

**2** YEARS WARRANTY

LoRaWAN®

CE FC RoHS IC



WLRC-VAPE

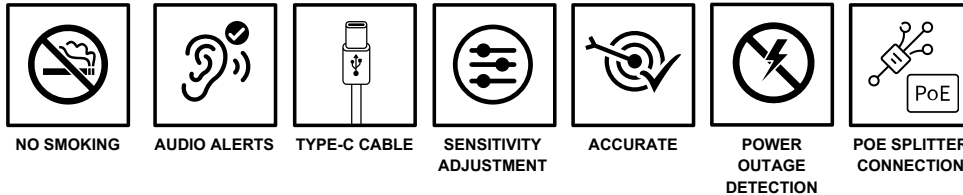
# Wireless Cigarette Smoke, Vaping and Bullying Alarm Sensor



Watch**NET** IoT

## DESCRIPTION

The WLRC-VAPE is an indoor sensor that can detect cigarette smoke, vape, and noise, along with additional features like anti-tamper protection, power outage detection, sensitivity adjustment, customizable audio alerts, and PoE splitter connection. The new WLRC-VAPE makes indoor monitoring easier and more flexible than ever before.



## KEY FEATURES

- Powered by 12vDC 1 amp adapter
- Battery backup: 2\* AAA 1.5V batteries
- Highly accuracy - up to 90% smoke / vape detection (must follow range calculation)
- Adjustable sensitivity for smoke / noise detection
- Custom audio alerts upload able for various detection alerts (Type C cable)
- IP5X weather proof rating (not waterproof)
- LoraWAN Class C wireless communication module

## BENEFITS OF WATCHNET VAPE AND SOUND DETECTOR

- LoraWAN technology for connectivity ( No need to plug in many devices to the corporate network)
- 12V DC powered ( Save money on POE switches and wiring)
- Battery backup up to 2 hours ( 3 X AAA cells required)
- Power Failure Detection
- Tamper Detection
- Easy to relocate within the premises
- Detection of sound ( With adjustable sensitivity )
- Detection of Vape and Smoke. ( Adjustable sensitivity )
- Custom sound file up loadable for vaping, tampering, and sound detection
- Can link to external sounder to generate alarm ( Security office. / Central office )
- Instant PoP up of the location of smoke and sound on a computer monitor
- Mobile APP notification and Alert
- Remote sensitivity adjustment
- Data stored on the cloud for up to one year included

## APPLICATION

- Residential buildings, hotels, schools, hospitals, banks, office buildings, libraries, museums, meeting rooms, airports, and stations
- Toilets, elevators, and storage rooms

## MULTI SENSOR SPECIFICATIONS

ELECTRIC	
Input Power	DC12V/1A (Power adapter)
Power Consumption	Monitoring: <100mA; Sounding alarm: <200mA
Battery Backup	2* 1.5V AAA alkaline batteries
Receiving Current	11mA @3.3V
Transmitting Current	120mA @3.3V

VAPE AND SMOKE DETECTION	
Operating Voltage	5VDC
Operating Current	100mA (typical value)
Comprehensive Response Time	≤10 seconds

VIBRATION DETECTION	
Type	Omnidirectional ball switch
Voltage	<6V
Current	2uA–10mA
Insulation Resistance	>10MΩ
Trigger Rate	100% (amplitude > 1 mm, frequency > 20 Hz)
Trigger Frequency	>50Hz

NOISE DETECTION	
Type	Condenser microphone
Direction	Omnidirectional
Sensitivity	-36 ± 3db
Frequency	20 – 10000Hz
Current Consumption (Max.)	0.5mA
Operating Temperature	-20 – 70 °C
Dimensions	φ9.7 x 6.5 mm

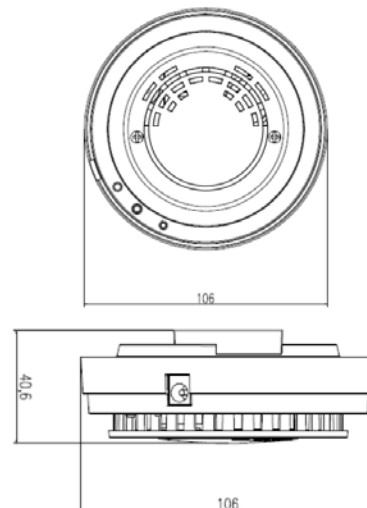
## GENERAL SPECIFICATIONS

TESTING RESULTS OF NOISE SENSOR		
Noise Type	Detectable decibel value (set sensor dB to the lowest)	Detectable decibel value (set sensor dB to the highest)
100Hz	90dB	109dB
1KHz	100dB	>110dB
10KHz	103dB	>110dB
Knocking Sound	73dB	92dB
Music	85dB	>110dB

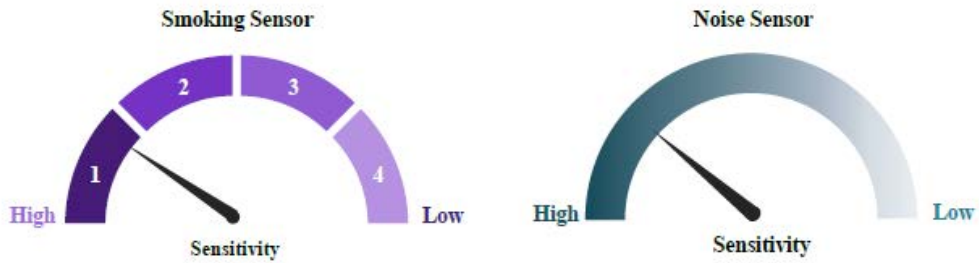
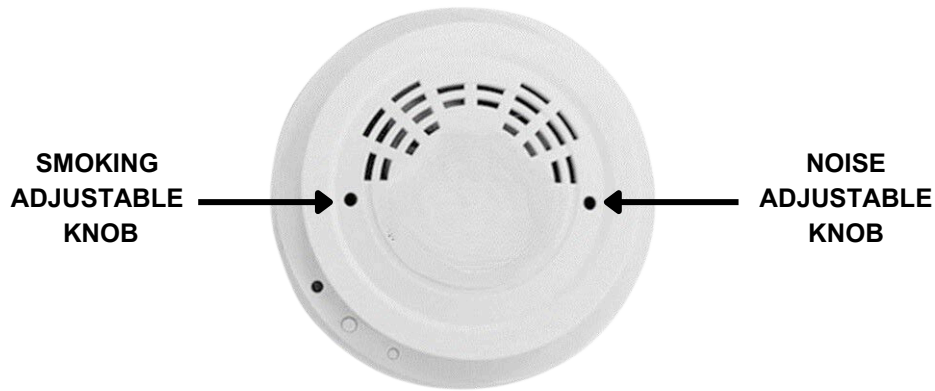
FREQUENCY	
Frequency Range	863MHz-928MHz 470MHz-510MHz
TX Power	US915 20dbm AS923 16dbm AU915 20dbm CN470 19.15dbm EU868 16dbm KR920 14dbm IN865 20dbm
Rx Sensitivity	-136dBm (LoRa, Spreading Factor = 12, Bit Rate = 293bps ) -121dBm (FSK, Frequency deviation = 5kHz, Bit Rate = 1.2kbps)
Antenna Type	Build-in internal antenna
Communication Range	up to 5 km (line of sight) Note: The communication distance depends on the environment
Data Transfer Rate	LoRa: 0.3kbps – 50kbps FSK: 1.2kbps – 300kbps (Note: One modulation is required.)
Modulation	LoRa / FSK
Available Frequency	EU863-870, US902-928, AU915-928, KR920-923, AS923-1, AS923-2, AS923-3, IN865-867, CN470-510

AUDIO ALERTS	
Audio alerts	dB
Smoking detection	53dB
Noise detection	62dB
Anti-tamper detection	62dB

PHYSICAL	
Dimensions	Ø106 mm x 40.6 mm
Length of Adapter Cable	1.5m
Ambient Temperature Range	-10°C to 55°C
Ambient Humidity Range	<90%RH (no condensation)
Mounting	Ceiling Mount (8' - 10')



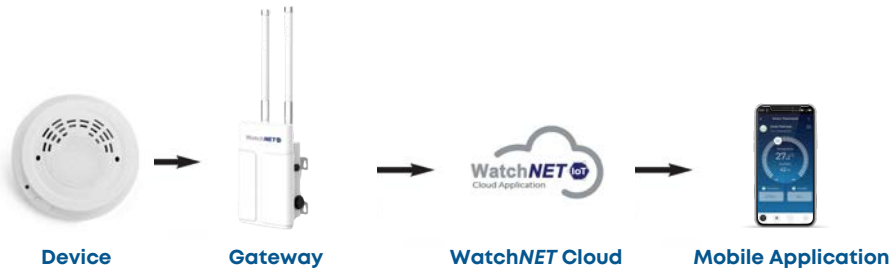
# SENSITIVITY ADJUSTMENT



SENSITIVITY LEVEL - 4 LEVELS (45° FOR ONE LEVEL)	
Level 1 > 2 > 3 > 4	Turn clockwise for lower sensitivity



Step 1. Use a small screwdriver and poke in the hole.  
 Step 2. Slowly turn clockwise to lower the sensitivity.



\*Cloud connectivity with a monthly subscription is needed for all functions to be monitored remotely

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