

Shelly Plus Smoke



Device identification

- Device name: **Shelly Plus Smoke**
- Device model: **SNSN-0031Z**
- Device SSID: **ShellyPlusSmoke-XXXXXX**

Short description

Shelly Plus Smoke (**the Device**) is a smart photoelectric smoke alarm, which is effective at detecting slow fires that smolder for hours before bursting into flames.

Sources of these fires may include burning cigarettes left on couches or bedding.

Features

- Battery operated
- LED indication
- Low battery warning
- Alarm pause (Hush mode)
- Test function
- Easy Installation
- DIN EN 14604 certified

Main applications

- Residential

Connectivity

- Wi-Fi

- Bluetooth

Each connectivity option can be enabled or disabled by the user.

User interface

Inputs

- One push button
 - Press and hold for 3 sec to test the Device.
 - Press briefly to silence an alarm.
 - Press briefly 3 times to put the Device in Setup mode for 2 minutes.
 - Press briefly 5 times to factory reset. Device stays in Setup mode for 2 minutes.

Outputs

- LED indication
 - Normal operation: Red light flashes once every 53 seconds.
 - Testing: 3 red light flashes.
 - Alarm: Continuous red light flashes.
 - Malfunction: Red light flashes twice every 53 seconds
 - Hushed alarm: Red light flashes once every 10 seconds.
 - Low battery warning: Red light flashes once every 53 seconds (with sound).
 - Hushed low battery warning: Red light flashes once every 53 seconds (with no sound).
 - Device in Setup mode: Green light flashes quickly.
 - Device in Setup mode for 2 minute: Green light flashes slowly.
- Buzzer
 - Button pressed: 1 short beep.
 - Testing: 3 short beeps.
 - Alarm: Continuous loud beeps.
 - Low battery warning: Short beep once every 53 seconds.

Specifications



Type	Value
Physical	
Size (DxH):	86x31 ±0.5 mm / 3.39x1.22 ±0.02 in
Weight:	95 ±1 g / 3.35 ±0.05 oz
Mounting:	Ceiling
Shell material:	Plastic

Color:	White
Device lifespan:	10 years
Environmental	
Ambient temperature:	-0 °C to 55 °C / 32 °F to 131 °F
Humidity:	30 % to 95 % RH
Electrical	
Power supply voltage AC:	N/A
Power supply voltage DC:	1x 3 V CR123A/CR17335 battery
Battery lifespan:	5 years (with original battery)
Sensors, meters	
Smoke sensor:	Photoelectric
Radio	
RF band:	2400 - 2495 MHz
Max. RF power:	<20 dBm
Wi-Fi protocol:	802.11 b/g/n
Wi-Fi Range:	Up to 30 m / 100 ft indoors and 50 m / 160 ft outdoors (Depends on local conditions)
Bluetooth Protocol:	4.2
Bluetooth Range:	Up to 10 m / 33 ft indoors and 30 m / 100 ft outdoors (Depends on local conditions)
MCU	
CPU:	ESP32-U4WDH
Flash:	4 MB
Firmware capabilities	
Webhooks (URL actions):	10 with 2 URLs per hook
Scripting:	No
MQTT:	Yes
CoAP:	No

Troubleshooting

...