT SD-300 smoke alarm, independently developed and designed by Hunan HKT Technology Co., Ltd., features high precision, sensitive response, and high stability. It is installed in a ceiling-mounted manner, requiring no calibration, and is capable of detecting fire conditions in a 360° radius. Utilizing surface-mount technology, it can resist interference from EMI and RFI. Once it "captures" the "signal" of an object burning, it will upload the signal to the cloud platform, ensuring the continuity of information transmission.

The smoke alarm is an important component of the automatic fire alarm system, serving as a triggering device and fire alarm unit within the system. This product uses a photoelectric smoke alarm system, where the sensor converts light signals into electrical signals and transmits them to the automatic fire alarm system, providing early warning or detection of fires, effectively ensuring the safety of life and property.

Based on the standard LoRaWAN<sup>®</sup> Internet of Things protocol, the product features a low-power design and can operate continuously for over three years on a single high-capacity battery without the need for replacement.

The HKT SD-300 is compact in size, easy to install, aesthetically pleasing, with all antennas built into the device, making it suitable for different types of mounting surfaces, and ideal for use in office areas, living areas, and residential areas.

## Features

- **Long Communication Range:** The maximum communication distance can reach up to 3Km in an open environment.
- **Ultra-long Standby:** Low power consumption, easy to replace, uses one high-capacity CR17450 battery, and can be used continuously for over three years.
- **Sensitive Sensing:** Fast alarm response, with the longest reaction time being less than 12 seconds.

- Rich Product Features: It has functions such as smoke alarm, high-temperature alarm, device muting, self-check, and low battery alarm.
- Strong Anti-interference Capability: It has the ability to resist white light and strong magnetic fields.
- No Wiring Required: No wiring or electrical connections needed, no damage to walls, reducing construction time.
- Good Compatibility: Compatible with all standard LoRaWAN® gateways.

## Specification

Model		SD-300
Hardware Parameters	LED	1 x LED light (red)
	Buzzer	1
	Button	1 x self-check button
Functional Performance	Effective Range	60m <sup>3</sup>
	Alarm Volume	≥80dB (3 meters directly in front)
	Alarm Delay	<12seconds
	Alarm Method	Audible and visual alarm
Wireless Parameters	Communication Protocol	Standard LoRaWAN <sup>®1.0.3</sup> Protocol
	Operating Frequency Band	EU868 (optional CN470\IN865\US915\AU915\AS923)
	Transmission Power	14dBm (22dBm@Max)
	Ultra-high Reception Sensitivity	-125dBm @SF=12
	Network/Operating Mode	OTAA Class A
Configuration Method	Server	

	Software Features	Smoke/low pressure/high temperature alarm
Physical Properties	Power Supply	1 CR17450 battery 2400mAh
	Battery Life*	>3 years (with 3 times of data reporting/day)
	Operating Temperature	-10°C ~50°C
	Operating Humidity	≤90% (non-condensing)
	Dimensions	102*102*51mm
	Installation Method	Screw fixed installation
	Suggestion	Install indoors, with no obstructions

\*: Test data is derived from laboratory conditions, and there may be deviations in actual use due to objective environmental factors.



**LoRaWAN™**

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