



Official Website



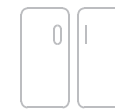
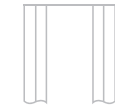
Electronic Manual

China Security & Fire IoT Sensing Co., Ltd.

Add: The 4th Building, WanDaiHeng Technology Industrial Park, Gongchang Road, Guangming District, Shenzhen, China
Tel: +86-755-33265055 Fax: +86-755-33265577 Email: info@ihornmail.com Website: www.ihorn-tech.com



reddot winner 2020



Professional IoT Sensors Designer and Manufacturer

CATALOG



Content

01 Company Introduction

- 1 About Us
- 3 One-stop OEM/ODM Capability
- 5 iHORN&TUYA Smart Home Kits T3

02 Application Scenarios

- 7 Smart Sensing Solution
- 9 Night Light Mode
- 10 Control Mode
- 11 Rain-proof Mode
- 12 Energy-saving Mode
- 13 Fire Prevention Mode
- 14 Explosion-proof Mode
- 15 Constant Temperature Mode
- 16 Home Theatre Mode

03 Product Introduction

- 17 Multi-function Gateway
- 19 Gas Leakage Sensor
- 21 Smoke Sensor
- 23 PIR Motion Sensor
- 25 Door & Window Sensor
- 27 Scenario Button
- 29 Temperature & Humidity Sensor
- 31 Water Sensor
- 33 Wi-Fi Indoor Siren

04 Partners

- 35 Air Quality Detector
- 39 Partners



20+
Types of Sensors

31^{Years}
Technology development

100+
Countries and regions

300+
Patented Inventions

1000^{million+pcs}
Annual Sales

10^{million+}
Home Users

About us

Founded in 1995, China Security & Fire IoT Sensing Co.,Ltd. (iHORN) is a professional security alarm products and solutions provider.

Our business covers three major areas: security alarm products, IoT sensors and access control products, focusing on the developing and manufacturing of various professional security equipment and smart home sensors and access control products, which include: security alarm controllers, security detectors, environmental sensors, perimeter prevention and other security products. We provide specialised industry solutions for smart old-aged support, smart community, smart home, smart finance, smart office and many other fields. With more than 30 agencies in China, our products are exported to more than 100 countries and regions worldwide, providing better products and services to millions of home users.

Pursuing to be one of the best security alarm products and solutions providers in the world, iHORN is and will always be committed to "Make the World Safer, More Comfortable and Harmonious with High Quality Products and Services.

One-stop ODM/OEM Capability



ID design



Structure design



Molding development



Product development



Laboratory verification



Certification support



Production delivery



Quality guarantee

A variety of sensor technologies and types

- Safety sensors include PIR motion sensor, door and window sensor, glass break sensor, vibration sensor, active infrared intrusion sensor, etc.
Environmental sensors include smoke sensor, gas leakage sensor, flammable gas sensor, carbon monoxide sensor, water sensor, temperature and humidity sensor, PM2.5 sensor, etc;
- Wireless solutions: Zigbee3.0, Bluetooth, NB-IoT, Wi-Fi, RF, etc.

High quality and innovative design first

- iHORN has more than 30 years of sensor design experience and more than 300 patented technologies such as Fresnel lens, Intelligent pet-immunity, labyrinth, etc;
- Products have CCC, CE, EN, FCC, RoHS, KC and other domestic and international market authority professional certification.

Product quality management

- Passed the certification of ISO9001, ISO14001 and OHSAS 18001 for the quality management and passed the audit of famous customers such as Huawei, Hikvision, Haier, Ali, Apple, Vanke and so on;
- Every product designed, developed and manufactured by iHORN has been tested and verified by nearly 1,000 times in the initial laboratory of product design, with a wide range of BETA user experience, long-term stability monitoring, and strict quality control plan for production delivery;
- With a sound quality management system, professional precision testing instruments and standardized management laboratory, the production process automation up to 80%, management IT achieves 100%.

Perfect supply chain and manufacturing system

- Integrated layout of R&D, production and marketing to ensure that high-quality products will launch on the market on time;
- The whole process from mold making, injection molding, SMT, plug-in, final assembly to quality control is carried out in the 7200m² production base to ensure rapid commitment to customers and rapid response to market demand;
- The company possesses a variety of production automation equipments, such as advanced high-speed SMT machine, AOI, precision injection molding machine ;
- The company implements the TQC, TPS and TPM trinity lean production model with strict quality management, and is committed to improving efficiency.

Top 1 manufacturer in security industry

- Participate in the development of new national standards for the security alarm industry;
- "Top Ten National Brands of China's security Alarm" for 17 years;
- "New Technology Award" from the American Industrial Security Association;
- "Most influential brand in 2019 intelligent building industry";
- "2019 Forbes China AIOT Top 100 Enterprises";
- "Excellence Solution Award in Huawei Developer Conference".

Provide ODM/OEM service to global famous enterprises

- Cooperated with lots of global famous enterprises such as Huawei, Lenovo, Haier, Hikvision, Vanke, Hengda, TUYA, Tmall genie and so on, so we are experienced in cooperating with large customers and promoting large ODM projects.
- Our famous projects are: Water Cube, National Museum, The United Nations Pavilion at Shanghai Expo, Quanyun Village, Bank of China, China Merchants Securities, Shenzhen airport, Guangzhou TV tower, Starbucks.



reddot winner 2020



iHORN&TUYA Smart Home Kits T3







Night Light Mode

People come with light on, people go with light off.

With the PIR motion sensor at entryway, the light will be automatically on when people get up in the night;
The light will be off after 10 minutes with nobody walking.



PIR Motion Sensor

+



Multi-function Gateway

+



Illumination Sensor

+



Smart Light



Control Mode

Soft night light and doorbell create more possibilities for life.

Multi-function gateway serves as not only the connection center of sensors, but also as a smart doorbell.
With door & window sensor, when the family members come back or friends visit, the multi-function gateway can simultaneously broadcasts as doorbell in “ding-dong”, which can realize the doorbell reminder function.



Door & Window Sensor

+



Multi-function Gateway



Rain-proof Mode

When people outside, the window is automatically closed if raining.

With water sensor on window, it will detect the water dripping when raining outside, then communicate with window pusher to close window, so as to prevent accidents such as furniture soaking and electric appliance leakage.etc.



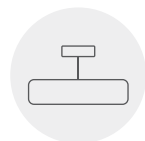
Water Sensor

+



Mufti-function Gateway

+



Window Pusher



Energy-saving Mode

Air purifier will enter into stand by mode when window is opened for ventilation.

Air purifier is automatically turned off when the window is opened for energy saving and environmental protection, and it is automatically turned on when the window is closed for creating fresh air everyday.



Door & Window Sensor

+



Mufti-function Gateway

+



Air Purifier



*Gas leakage sensor needs to be used with a power adapter



Fire Prevention Mode

Fire accidents in home can be remotely informed to user in real time.

Even if nobody at home, smoke sensor will protect your home from fire hazards. Once fire is detected, a local alarm is triggered immediately, and the message is sent remotely to user's mobile phone to reduce losses.



Smoke Sensor

+



App Remote Reminder



Explosion-proof Mode

Intelligently monitor gas leakage and protect your family .

Once gas leakage is detected, gas leakage sensor will immediately give a sound alarm and push the message to user's mobile phone as remote reminder and communicate with exhaust fan and electric gas valve immediately, Safety risk is eliminated in time to protect your home from gas leakage in real time.



Gas Leakage Sensor

+



Exhaust Fan

+



Electric Gas Valve



*Multi-function Hub needs to be used with a power adapter



Constant Temperature Mode

Sense the change of indoor temperature and automatically turn on the air conditioner.

With the PIR motion sensor and temperature & humidity sensor at home, the air conditioner will automatically turn on when someone is sensed and indoor temperature exceeds 28°C .



Temperature & Humidity Sensor

+



PIR Motion Sensor

+



Muhti-function Gateway

+



Air Conditioner Accessory

--->



Air Conditioner On



Home Theatre Mode

Switch scenes with one click, saving time and energy.

When waking up in the morning, just click on scenario button in the bed, then the curtain will be opened slowly , sunlight will walk in through window; Double-click the scenario button, curtain will be closed, and you will feel like in the cinema.



Scenario Button

+



Muhti-function Gateway

+



Smart Curtain

Multi-function Gateway T3

As a control center of the sensor, it reports information to the cloud platform through WiFi, and connects sub-devices through zigbee.

- Support multiple functions: Door bell, night light, sound and light alarm;
- With routing-level SOC solution, it brings more stable Wi-Fi communication;
- With built-in IFTTT structure, it realizes local scenarios and work normally even when the network is disconnected;
- With built-in security guard mode, it supports warning delay and alarm delay;
- Built-in log management system, which can locate problems remotely and facilitate remote maintenance.



Device connection center



64 channel sub-devices



APP remote control



Log management



Specifications:

Working voltage: DC12V, work with power adapter
Working temperature: -10°C ~ +55°C
Working humidity: ≤95%RH
Installation method: Desktop placed
Number of sub-device accesses: 64
Housing material: PC+ABS

OTA upgrade: Support
Night light function: Support, with adjustable brightness
Voice prompts: Support, serve as doorbell, alarm
Button: Yes, switchable night light and alert status
Dimension: 70mm*70 mm*32 mm
Communication method: Zigbee3.0, WiFi

Gas Leakage Sensor LH-801 Series

It detects the concentration of natural gas to determine if there is a gas leakage, and sends an alarm through indicator lights and a high-decibel buzzer.

- With unique air flow window design to avoid direct damage to the core sensor such as oil, smoke, water vapor, etc., to ensure the product continues to work stably;
- With Wi-Fi communication protocol, it can be directly connected to the platform without gateway, and push alerts to the APP in mobile phone in the first time;
- It complies with CCCF fire certification requirements, and special insurance;
- It supports remote mute, local periodic self-test and APP remote self-test to ensure the product effective and reliable.



Natural gas monitoring



High decibel alarm



Remote self-test



CCCF certification



reddot winner 2020



(Bluetooth communication protocol can be customized according to customer needs)



Specifications:

Working voltage: DC12V, with power adapter

Working temperature: -10°C ~ +55°C

Working humidity: ≤95% RH

Installation method: Ceiling mounted with 3M tape or screw

Housing material: PC+ABS

Alarm concentration: 8% LEL

Alarm sound pressure: 70dB@1m

Alarm concentration error: Below 3% LEL

Dimension: 66 mm*66 mm*29 mm

Communication method: NB-IoT, Zigbee3.0, WiFi

Smoke Sensor LH-601 Series

It senses smoke concentrations through a labyrinth, combines temperature changes to determine if there is a fire, and sends an alarm through an indicator light and a high-decibel buzzer.

- With a new generation of high-sensitivity labyrinth to further enhance all-round sensitivity;
- With pyramid embossed design, 16 directions smoke indexes maintains consistency and stability;
- With anti-tamper function, it will alarm when removed;
- With intelligent double-checking algorithm, the smoke concentration exceeds the threshold or the temperature exceeds 65 °C it will alarm;
- With Wi-Fi communication protocol, you can directly connect to the platform without a gateway, and push warning message to the App in the mobile phone in the first time;
- Local regular self-tests to ensure that products are effective and reliable.



(NB-IoT, Bluetooth communication protocol can be customized according to customer needs)



Specifications:

Working voltage: DC3V
Working temperature: -10 °C ~ +55 °C
Working humidity: ≤95%RH
Installation method: Ceiling mounted with 3M tape or screw
Housing material: PC+ABS

Detection range: 50 square meters
Alarm sound pressure: 85dB@3 meters
Battery type: CR123A
Dimension: 70.5mm*70.5mm*29 mm
Communication method: Zigbee3.0, WiFi

PIR Motion Sensor LH-961 Series

It detects people's movement by pyroelectric sensors and new generation Fresnel lens to sense infrared light emitted by people.

- With third generation Fresnel lens, the zone density has increased by 3.4 times;
- With imported quaternary pyroelectric sensor and intelligent temperature compensation algorithm;
- Magnetic suction base design, 1 second installation, detection direction can be adjusted freely;
- With ultra-low power consumption, it works with gateway and supports linkage control and remote reminder.



Monitoring on human body moving



Latest Spherical lens



Quaternary sensor



1 second installation



The direction is adjustable



(Bluetooth communication protocol can be customized according to customer needs)



Specifications:

Working voltage: DC3V
Working temperature: -10 ° C ~ +55 ° C
Working humidity: ≤95%RH
Installation method: Wall or ceiling mounted with 3M tape
Housing material: PC+ABS

Detection distance: 7m
Detection angle: 70°
Battery type: CR2450
Dimension: Φ40 mm*48 mm
Communication method: Zigbee3.0

Door & Window Sensor HO-031 Series

It judges the opening and closing state of the door, window and cabinet by the magnet's suction to the reed switch.

- With anti-tamper function, it will alarm when removed;
- With low-power design, it will remind users to replace batteries at low voltage;
- 3M adhesive paste, easy to install;
- It works with gateway, and supports linkage control and remote reminders.



Monitoring door and window opening and closing



Anti- tamper design



Magnet separation immediately generate signal



Intelligent linkage



reddot winner 2020



(Bluetooth communication protocol can be customized according to customer needs)



Specifications:

Working voltage: DC3V
Working temperature: -10°C ~ +55°C
Working humidity: ≤95%RH
Installation method: 3M tape
Housing material: PC+ABS

Magnetic control distance: ≥20mm
Battery type: CR1632
Main body dimension: 54 mm*22.2 mm*12.5 mm
Secondary body dimension: 33.3 mm*10.2 mm*12.5 mm
Communication method: Zigbee3.0

Scenario Button HO-011 Series

It triggers the corresponding scene through three pressing modes and the linkage mode set by the APP.

- With four cantilever balance structure, it has better pressing experience in each position;
- Support multi functions: doorbell, emergency button, appliances control, customize setting;
- It is ready to use after being placed or pasted without installation tools;
- It can control many devices with one click to implement customize settings.



No installation tool



Linkage control



Customize settings



reddot winner 2020



(Bluetooth communication protocol can be customized according to customer needs)



Specifications:

Working voltage: DC3V
Working temperature: -10°C ~ +55°C
Working humidity: ≤95%RH
Installation method: Wall mounted or desktop
placed with 3M tape

Housing material: PC+ABS
Trigger mode: Click, Double click, Long press
Battery type: CR2032*1pcs
Dimension: 44.5 mm*44.5 mm*13 mm
Communication method: Zigbee3.0

Temperature & Humidity Sensor LH-331 Series

It senses temperature and humidity value of the environment, and shows the value in LCD display.

- Using Swiss Sensirion's latest IoT sensor to accurately monitor changes in ambient temperature and humidity;
- Narrow-edge design with a wider viewing angle LCD display for superior display performance;
- Clearly show the comfort level of the environment through two expressions of smile and cry.



Precision detection



Narrow edge design



Expression display



reddot winner 2020



(Bluetooth communication protocol can be customized according to customer needs)



Specifications:

Working voltage: DC3V

Working temperature: -10°C ~ +55°C

Working humidity: ≤95%RH

Housing material: PC+ABS

Mounting method: Wall mounted or placed with bracket desktop with 3M tape

Battery type: CR2450*1pcs

Dimension: 61.8 mm*60 mm*13.5 mm

Emoticon display: Support, smile and cry

Detection range: Operating temperature: -9.9°C ~ +55°C,
Operating humidity: 0 ~ 99%RH

Communication method: Zigbee3.0

Water Sensor LH-301 Series

It monitors the on-off state between metal probes to determine whether flooding, water leakage or rain has occurred.

- Innovative double-sided design with probes facing down to monitor flooding, probes facing up to monitor rain and water leakage, and detecting faucet leaks or balcony rain;
- With rotary cover design and waterproof rating IP66 to ensure normal use in humid, dusty and other environments;
- Suitable for home, computer room, warehouse and other fields.



Real-time monitoring



Double-sided design



Low-power reminder



Remote reminder



(Bluetooth communication protocol can be customized according to customer needs)



Specifications:

Working voltage: DC3V
Working temperature: -10°C ~ +55°C
Working humidity: ≤95%RH
Housing material: PC+ABS
Mounting method: Wall mounted or ground placed with 3M tape

Waterproof rating: IP66
Detection water level: 0.5mm
Battery type: CR2032*1pcs
Dimension: 45.5 mm*45.5 mm*14.2 mm
Communication method: Zigbee3.0

Wi-Fi Indoor Siren HC-109 Series

The siren is used with the gateway to give a high-decibel alarm sound with a flashing light after receiving an alarm signal.

- Support customize setting for alarm time and volume;
- 105dB alarm high (distance 1m 105dB), medium (distance 1m 85dB), low (distance 1m 75dB);
- Small and stylish appearance, easy to install, can be placed or installed in the entryway, or around lamp in the living room.



Customize setting



105dB



Easy installation



Specifications:

Working voltage: DC5V (AC 220V adapter)
Back up battery: 3.7V Lithium Battery*1pcs (Only WiFi version)
Working temperature: -10°C ~ +55°C
Working humidity: ≤95%RH
Mounting method: Wall mounted

Housing material: ABS
Buzzer level: 105dB@1m
Dimension: Φ80×45mm
Communication method: Zigbee3.0, WiFi

Air Quality Detector LH-338ZB

It senses ambient temperature, humidity, CO₂, PM2.5 and PM10 values.

- Equipped with multiple sensors, it comprehensively monitors values of temperature, humidity, CO₂, PM2.5, PM10, and other hazardous gases;
- Adopt laser & digital composite detection sensors for higher detection accuracy;
- Dual anti-interference design with hardware optimization and algorithm calibration, featuring faster response and more stable operation performance;
- Easy operation,plug-and play,no repeated calibration or complicated configuration.



Specifications:

Working voltage: AC 220V
Installation method: Wall Mounted,with bracket
Function:Temperature, Humidity, CO₂, PM2.5 & PM10
Working Humidity: 0%RH ~ 95%RH
Working Temperature: -10°C ~ +55°C

Resolution: 0.1°C; 1%RH
Measurement deviation: ±1°C; ±10%RH
PM2.5 & PM10 Measuring range: 0 ~ 999µg/m³
CO₂ Measuring range: 400 ~ 9999ppm
Dimension: 86mm*86mm*38mm

Air Quality Detector LH-339ZB

It senses ambient temperature, humidity, CO₂, PM2.5 and PM10 values.

- Equipped with multiple sensors, it comprehensively monitors values of temperature, humidity, CO₂, PM2.5, PM10, and other hazardous gases;
- Adopt laser & digital composite detection sensors for higher detection accuracy;
- Dual anti-interference design with hardware optimization and algorithm calibration, featuring faster response and more stable operation performance;
- Easy operation, plug-and-play, no repeated calibration or complicated configuration.



Specifications:

Working voltage: AC 220V
Installation method: Ceiling Mounted
Function: Temperature, Humidity, CO₂, PM2.5 & PM10
Working Humidity: 0%RH ~ 95%RH
Working Temperature: -10°C ~ +55°C

Resolution: 0.1°C; 1%RH
Measurement deviation: ±1°C; ±10%RH
PM2.5 & PM10 Measuring range: 0 ~ 999µg/m³
CO₂ Measuring range: 400 ~ 9999ppm
Dimension: 102mm*86mm*44mm

Partners



... ..

(No particular order)