# **PRODUCT CATALOG**



- 100+ Wireless IoT Sensors
- Smart Industrial Gateways
- WatchNET IoT Cloud Platform
- User friendly APP



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# Taking all Industries ahead with WATCHNET IoT



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# Index

#### GATEWAY

oRa Gateway	04
oRaWAN Gateway	06

#### SENSORS

Temperature & Humidity Sensors	08
Water Leak Detection Sensors	
Power & Monitoring Sensors	
Smart Thermostat	
Air Quality & CO <sub>2</sub> Sensors	
Vape Sensors	
Activity & Movement Detection Sensors	
Vibration Sensors	
Ultrasonic Level Sensors	
Energy Meter	
I/O Control	
RS485 & Power Adaptors	
Dry Contact & Pulse Counter Interface	
Open-Closed Sensors	
Pressure Pad Activity Sensors	
Security Sensors	
Safety Sensors	
Parking Sensors	
Agriculture Sensors	
Renewable Energy Power Bank	
Generic Sensors and Accessories	
WatchNET IoT Cloud & Software	

#### SOLUTIONS

Wireless Smart Building Automation	51
Smart Hospital Management	52
Internal Air Quality Monitoring	53
Cold Storage Automation & Climate Controlled Storage	54
Industries & Factories	55
Restaurant & Food Industries	56
Smart Parking	57
E-Farming & Greenhouse	58



## LoRa GATEWAY

## WLRI-G11A Integrated Wireless IoT Controller with Antenna

This intelligent smart gateway is the core of the entire wireless smart IoT system. The Multi-technology combination of Cloud, WiFi, LoRa, LAN, and 4G connectivity can be used in a wide variety of applications. External antenna enhances the range enables this product to be used in any network that requires high-security iOS and Android APP are now available to add devices easily to the gateway and create linkage for automation.

- System: MT7620A processor, 32MB Flash, 128MB DDR2, LoRa R100 (SX1276) & 1xUSB2.0
- Built-in Powerful Antenna
- Supported: 2xEthernet, WiFi (2.4 to 2.4835 GHz) & 3G/4G Dongle
- Encrypt-RF<sup>™</sup> Security
- Frequency: 410~525MHz / 862~1020MHz (user defined frequency)
- Connects up to 100 wireless devices (plug & play)
- Button: LoRA, WPS, Reset

# WLRI-G12A

#### Applications:

- Commercial/Residential monitoring
- Condominium and apartment buildings
- Smart logistics
- Golf courses and open field areas
- Multi-site management and notification
- Mini Smart Gateway with Antenna

This intelligent smart gateway is the core of the entire wireless smart IoT system. A small form factor design can be used in a wide variety of applications. External antenna enhances the range enables this product to be used in any network that requires high-security iOS and Android APP are now available to add devices easily to the gateway and create linkage for automation.

- Integrated Wireless Gateway (up to 50 IoT Devices)
- With External Antenna & Secure Connection
- One RJ-45 data interface
- Frequency: 410~525MHz / 862~1020MHz (user defined frequency)
- Modulation LoRa/FSK

Applications:

- Commercial/Residential monitoring
- Franchise stores and multi-location installation



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## WLRI-G11AH

This intelligent smart gateway is the core of the entire wireless smart IoT system, a Multi-technology combination of Cloud, WiFi, LoRa, LAN, and 4G connectivity can be used in a wide variety of applications. External antenna enhances the range, and HTTPS secure connection enables this product to be used in any network that requires high-security iOS and Android APP is now available to add devices easily to the gateway and create linkage for automation.

- System: MT7620A processor, 32MB Flash, 128MB DDR2, LoRa R100 (SX1276) & 1xUSB2.0
- Built-in Powerful Antenna
- Supported: 2xEthernet, WiFi (2.4 to 2.4835 GHz) & 3G/4G Dongle
- Frequency: 410~525MHz / 862~1020MHz (user defined frequency)
- Encrypt-RF<sup>™</sup> Security
- Connects up to 100 wireless devices (plug & play)
- Button: LoRA, WPS, Reset

## WLRI-G12AH

#### Applications:

- Commercial/Residential monitoring
- Condominium and apartment buildings
- Franchise stores and multi-location installation
- Golf courses and open field areas
- Multi-site management and notification

## Mini Smart Gateway with Antenna & HTTPS

This intelligent smart gateway is the core of the entire wireless smart IoT system, a small form factor design can be used in a wide variety of applications. External antenna enhances the range, and HTTPS secure connection enables this product to be used in any network that requires high-security iOS and Android APP are now available to add devices easily to the gateway and create linkage for automation.

- Integrated Wireless Gateway (up to 50 IoT Devices)
- With External Antenna & Secure Connection
- One RJ-45 data interface
- Frequency: 410~525MHz / 862~1020MHz (user defined frequency)
- Modulation LoRa/FSK

Applications:

- Commercial/Residential monitoring
- Franchise stores and multi-location installation



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## LoRaWAN GATEWAY

## WLRI-GS8-M Mini LoRaWAN Gateway

The WLRI-GS8-M is a robust 8-channel indoor LoRaWAN®gateway. Adopting SXI302 LoRa chip and highperformance quad-core CPU, WLRI-GS8-M supports connection with up to 50 nodes. WLRI-GS8-M has line of sight up to 5 km\* and can cover about 1 km in urbanized environment, which is ideally suited to smart office, smart building and many other indoor applications. WLRI-GS8-M supports not only multiple back-haul backups with Ethernet, but also has integrated mainstream network servers (Such as TTI, ChirpStack, etc.) and built-in network server and Watch*NET* IoT Cloud for easy deployment.

- High Performance NXP industrial processor and SX1302 chip
- 8 half/full-duplex channels
- Support Listen Before Talk (LBT) for downlink
- Small in size for easy carrying & deployment
- Built-in network server and MQTT/HTTP/HTTPS API for easily integration
- Applications:
- To use in Smart Metering, Smart Thermostat, Smart Parking Smart Hospital & Agriculture Sensor
- Conntect & monitor all LoRaWAN based IoT devices
- Best fit to control up to 50 devices (indoor application)



## WLRI-G08-M LoRaWAN Gateway

The WLRI-G08-M is a robust 8-channel indoor LoRaWAN®gateway. Adopting SXI302 LoRa chip and high-performance quad-core CPU, WLRI-G08-M supports connection with more than 2000 nodes. WLRI-G08-M has line of sight up to 15 km\* and can cover about 2 km in urbanized environment, which is ideally suited to smart office, smart building and many other indoor applications. WLRI-G08-M supports not only multiple back-haul backups with Ethernet, Wi-Fi and cellular, but also has integrated mainstream network servers (Such as TTI, ChirpStack, etc.) and built-in network server and Watch*NET* IoT Cloud for easy deployment.

- Quad-core industrial processor with better memory
- Equip with SX1302 chip, handling a higher amount of traffic with lower consumption
- 8 half/full-duplex channels
- IP65 enclosure and industrial design for parts of outdoor environment applications like eaves
- Detect and analyze the noise level and provide intuitive diagram for deployment
- Built-in network server and MQTT/HTTP/HTTPS API for easily integration

- To use in Smart Metering, Smart Thermostat, Smart Parking Smart Hospital & Agriculture Sensor
- Connect & monitor all LoRaWAN based IoT devices
- Best fit to control upto 1500 nodes (indoor application)
- Support BACnet/IP to integrate LoRaWAN data to BMS system easily

## WLRI-GPS-M Outdoor LoRaWAN Gateway

The WLRI-GPS-M is a robust 8-channel outdoor LoRaWAN®gateway. Adopting SX1302 LoRa chip and highperformance quad-core CPU, WLRI-GPS-M supports connection with more than 2000 nodes. WLRI-GPS-M has line of sight up to 15 km\* and IP67 waterproof case, which is ideally suited to smart agriculture, smart metering and many other outdoor applications.

- Quad-core industrial processor with better memory
- Equip with SX1302 chip, handling a higher amount of traffic with lower consumption
- 8 half/full-duplex channels
- IP67 waterproof enclosure and industrial design for harsh environment applications
- Detect and analyze the noise level and provide intuitive diagram for deployment
- Built-in network server and MQTT/HTTP/HTTPS API for easily integration

- Applications:
  - To use in Smart Metering, Smart Thermostat, Smart Parking Smart Hospital & Agriculture Sensor
  - Conntect & monitor all LoRa & LoRaWAN based
    IoT devices
  - Best fit to control upto 1500 nodes (Outdoor application)
  - Support BACnet/IP to integrate LoRaWAN data to BMS system easily



# SENSORS

## TEMPERATURE & HUMIDITY SENSOR

## WLRC-S16L

#### Wireless Temperature & Humidity Sensor For Low Temp

This commercial-grade temperature and humidity sensor can be used to monitor the temperature and humidity of a low-temperature environment and notify personnel by SMS, email, or phone call true our hosted web platform if the values go out of the optimal range. This sensor is rugged and IP65 rated for a humid and moist environment. This device has a magnetic back panel that can be mounted on any metal surfaces.

- Temperature Measurement Range: -40°C ~ 55°C (-40°F ~ 131°F)
- Built-in Antenna
- TX Power: 19dBm±1dBm
- Operating Temperature: -40°C ~ 55°C (-40°F ~ 131°F)

- Applications:
- Walk-In Freezers and coolers
- Cold storages
- Factories, Mines
- Data centers
- E-Farming and greenhouse
- Temperature in extreme conditions

## **WLRI-S16**

## Wireless Indoor Temperature & Humidity Sensor

This indoor temperature and humidity sensor can be used to monitor the temperature and humidity of the environment and notify personnel by SMS, email, or phone call if the values go out of the optimal range. This sensor is small and has a sleek design making it look elegant.

- Temperature Measurement Range: -20°C ~ 55°C (-4°F ~ 131°F)
- IP40 rated
- Built-in Antenna
- Operating Temperature: -20°C ~ 55°C (-4°F ~ 131°F)

- Office room temperature & humidity
- Restaurant dining area temperature and humidity
- Indoor stadium temperature & humidity
- Seminar halls temperature & humidity

## **WLRC-S17**

#### Wireless Temperature & Humidity Sensor

This commercial-grade temperature and humidity sensor can be used to monitor the temperature and humidity of a low-temperature environment and notify personnel by SMS, email, or phone call true our hosted web platform if the values go out of the optimal range. This sensor is rugged and IP65 rated for a humid and moist environment. This device has a magnetic back panel that can be mounted on any metal surfaces.

- Temperature Measurement Range: -20°C ~ 55°C (-4°F ~ 131°F)
- Built-in Antenna
- Operating Temperature: -20°C ~ 55°C (-4°F ~ 131°F)

## **WNBI-TH**

#### NB-IoT Indoor Temperature & Humidity Sensor

Watch*NET* NB-IoT sensors transmit the data over cellular network (Narrowband IoT) and do not require any additional devices (router, gateway, etc.). Sensors are also equipped with Bluetooth Low Energy interface, which allows quick and easy configuration with a smartphone. Watch*NET* NB-IoT sensors can be integrated with any cloud platform.

NB-IoT temperature and humidity loggers are used to measure both temperature and humidity in places which require constant monitoring of the prevailing conditions – museums, archives or churches to monitor atmospheric conditions affecting exhibits.

- Temperature Measurement Range: -15° to 70°C (Accuracy up to 0.4°C)
- Humidity range: 0 to 99% RH (Accuracy: 4% in 0 to 80% RH)
- Operating Temperature: -15° to 70°C

Applications:

- Office room temperature & humidity
- Restaurant dining area temperature and humidity
- Indoor stadium temperature & humidity

Applications:

• Cold storages

• Walk-In Freezers and coolers

- Gym temperature & humidity
- Seminar halls temperature & humidity







## WLRC-S18T

#### Wireless 1-Gang Thermocouple Sensor - Type T

This commercial-grade T Type thermocouple sensor can be used to monitor the temperature of the specific substance or environment and notify personnel by SMS, email, or phone call from our hosted web platform if the values go out of the optimal range. The device comes in a sealed box making it moisture-proof and withstands extreme conditions. This device has a magnetic back panel that can be mounted on any metal surfaces.

- Temperature Measurement Range: -40°C ~ 125°C (-40°F ~257°F)
- Built-in Antenna
- Operating Temperature: -20°C ~ 55°C (-4°F ~ 131°F)

Wireless Thermocouple sensor used to detect the temperature of the object and medium which thermocouple is contacted using an external T/K-type thermocouple. Can be used in Factories, Food manufacturing units, Freezers, Boiler and furnace rooms, High heat ovens & Meat fridge... Applications:

- Factories
- Food manufacturing units
- Freezers
- Boiler and furnace rooms
- High heat ovens
- Meat fridge



## WLRC-S18K1

#### Wireless 1-Gang Thermocouple Sensor -Type K

This commercial-grade K Type thermocouple sensor can be used to monitor the temperature of the specific substance or environment and notify personnel by SMS, email, or phone call from our hosted web platform if the values go out of the optimal range. The device comes in a sealed box making it moisture-proof and withstands extreme conditions. This sensor is rugged and IP65 rated for a humid and moist environment. This device has a magnetic back panel that can be mounted on any metal surfaces.

- Temperature Measurement Range: -40°C ~ 375°C (-40°F ~ 707°F)
- Signal Range: Up to 500m/0.310miles
- Thermocouple Wire Length 1m / 39.37"
- Encrypt-RF<sup>™</sup> Security
- Built-in Antenna

- Factories
- Food manufacturing units
- Freezers, Boiler and furnace rooms
- High heat ovens & Meat fridge



## WLRC-S18T2 Wireless 2-Gang Thermocouple Sensor - Type T

This commercial-grade T Type thermocouple sensor can be used to monitor the temperature of the specific substance or environment and notify personnel by SMS, email, or phone call from our hosted web platform if the values go out of the optimal range. The device comes in a sealed box making it moisture-proof and withstands extreme conditions. This sensor is rugged and IP65 rated for a humid and moist

environment. This device has a magnetic back panel that can be mounted on any metal surfaces.

- Temperature Measurement Range: -40°C ~ 125°C (-40°F ~257°F)
- Signal Range: Up to 500m/0.310miles
- Thermocouple Wire Length 1m / 39.37"
- Encrypt-RF<sup>™</sup> Security
- Built-in Antenna

- Applications:
- Factories
- Food manufacturing units
- Freezers, Boiler and furnace rooms
- High heat ovens & Meat fridge



## WLRC-S18K2 Wireless 2-Gang Thermocouple Sensor - Type K

This commercial-grade K Type thermocouple sensor can be used to monitor the temperature of the specific substance or environment and notify personnel by SMS, email, or phone call from our hosted web platform if the values go out of the optimal range. The device comes in a sealed box making it moisture-proof and withstands extreme conditions. This sensor is rugged and IP65 rated for a humid and moist

environment. This device has a magnetic back panel that can be mounted on any metal surfaces.

- Temperature Measurement Range: -40°C ~ 375°C (-40°F ~ 707°F) Applications:
- Signal Range: Up to 500m/0.310miles
- Thermocouple Wire Length 1m / 39.37"
- Encrypt-RF™ Security
- Built-in Antenna



- Food manufacturing units
- Freezers, Boiler and furnace rooms
- High heat ovens & Meat fridge



## WNBC-THE101 NB-IoT Temperature and Humidity Sensor with External Probe

The sensor is equipped with an external, temperature and humidity probe with a length of 1m, allowing measurements in places where the sensor cannot be placed directly. This NB-IoT sensors transmit the data over cellular network (Narrowband IoT) and do not require any additional devices (router, gateway, etc.). Sensors are also equipped with Bluetooth Low Energy interface, which allows quick and easy configuration with a smartphone. Watch*NET* NB-IoT sensors can be integrated with any cloud platform.

- Temperature Measurement Range: -40° to 125°C
- Humidity range: 0 to 99% RH (Accuracy: 3% in 0 to 90% RH)
- Operating Temperature: -15° to 70°C
- IP67 rated enclosure

- Applications:
- Measure Temperature and Humidity
- Cold storage application
- Outdoor temperature in extreme conditions
- E-Farming and greenhouse

## WLRC-PT100-RXX Industrial LoRaWAN Temperature Sensor from -200 °C to +800 °C

The WLRC-PTI00 series is equipped with a remarkably precise PTI00 temperature sensor, which is a platinum resistance temperature detector known for providing highly stable and accurate temperature measurements across a wide range from -200 to 800°C.

- Corrosion resistance cable and multiple probe options
- 3 wire connection for high precision
- Ultra-wide-distance transmission up to line of sight of 5km
- IP67 waterproof enclosure for harsh environment applications
- Built-in 19000 mAh replaceable battery
- Equipped with NFC for easy configuration
- Compliant with standard LoRaWAN gateways and network
  servers

#### Applications:

- Extreme Temperature Measurement
- Chimney and boiler temperature monitoring
- Industrial machine monitoring
- Oven and cooking monitoring
- Liquid or gas monitoring
- Medical or laboratory use
- Precise temperature measurement from -200 °C to +800 °C

ORDERING INFO				
WLRC-PT100-R50	Temperature measurement range: -200 °C to +50 °C	Sensor IP30 rated		
WLRC-PT100-R200	Temperature measurement range: -50 °C to +200 °C	Sensor IP68 rated		
WLRC-PT100-R500	Temperature measurement range: -50 °C to +500 °C	Sensor IP30 rated		
WLRC-PT100-R800	Temperature measurement range: -50 °C to +800 °C	Sensor IP30 rated		

🛞 NB-IoT

# WLRC-S612N Dual PT1000 Temperature Sensor - Needle Probe (-70°~200°C)

WLRC-S612N is a device used to detect object temperature. It can connect PT1000 platinum thermistor and join the gateway to display the collected data in the gateway. It adopts SX1276 wireless communication module.

- One-gang PTI000 platinum thermal resistance detection
- Temperature range of -70 °C to 200°C Working temperature of rubber silicone wire: -50 °C to 200 °C
- 2 section of ER14505 lithium battery in parallel (AA size 3.6V / section)
- The base is attached with a magnet that can be attached to a ferromagnetic material object
- Compatible with LoRaWAN Class A
- IP rating: Main body IP65/ IP67 (optional), sensor IP67

Applications:

- Temperature measuring device
- Thermodynamic system device
- Food industry



## WLRC-S61N

## PTI000 Temperature Sensor - Needle Probe (-70°~200°C)

WLRC-S61N is a device used to detect object temperature. It can connect PTI000 platinum thermistor and join the gateway to display the collected data in the gateway. It adopts SX1276 wireless communication module.

- One-gang PTI000 platinum thermal resistance detection
- Temperature range of -70 ℃ to 200℃ Working temperature of rubber silicone wire: -50 ℃ to 200 ℃
- 2 section of ER14505 lithium battery in parallel (AA size 3.6V / section)
- The base is attached with a magnet that can be attached to a ferromagnetic material object
- Compatible with LoRaWAN Class A
- IP rating: Main body IP65/ IP67 (optional), sensor IP67

## WLRC-S62N

## PTI000 Temperature Sensor - Needle Probe (-40°~375°C)

Applications:

Food industry

WLRC-S62N is a device used to detect object temperature. It can connect PTI000 platinum thermistor and join the gateway to display the collected data in the gateway. It adopts SX1276 wireless communication module.

- One-gang PTI000 platinum thermal resistance detection
- Temperature range of -40 ℃ to 375℃
- 2 section of ER14505 lithium battery in parallel (AA size 3.6V / section)
- The base is attached with a magnet that can be attached to a ferromagnetic material object
- Compatible with LoRaWAN Class A
- IP rating: Main body IP65/ IP67 (optional), sensor IP50

Applications:

Temperature measuring device

Temperature measuring device

• Thermodynamic system device

- Thermodynamic system device
- Food industry





## WLRC-D15

#### Wireless Water Leak Sensor

# WATER LEAK **DETECTION SENSOR**

WLRC-D15 is a wireless water/flood detection device with long-range communication capabilities. Two stainless steel electrodes quickly detect water presence on contact. Combined with a water shutter valve WLRI-V11 can stop serious water damage to the property. Built-in smart linkage function on gateway enables automated shut off in online or offline mode.

- 2 sections of ER14505 lithium batteries (3.6V, 2400mAh/section) in parallel
- Standby Current: 24uA
- Receiving Current: 11mA @3.3V
- Transmitting Current: 120mA/3.3V

- Applications:
- Any location where water presence or leak to be detected
- Industrial or Commercial use
- Residential water leak detection
- Automatic operation shut off valve to prevent damage
- Instant notification

Wireless Water Leak Detection sensor detects the leak with utmost precision & locates the exact place. Will send an alarm message to the smart IoT gateway. Used commonly in Residential/Commercial Data Centers/Server Rooms, Air conditioning water leak detection. Storage Tank Water Presence & Dry Condition Detection

#### **WLRC-D122** Wireless 2-Gang Water Leak Detector

This commercial-grade water leak sensor can detect water presence immediately and notify personnel by SMS, Email, or phone call f rom our hosted web platform. The anti-corrosive dual-pin sensor can detect water levels in condensation pans for air conditioning units. This sensor also can detect the water level is low in some holding tanks. Combined with WLRI-V11 automatic valve closure device water damage can be prevented immediately. Detects water presence or non-presence (wet/dry) in any condition

- 2 sections of ER14505 lithium batteries (3.6V, 2400mAh / section)
- Sleeping Mode: 23uA
- Receiving Current: 11mA @3.3V
- Transmitting Current: 120mA/3.3V

- Residential / Commercial water leak detection
- Data Centers / IT Server rooms
- Air conditioning water leak detection
- Storage tank water presence detection
- Dry condition detection







## WLRC-D12

This commercial-grade water leak sensor can detect water presence immediately and notify personnel by SMS, Email, or phone call from our hosted web platform. The anti-corrosive dual-pin sensor can detect water levels in condensation pans for air conditioning units. This sensor also can detect the water level is low in some holding tanks. Combined with WLRI-VII automatic valve closure device water damage can be prevented immediately. Detects water presence or non-presence (wet/dry) in any condition.

- Super Long Range Signal Penetration
- Water Line Max. Working Temperature: 80°C / 176°F
- Water Line Diameter: 2mm / 0.078"
- Water Line Length: 1000mm / 39.37"
- Water Line Length Limit: 300m / 984ft

Applications:

- Residential / Commercial water leak detection
- Data Centers / IT Server rooms
- Air conditioning water leak detection
- Storage tank water presence detection
- Dry condition detection



## WLRC-D14

#### Wireless Water Leak Detector with Rope Sensor

Accurate water leak detection with immediate notification. Supervised online/offline status and battery monitoring ensure product readiness when it occurs. Water detection rope can be extended up to 300m (1000ft) for larger room monitoring.

- Super Long Range Signal Penetration
- Water Line Max. Working Temperature: 75°C / 167°F
- Water Line Diameter: 5.5mm / 0.22"
- Leaking Line Length Limit: 300m/984ft
- Core Resistance: Less than 50hm/100m
- Rope Length: 3m / 10ft (each gang)

- Utility room floor monitoring
- Laundry and kitchen floor monitoring
- Pump rooms and boiler room floor
- Elevator pit/sump pump water presence
- Air handling units (AHU) & compressor room floor
- Any location where water leak or presence to be detected



## WLRC-D142

Accurate water leak detection with immediate notification. Supervised online/offline status and battery monitoring ensure product readiness when it occurs. Water detection rope can be extended up to 300m (1000ft) for larger room monitoring.

- Super Long Range Signal Penetration
- Water Line Max. Working Temperature: 75°C / 167°F
- Water Line Diameter: 5.5mm / 0.22"
- Leaking Line Length Limit: 300m/984ft
- Core Resistance: Less than 50hm/100m
- Rope Length: 3m / 10ft (each gang)

Applications:

- Utility room floor monitoring
- Laundry and kitchen floor monitoring
- Pump rooms and boiler room floor
- Elevator pit/sump pump water presence
- Air handling units (AHU) & compressor room floor
- Any location where water leak or presence to be detected



## WLRI-S46

#### Wireless Water Leak Detection and Location Sensor

WLRI-S46 is a water leak detector sensor that can pinpoint the location where the water touched the rope. Mostly when installed under elevated flooring and building risers it's useful to know the location of water and take action to limit the damage. The location data is sent to the gateway and alerts are sent.

- Position Water Leak Detector 100m (max)
- Leak Detection Error Range: 1% ± 0.5 meters of sensor cable length
- Working Temp: -20°C ~ 55°C/-4°F ~ 131°F
- Storage Temp: -40°C ~ 5°C/-40°F ~ 185°F
- Working Power (max): 40mA(RX), 80mA (TX)
- Power Supply Adapter: DC powered (12V/1A)

- Server rooms
- Under raised flooring
- Tunnels
- Apartment water pipe raisers



Wireless 1 & 3 phase current detector is used to detect electrical input current respectively. Powered by a b attery and receives AC current through a current transformer. Adopts open-loop current transformer, which can be easily connected to the device to be tested

# **POWER & METERING**

## WLRC-M1150

### Wireless 1 - Phase Current Meter with 1 x 150A Clamp-On

## **WLRC-M175**



#### Wireless 1 - Phase Current Meter with 1 x 75A Clamp-On



This commercial-grade current meter can be used to monitor the current usage of any equipment whether it is single-phase or three - phase. The device comes in a sealed box making it moisture-proof and withstands extreme conditions. This device can be installed on any metal surface as it comes with a built-in magnet. The core of this sensor that goes around the live wires can be opened and are easy to install on an existing setup. Current monitors can help in predictive maintenance of any equipment that may overdraw or work using a high current than specified by the manufacturer.

- 2 x 3.6v ER14505 AA lithium batteries (3.6v 2400mah / section)
- Sleeping Current: 25uA & Wake up Current: 7mA
- Current: Receiving (11mA @3.3V) / Transmitting (127mA @3.3V)
- Super long signal penetration with Encrypted-RF™ Security
- Working Temperature: -20°C ~ 55°C / -4°F ~ 131°F
- Built-in antenna
- Communication Range: Up to 500m/0.310miles

- Compressor / Generator current monitoring
- Equipment working or not working status
- Overload current monitoring
- Predictive maintenance of machinery
- Smart energy management

## **WLRC-M375**

### Wireless 3-Phase Current Meter with 3 x 75A Clamp-On

This commercial-grade current meter can be used to monitor the current usage of any equipment whether it is a single-phase or three-phase. The device comes in a sealed box making it moisture-proof and withstands extreme conditions. This device can be installed on any metal surface as it comes with a built-in magnet. The core of this sensor that goes around the live wires can be opened and are easy to install on an existing setup. Current monitors can help in predictive maintenance of any equipment that may overdraw or work using a high current than specified by the manufacturer.

- Measurement range for 75A CT is 100mA ~ 75A
- Rated Input Current: 30A, 50Hz~60Hz
- Rated Output Current: 10mA & Saturation Current: ≥75A
- Ratio: 3000:1 with Load Resistance of 10  $\!\Omega$
- Temperature: -20°C~55°C (-4°F~131°F)
- Encrypt-RF<sup>™</sup> Security

#### Applications:

- Compressor / Generator current monitoring
- Equipment working or not working status
- Overload current monitoring
- Predictive maintenance of machinery
- Smart energy management



# WLRC-M3150 Wireless 3-Phase Current Meter with 3 x 150A Clamp-On

This commercial-grade current meter can be used to monitor the current usage of any equipment whether it is single-phase or three-phase. The device comes in a sealed box making it moisture-proof and withstands extreme conditions. This device can be installed on any metal surface as it comes with a built-in magnet. The core of this sensor that goes around the live wires can be opened and are easy to install on an existing setup. Current monitors can help in predictive maintenance of any equipment that may overdraw or work using a high current than specified by the manufacturer.

- Measurement range for 150A CT is 1A ~ 150A
- Wireless Three Phase Current Meter with 3 x 150A Clamp-On
- 2 x 3.6v ER14505 AA lithium batteries
- Sleeping Current: 25uA
- Wake up Current: 7mA
- Current: Receiving (11mA @3.3V) / Transmitting (127mA @3.3V)

- Compressor / Generator current
  monitoring
- Equipment working or not working status
- Overload current monitoring
- Predictive maintenance of machinery
- Smart energy management



## WLRC-M1250

#### Wireless 1-Phase Current Meter with 1 x 250A Clamp-On

This commercial-grade current meter can be used to monitor the current usage of any equipment whether it is single-phase or three-phase. The device comes in a sealed box making it moisture-proof and withstands extreme conditions. This device can be installed on any metal surface as it comes with a built-in magnet. The core of this sensor that goes around the live wires can be opened and are easy to install on an existing setup. Current monitors can help in predictive maintenance of any equipment that may overdraw or work using a high current than specified by the manufacturer.

- Measurement range for 250A CT is 1A ~ 250A
- Wireless One Phase Current Meter with 1 x 250A Clamp-On
- 2 x 3.6v ER14505 AA lithium batteries
- Sleeping Current: 25uA
- Wake up Current: 7mA
- Current Receiving (11mA @3.3V) / Transmitting (127mA @3.3V)

- Applications:
- Compressor / Generator current monitoring
- Equipment working or not working status
- Overload current monitoring
- Predictive maintenance of machinery
- Smart energy management



## WLRC-M3250 Wireless 3-Phase Current Meter with 3 x 250A Clamp-On

This commercial-grade current meter can be used to monitor the current usage of any equipment whether it is single-phase or three-phase. The device comes in a sealed box making it moisture-proof and withstands extreme conditions. This device can be installed on any metal surface as it comes with a built-in magnet. The core of this sensor that goes around the live wires can be opened and are easy to install on an existing setup. Current monitors can help in predictive maintenance of any equipment that may overdraw or work using a high current than specified by the manufacturer.

- Measurement range for 250A CT is 1A ~ 250A
- Wireless Three Phase Current Meter with 3 x 250A Clamp-On
- 2 x 3.6v ER14505 AA lithium batteries
- Sleeping Current: 25uA
- Wake up Current: 7mA
- Current Receiving (11mA @3.3V) / Transmitting (127mA @3.3V)

- Compressor / Generator current
  monitoring
- Equipment working or not working status
- Overload current monitoring
- Predictive maintenance of machinery
- Smart energy management



## WLRC-M11

This interface completes a 4~20mA current loop. The sensor measures a process variable, the transmitter translates that measurement into a current signal, the receiver displays or performs an action with that signal. It can be used to read field instrumentation sensors such as pressure sensors, temperature sensors, level or flow sensors, pH sensors, and gas sensors implement a 4~20mA connection to their outputs. Also, there are several actuators, such as valves, which can be controlled via a 4~20mA loop.

- 2 x 3.6v ER14505 AA lithium batteries
- Sleeping Mode: 21uA
- Wake up Mode: 6.3mA@3.3V
- Current Receiving (11mA @3.3V) / Transmitting (120mA @3.3V)
- Applications:
- Sensing
- Measuring equipment
- Instrumentation
- Convert analog to the digital readout



# WLRC-M112 Wireless 2-input mA Current Meter Interface, 4~20mA

This interface completes a 4~20mA current loop. The sensor measures a process variable, the transmitter translates that measurement into a current signal, the receiver displays or performs an action with that signal. It can be used to read field instrumentation sensors such as pressure sensors, temperature sensors, level or flow sensors, pH sensors, and gas sensors implement a 4~20mA connection to their outputs. Also, there are several actuators, such as valves, which can be controlled via a 4~20mA loop.

- 2 x 3.6v ER14505 AA lithium batteries
- Sleeping Mode: 21uA
- Wake up Mode: 6.3mA@3.3V
- Current Receiving (11mA @3.3V) / Transmitting (120mA @3.3V)
- Applications:
- Sensing
- Measuring equipment
- Instrumentation
- Convert analog to the digital readout

## TWH-101-W

#### Smart Heating Thermostat - WiFi

TPH-101-W is smart heating thermostat has luxurious look to fit any decor and is available in white or black. Colorful TFT touch screen and programmable schedule combined with smart functions can lower the energy cost by up to 20%. Built-in WiFi communication for standalone or commercial centrally controlled operation. Suitable for commercial, residential, hotels, hospitals, schools and lite industrial applications.

- 24VAC power supply
- RF Wireless: 915mHZ
- 3.5" tft color touch screen with lockout option
- WiFi enabled / Modbus TCP(optional)
- Four or six events per day
- Temperature control range 5°c 45°c (with C/F temperature display)
- History data tracking diagram(Up to 4 weeks)
- Defrost protection
- Work mode: Holiday, Home/Away, Boost(Hold)
- Temperature & Humidity sensor

#### Applications:

- To use in Heating Systems (electric heaters, gas furnaces, & radiant heating)
- One heating zone is largely controlled by TWH-101-W
- Energy efficiency and precise temperature management
- Pair with TP-110-RTI to control underfloor heating system

# olack.

**SMART THERMOSTAT** 



## **TPH-101-W**

## Smart Heating Thermostat - LoRaWAN

TPH-101-W is smart heating thermostat to control low voltage heating system. Colorful TFT touch screen and programmable schedule combined with smart functions can lower the energy cost by up to 20%. Built-in LoRaWAN communication for standalone or commercial centrally controlled operation. It is paired with a receiver TP-110-RTI to control the heating system, such as underfloor heating

- 24VAC power supply & RF Wireless: 915mHZ
- 3.5" tft color touch screen with lockout option
- LoRaWAN
- Four or six events per day, 7 day, weekday/weekend, 24hours schedule, 12/24 hours
- Automatically adjusts to daylight saving time
- Temperature control range 5°c 45°c (with C/F temperature display)
- History data tracking diagram(Up to 4 weeks)
- Defrost protection
- Work mode: Holiday, Home/Away, Boost(Hold)

- To use in Heating Systems (electric heaters, gas furnaces, & radiant heating)
- One heating zone is largely controlled by TPH-101-W
- Energy efficiency and precise temperature management
- Pair with TP-110-RTI to control underfloor heating system



TP-110-RTI is a single-channel output RF receiver. It communicates with our Heating or HVAC thermostats to control Boiler, Underfloor heating, Valve, and other heating system.

- AC24 power supply
- RF Wireless: 915mHz
- Single channel output
- Boiler/ radiator/electric heating

#### Applications:

- TP-110-RTI to control underfloor heating system
- Wireless Receiver for TPH & TWH-101 Heating Thermostats

TECHNICAL DATA			
Purpose Of Control	Underfloor heating system		
Supply Voltage	24vac VAC 50/60 HZ		
Communications	Wireless RF 915mHz		
Output Relay	5A		
Operating Temperature	1° c- 85° C		
Dimensions (W/H/D)	96 * 86 * 32.5 (mm)		
Weight	≤200 g		
Enclosure Rating	lp 20		
Enclosure Material	PC + ABS plastic		



## **TW-101-W** Smart Thermostat - WiFi

TW-101-W is smart thermostat has luxurious look to fit any decor and is available in white or black. Colorful TFT touch screen and programmable schedule combined with smart functions can lower the energy cost by up to 20%. Built-in WiFi communication for standalone or commercial centrally controlled operation. Suitable for commercial, residential, hotels, hospitals, schools and lite industrial applications.

- 3.5" TFT touch color display, 480 x 320 resolution
- WiFi embedded, 2.4GHZ
- Geo-fencing
- With humidity sensor (+/- 3%)
- With ambient light sensor
- Programmable mode, 5/2, 7 days, 24 hours

- Commercial, residential, hotels, hospitals, schools and lite
- industrial applications.
- Control upto 3 heating stages & 2 cooling stages Gas / Electric / Heat Pump / Fossil Fuel / Conventional system
- Helps in frost protection & filter reminder



## **TP-101-W**

#### Smart Thermostat - Pro

TP-101-W is smart thermostat has luxurious look to fit any decor and is available in white or black. Colorful TFT touch screen and programmable schedule combined with smart functions can lower the energy cost by up to 20%. Built-in LoRa/WiFi communication for standalone or commercial centrally controlled operation. Suitable for commercial, residential, hotels, hospitals, schools and lite industrial applications.

- 3.5" TFT touch color display, 480 x 320 resolution
- WiFi embedded, 2.4GHZ
- LoRaWAN, 915mHZ, "C" class (Region specific)
- LoRaWAN uplink default 10 mins, this time could be set by LoRaWAN downlink command
- Geo-fencing
- With humidity sensor (+/- 3%)
- With ambient light sensor
- Programmable mode, 5/2, 7 days, 24 hours

Applications:

- Commercial, residential, hotels, hospitals, schools and lite
- industrial applications.
- Control upto 3 heating stages & 2 cooling stages Gas / Electric / Heat Pump / Fossil Fuel / Conventional system
- Helps in frost protection & filter reminder

## TW-201

## DX-type Smart Thermostat

TW-201 is a smart thermostat specially designed for DX-type systems. Colorful TFT touch screen and programmable schedule combined with smart functions can lower the energy cost by up to 20%. Built-in WiFi communication for standalone or commercial centrally controlled operation. Suitable for commercial, residential, hotels, hospitals, schools and lite industrial applications.

- 3.5" TFT touch color display, 480 x 320 resolution
- WiFi embedded, 2.4GHZ
- With humidity sensor (+/- 3%)
- Data history graph
- Programmable mode, 5/2, 7 days, 24 hours

- Commercial, residential, hotels, hospitals, schools and lite industrial applications.
- Designed for DX-type system
- Control 3-speed fan, 2-stage compressor, 1-stage heating
- Helps in frost protection & filter reminder





## AS-WLT100-W AeroSENSE - IAQ Sensor - WiFi

AeroSENSE Pro multi-sensor device measures indoor climate accurately with an easy to read display. The device is equipped with high quality sensors (Swedish & Swiss made) and measures four levels of dust concentration, total volatile organic compounds (TVOC), carbon dioxide (CO<sub>2</sub>), temperature and relative humidity. The Air Quality Indicator shows instant air quality conditions. A healthy indoor climate contributes to the productivity of people in the room. Clean air also ensures better concentration and reduces fatigue complaints.

- Display: 3.5" TFT touchscreen color display, 480\*320 resolution
- Power supply: DC5V (default), DC12V,AC24V, AC220v
- Network: Wi-Fi connective (2.4G)
- USB data export(.txt)
- Data record interval time- 1,5,15,30,60 mins
- Multi language
- Screen lock with password
- C/F temperature display
- History data 7000 records

Applications:

- Measures air quality such as Particle PM1, PM2.5, PM4, PM10, TVOC
- Measures the humidity, temperature,
- To use in schools, childcare centers, offices and homes
- Measures 4 levels of Dust
  Concentration & Aerosol
- Carbon Dioxide (CO<sub>2</sub>) & Total Volatile Organic Compounds (TVOC)

## AS-LTIOOPRO-W AeroSENSE - IAQ Sensor - Pro

AeroSENSE Pro multi-sensor device measures indoor climate accurately with an easy to read display. The device is equipped with high quality sensors (Swedish & Swiss made) and measures four levels of dust concentration, total volatile organic compounds (TVOC), carbon dioxide (CO<sub>2</sub>), temperature and relative humidity. The traffic light display shows instant air quality conditions. A healthy indoor climate contributes to the productivity of people in the room. Clean air also ensures better concentration and reduces fatigue complaints.

- Display: 3.5" TFT touchscreen color display, 480\*320 resolution
- Power supply: DC5V, DC12V,AC24V, AC220v
- Network: Wi-Fi connective (2.4G), LoRaWAN
- USB data export( .txt)
- Data record interval time- 1,5,15,30,60 mins
- Multi language
- Screen lock with password
- C/F temperature display
- History data 7000 records

Applications:

- Measures air quality such as Particle PM1, PM2.5, PM4, PM10, TVOC
- Measures the humidity, temperature,
- To use in schools, childcare centers, offices and homes
- Measures 4 levels of Dust Concentration & Aerosol
- Carbon Dioxide (CO<sub>2</sub>) & Total Volatile Organic Compounds (TVOC)







# AIR QUALITY & CO<sub>2</sub>

# **VAPE SENSORS**

WT-15391 – 3D Sense Pro Vape Detection – New Launch in Canada! Protect your indoor air quality and promote healthier living with real-time vaping alerts via SMS text, email, app push notifications, and unlimited recipients with an active subscription.

- Operating Temperature: 32°F 104°F (0°C 40°C)
- Operating Humidity: 0 to 90% Relative Humidity (noncondensing)
- Alert Options: Particulate Anomalies: Vaping, Smoking, other high particulate occurrences Other Air Quality: VOCs, Temp., Relative Humidity, PM1.0, PM2.5, PM4 and PM10 Tampering (sensor detects device movement) (siren and electronic alert) Keywords: "Help," "Stop," "Shooter" Noise Anomalies: Sudden loud noise
- Alert Methods: SMS Text Message, Email, App Push Notifications

Applications:

- Picks up on vaping, smoking, poor IAQ, and other anomalies
- Tested to detect vaping emitted from Juul, Puff Bar, SMOK, Vuse, and many other vape and THC emitting vape devices (dab pens)
- Keywords: "Help," "Stop," "Shooter"
- Noise Anomalies: Sudden loud noise



# WT-152921 3D Sense Lite Vape Detection

WT-15391 – 3D Sense Pro Vape Detection – New Launch in Canada! Protect your indoor air quality and promote healthier living with real-time vaping alerts via SMS text, email, app push notifications, and unlimited recipients with an active subscription.

- Operating Temperature: 32°F 104°F (0°C 40°C)
- Operating Humidity: 0 to 90% Relative Humidity (non-condensing)
- Alert Options: Particulate Anomalies: Vaping, Smoking, other high particulate occurrences
- Alert Methods: SMS Text Message, Email, App Push Notifications

- Picks up on vaping, smoking, poor IAQ, and other anomalies
- Tested to detect vaping emitted from Juul, Puff Bar, SMOK, Vuse, and many other vape and THC emitting vape devices (dab pens)



## ACTIVITY & MOVEMENT DETECTION SENSORS

## WLRC-S31

### Wireless Accelerometer & Surface Temperature Sensor

WLRC-S31 can detect the movement or vibration of any attached device, along with the surface temperature. This product is great to monitor pumps, motors, and industrial / commercial equipment for stress and working over the recommended temperature. It can prevent equipment failure that requires a 24-hour operation.

- NTC Temperature Range: -40°C ~ 125°C (-40°F ~ 257°F)
- 2x 3.6V ER14505 AA lithium batteries
- Encrypt-RF<sup>™</sup> Security
- Built-in Antenna

- Applications:
- Industrial equipment monitoring
- Surface temperature measurement
- Movement and vibration sensing

Wireless vibration sensor equipped with an external rolling ball type to detect motion events such as vibration and shock. Used to detect Motor failure detection (loss of vibration), Glass break detection, Security applications, General vibration & shock sensing

## WLRC-S33

#### Wireless Activity Detection Sensor

The WLRC-S33 sensor detects the sudden movement or vibration of the device and sends an alarm signal to the gateway for processing. This device can be used for monitoring unattended devices or equipment for sudden movement or vibration.

- Detects sudden movement or vibration of the device
- Signal Range: Up to 500m/0.310miles
- TX Power: 19dBm±1dBm & Rx Sensitivity: -136dBm (LoRa) & -121dBm (FSK)
- Encrypt-RF<sup>™</sup> Security
- Built-in Antenna

- Monitor unattended traps
- Sudden force or glass break detection
- Outdoor parked vehicle monitoring
- Other movements and vibrations



# **VIBRATION SENSOR**

## WLRC-S19R

## Wireless Vibration Sensor, Rolling Ball Type

Pick up small vibrations or movements with this rolling ball type vibration detector. It can be used as a glass break sensor, material or surface vibration, intruder prevention, etc. This device has a magnetic back panel that can be mounted on any metal surfaces. Immediate alerts can be sent by SMS, email, or phone call from our hosted web platform.

- Pick up small vibrations or movements with this rolling ball
- Signal Range: Up to 500m/0.310miles
- 2x 3.6V ER14505 AA lithium batteries (3.6V2400mah/section)
- Encrypt-RF<sup>™</sup> Security
- Built-in Antenna

Applications:

- Vibration count per day
- Monitor machinery to know whether it is On/Off
- Equipment cycle per period
- Excessive vibrations
- Sudden impact from a force



## WLRC-S19R2 Wireless 2-Gang Vibration Sensor, Rolling Ball Type

Pick up small vibrations or movements with this rolling ball type vibration detector. It can be used as a glass break sensor, material or surface vibration, intruder prevention, etc. This device has a magnetic back panel that can be mounted on any metal surfaces. Immediate alerts can be sent by SMS, email or phone call from our hosted web platform.

- Pick up small vibrations or movements with this rolling ball
- Signal Range: Up to 500m/0.310miles
- 2x 3.6V ER14505 AA lithium batteries (3.6V2400mah/section)
- Encrypt-RF™ Security
- Built-in Antenna

- Vibration count per day
- Monitor machinery to know whether it is On/Off
- Equipment cycle per period
- Excessive vibrations
- Sudden impact from a force



## WLRC-S19S

#### Vibration Sensor, Spring Type

This commercial-grade vibration detection sensor can be used to detect vibrations on mechanical equipment and on any surfaces to monitor vibrations. The device is small and has a sleek design making it easy to install and handle. This device can be used to monitor machinery; vibrations for too long, vibration count per day, and no vibration at all. This device helps in predictive maintenance by analyzing the efficiency of the machine on a daily basis.

- To detect & monitors vibration on mechanical equipment & on any surface
- Signal Range: Up to 500m/0.310miles
- 2x 3.6V ER14505 AA lithium batteries (3.6V2400mah/section)
- Encrypt-RF<sup>™</sup> Security
- Built-in Antenna

Applications:

- Vibration count per day
- Monitor machinery to know whether it is On/Off
- Equipment cycle per period
- Excessive vibrations
- Sudden impact from a force

## WLRC-S19S2 Vibration 2-Gang Sensor, Spring Type

This commercial-grade vibration detection sensor can be used to detect vibrations on mechanical equipment and on any surfaces to monitor vibrations. The device is small and has a sleek design making it easy to install and handle. This device can be used to monitor machinery; vibrations for too long, vibration count per day, and no vibration at all. This device helps in predictive maintenance by analyzing the efficiency of the machine on a daily basis.

- To detect & monitors vibration on mechanical equipment & on any surface
- Signal Range: Up to 500m/0.310miles
- 2x 3.6V ER14505 AA lithium batteries (3.6V2400mah/section)
- Improved interference immunity
- Built-in Antenna

- Vibration count per day
- Monitor machinery to know whether it is On/Off
- Equipment cycle per period
- Excessive vibrations
- Sudden impact from a force





## **WNBI-AQ100** NB-IoT Indoor Air Quality, Temperature and Humidity sensor

Wireless temperature, humidity and air quality logger is designed to monitor indoor climate conditions. The device measures air quality based on the concentration of volatile organic compounds (VOC) and calculates IAQ (Indoor Air Quality) representing air quality in the room based on the Bosch patented algorithm. Volatile organic compounds are substances derived from many indoor products, including from paints, cleaning agents, solvents, alcohol or glue.

- Air quality: 0-500 IAQ
- Temperature: -15 to +70°C, accuracy up to 0.4°C
- Humidity: 0 to 99% RH, accuracy 4% in the range of 0 to 80%
- Measurement period: 1 minute 10 days (configurable by the user)
- Memory size 40,000 measurements

Applications:

- Measure indoor TVOC, Temperature, and Humidity
- To use in indoor facilities, such as schools, restaurant, childcare centers, offices and homes



## WLRI-S24M Wireless PM2.5 / Temperature / Humidity Sensor M

This air quality sensor can pick up airborne particles in the air such as dust up to PM2.5. It also has a built-in temperature and humidity sensor. Ideal for any environment air quality monitoring is required.

- Particle measurement range: 0.3 ~ 1.0; 1.0 ~ 2.5um
- Particle count efficiency: 50%@0.3um, 98%@≥0.5um
- Temperature measurement range: -20°C ~ 55°C (-40°F ~ 131°F)

- Laboratories
- Gym and public areas
- Restaurants
- Office and other Workplace
- Factory & manufacturing



## WLRC-IDCO

WLRC-IDCO is an Investigative Device used for monitoring presences of carbon monoxide at any enclosed area. This device can detect carbon monoxide and send data to our cloud platform for investigative purposes and notification.

- Standby Current: 18uA/3VDC
- Operating Current: 70uA/3VDC
- Current While alarming: 20mA/3VDC
- Communication Range: Up to 400m/0,25miles
- Built-in antenna

#### Applications:

• Carbon Monoxide Detection device for Commercial building, offices, stair walls, server rooms, school and hotel applications



\*WLRC-IDCO device is not to substitute for smoke detection mandated by local and government regulations/building code \*WLRC-IDCO is to be used as an investigative device for data collection purposes ONLY \*WLRC-IDCO is not a life safety device

## WLRI-S41

## Wireless CO<sub>2</sub> / Temperature / Humidity Sensor

This wireless  $CO_2$  (carbon dioxide) detector makes it ideal to install in public places, greenhouses, gyms, etc. A proper  $CO_2$  measuring device is integral to a good facility safety system, as it gives a real-time  $CO_2$  measure and alarm to protect your employees from dangerous gases in the work area.

- Accuracy: +/- (100ppm+6%{Value})
- Range: 0-5000ppm
- Response Time: T<90s & Output: PWM UART
- Power Supply: 12V/1A\* DC
- Built-in antenna

- Greenhouses
- Gym and public areas
- Workplace
- Factory & manufacturing



## WLRI-S43 Wireless Liquid Level Sensor

Monitor non-inflammable liquid. Simple and easy to install a wireless sensor that works with long-range communication to our gateway and platform for immediate notifications of liquid level status.

- Liquid Level Sensor Length: 3m/9.8ft, 5m/16.4ft, 10m/32.8ft...etc.
- Liquid Level Sensor Accuracy: 0.25%FS (Typical)
- Spread Technique: LoRa/FSK

Applications:

- Monitor and track water tank levels
- Monitor no inflammable liquids
- Track non-corrosive fluid levels
- Monitor sump pit water level

## ULTRASONIC LEVEL SENSORS



## WLRC-S43U Wireless Bottom-installed Ultrasonic Liquid Level Sensor

WLRC-S43U is a new innovative Ultrasonic liquid level meter, which is mounted at the bottom of the tank without any need for alteration or drilling holes for installation. This is an ideal sensor for measuring pure liquids, such as clean water, oil, diesel, gasoline, and liquefied gas, etc. in small, medium, and large capacity tanks. Long-range wireless communication makes this device easy to install outdoors and make operational at record time.

- Applications:
- Tank levels, Diesel fuel gauging
- Liquid assets inventory
- High or low-level alarms
- Process batch monitoring
- Input to telemetry systems
- Irrigation control

## WLRC-S43T

## Wireless Top Mount Ultrasonic Liquid Level Sensor

This wireless communication device uses ultrasonic to measure distance. The ultrasonic propagation medium of WLRC-S43T ultrasonic sensor is air, so the measured object can be any liquid or solid with a certain flat. The device can be used for liquid level detection, material level detection, etc. It adopts a wireless communication method that conforms to the LoRa protocol standard.

• Wakeup current range: 0.8mA-20mA

• Operating Current: Less than 50mA

• Temperature Accuracy: ±2-3°C (±35.6~37.4°F),

-40°C~125°C (-40°F~257°F)(NTC thermistor)

- Detection Angle: About 15°
- Wake-up Current: 0.8mA 8mA@3.3V
- Blind Distance: 0-0.25m / 0-9.84"
- Wireless communication through LoRa
- Temperature Range: -15°C ~ 55°C (-5°F ~ 131°F)

- Water level of water tank monitoring
- Water level of water well monitoring
- Horizontal distance detecting
- The level of material detecting





# **ENERGY METER**

## WLRC-E3000 RS485 Smart Energy Meter

WLRC-E3000 is a smart meter designed for power supply system, industrial and mining enterprises and utilities to calculate the electricity consumption and manage the electric demand. It features the high precision, small size and simple installation.

It integrates the measurement of all electrical parameters with the comprehensive electricity metering and management provides various data on previous 12 months, checks the 31st harmonic content and the total harmonic content, realizes the remote communication and the remote control with switching input and relay output and boasts the alarm output. It is fitted with RS485 communication port and adapted to MODBUS-RTU.

- Measurement of kWh Active kWh & Reactive kWh (positive & A negatives)
- Measurement of electrical parameters: U, I, P, Q, S, PF, HZ
- Communication: Infrared, RS485, Modbus-RTU
- Temperature Measurement: Support 3 outlay NTC temperature

- Applications:
- Smart Energy Management
- Energy Consumption monitoring in residential, commercial & industrial sector
- Multi-function energy metering



## WLRE-GTW

#### RS485 to WiFi Gateway for WLRC-E3000

The WLRE-GTW can automatically access the WIFI hotspot according to the hotspot name and password, realize the transparent transmission of 485 and WIFI data, and also use our cloud platform protocol.

- Supports: 2.4G frequency band
- WiFi rate: 115200bps
- RS485 Communication
- Operating temperature: -10℃~55℃
- Storage temperature: -40°C~85°C

#### Applications:

• Facilitate communication with WLRC-E3000 to allow data collection and connectivity



# I/O CONTROL

## WLRC-IO3

#### Wireless Automation Controller

WLRC-IO3 is a Wireless Multifunctional Controller that can be used as an Input/Output device or AC/DC Motor controller. Watch*NET* IoT platform can link IoT events from other devices to activate relays on this controller. Three inputs and three independent relay outputs can perform simple automation or scheduled tasks with monitoring and control.

- Input Power: DC 12V / 1A
- Working Current: 20mA(12V)
- Relay Load Characteristics: AC250V/5A, DC30V/5A
- Relay Power Consumption: 300mW
- Built-in antenna

Applications:

- Monitor doors or other dry contact inputs
- Independent input/output control (Light switch on/off, alarm trigger, etc.)
- For greenhouse/farm automation
- Remote on/off control



## WLRI-V11

#### Wireless LoRa Valve Keeper

This automatic wireless valve closure can be used to shut off water/gas in event of an emergency. It can be activated from a smart phone or can be paired with a smart gateway and water leak/gas detectors. A robust and high-power gearbox gives up to 7.5kgf (Output force) to close any stubborn valve.

- Applicable pipe diameter is 3/4 inch
- DC Power Supply, DC12V
- Working Temperature: -20°C~55°C (-4°F~131°F)

- Water main shut off upon leak detection
- Automatic irrigation by timer
- Smart irrigation with a soil moisture sensor
- Emergency gas shut off
- Works online/offline with smart gateway



# **RS485 & POWER ADAPTOR**

## WLRC-A11

#### Wireless RS485 Adapter

WLRC-All is RS485 to Wireless Converter that can communicate to devices that use RS485 communication protocol. This adaptor uses 12V DC power. Cloud-based control & notifications from legacy devices are not possible.

- Power Supply: DC 12V adapter
- Working Current: 35mA (when there is no external sensor)
- TX Power: 19dBm±1dBm
- Data Transfer Rate: 0.3kbps ~ 50kbps
- Built-in antenna

Applications:

- Monitor legacy controllers and devices that communicates on RS485 bus
- Controls DVRs/PTZ Cameras on alarm
- Can do basic automation control with selected controllers



# WLRI-P11M Wireless Plug-and-Play Power Outlet with Consumption Meter

This power plug can support up to 15Amps powering most of the residential/commercial power equipment. Ideal to monitor power for machines that need to be ON all the time. Monitor power consumption, voltage, Amps, power failure, and the number of times used per day to any connected equipment. Great for extending life cycle by identifying frequently used equipment such as in the gym.

- Wireless plug-and-play Power Outlet with consumption meter A
- Typical Operating Current: 15mA/220VAC/1W
- Motor load: 1.5HP/240VAC
- Resistive load: 16A/250VAC; P:4000VA
- Relay Switch Life Times: 100,000 times

- Gym equipment used cycles per day
- Medical storage refrigerators
- Food storage freezers
- Aquariums and reptile cages
- Remote On/Off connected devices



## DRY CONTACT & PULSE COUNTER INTERFACE

## **WLRC-I14**

## Wireless 1-Input Dry Contact Interface

# WLRC-I142



### Wireless 2-Input Dry Contact Interface



The WLRC-I14/WLRC-I142 can be connected to external dry contact devices, such as various switches, buttons, relays and reed switch outputs. It can detect the closure or disconnection signal of the dry contacts. Based on SX1276 wireless communication module, wireless communication is secured with proprietary encryption.

- Low Voltage Threshold: 3.2V
- Transmitting Current (max): 120mA@3.3V
- Receiving current (max): 11mA @3.3V
- Environment Temperature Range: -20°C ~ 55°C (-40°F ~ 131°F)
- Storage Temperature: -40°C ~ 85°C / -40°F ~ 185°F
- Wire maximum temperature: 80°C / 176°F
- Encrypt-RF<sup>™</sup> Security
- Built-in Antenna & Communication Range Up to 500m/0.310miles

\* Actual transmission distance depends on the environment

- Tamper Switches
- Barn door access monitoring
- Freezer / cooler door access
- Door open too long (to determine if they are not closed all the way)
- Convenience store cooler doors (to determine if they are not closed all the way)
- Forklift seat switches
- Dry contact sensor
- Control relay / alarms

## **WLRC-I12**

#### Wireless 0-10V ADC Sampling Interface

The device is designed for a variety of resistive bridge-sensing applications like pressure, temperature, and level-sensing applications. It can also support other applications, weight scale and force-sensing applications that use strain gauge load cells, and other general resistive bridge signal-conditioning applications.

- Low Voltage Threshold: 3.2V
- Sleeping Mode: 22uA
- Wake up Mode: 6.3mA@3.3V
- Transmitting current: (max)120mA@3.3V
- Receiving current: (max)11mA @3.3V

Applications:

- Battery Health
- Voltage Measurement
- Transducer Measurement
- Machinery & Electrical Motors
- Weight Scale and Force-sensing
- Pressure, Temperature, Level-sensing Applications

## **WLRC-I122**

## Wireless 2-Input 0-10V ADC Sampling Interface

The device is designed for a variety of resistive bridge -sensing applications like pressure, temperature, and level-sensing applications. It can also support other applications, weight scale, and force-sensing applications that use strain gauge load cells, and other general resistive bridge signal-conditioning applications.

- Sleeping Mode: 27uA
- Wake up Mode: 6.3mA@3.3V
- Transmitting current: max 120mA@3.3V
- Receiving current: max 11mA @3.3V

- Applications:
- Battery Health
- Voltage Measurement
- Transducer Measurement
- Machinery & Electrical Motors
- Weight Scale & Force-sensing
- Pressure, Temperature, Level-sensing Application

# WLRC-I122C Wireless Multi-Sensor Interface for 0-24V ADC, Dry Contact and 4-20mA

WLRC-II22C is a great interface device to monitor machinery, battery chargers, gas sensors and water flow sensors. It can transmit alarm status of the device using dry contact and analog output reading of the equipment. Easy to read and customize application on WatchNET IoT platform for alarms and notifications.

- Working Temperature : -20°C ~ 55°C (-4°F ~ 131°F)
- Signal Range: Up to 500m/0.310miles
- 2x 3.6V ER14505 AA lithium batteries (3.6V2400mah/section)
- Encrypt-RF™ Security
- Built-in Antenna

- Applications:
- Sensor
- Measuring equipment
- Instrumentation
- Alarm status
- Equipment interface







## WLRC-M11

#### Wireless 1-input mA Current Meter Interface, 4~20mA

## **WLRC-M112**

### Wireless 2-input mA Current Meter Interface, 4~20mA





This interface completes a 4~20mA current loop. The sensor measures a process variable, the transmitter translates that measurement into a current signal, the receiver displays or performs an action with that signal. It can be used to read field instrumentation sensors such as pressure sensors, temperature sensors, level or flow sensors, pH sensors, and gas sensors implement a 4~20mA connection to their outputs. Also, there are several actuators, such as valves, which can be controlled via a 4~20mA loop.

- Input Power: 2x 3.6V ER14505 AA lithium batteries (3.6V2400mah/section)
- Sleeping Mode: 21uA
- Wake up Mode: 6.3mA@3.3V
- Transmitting current (max): 120mA@3.3V
- Receiving current (max): 11mA @3.3V
- TX Power: 19dBm±1dBm
- Built-in antenna
- Environment Temperature Range:-20°C ~ 55°C / -4°F ~ 131°F

- Sensing
- Measuring equipment
- Instrumentation
- Convert analog to the digital readout

## OPEN-CLOSED SENSOR

## WLRC-D17

#### Wireless 1-Gang Hall Type Open/Close Detection Sensor

## **WLRC-D172**







WLRC-D17/WLRC-D172 Wireless Door/Window Sensor can be easily installed to monitor windows, doors, and any other openings and closings, that have to be monitored. Built-in attached contact and magnet can be mounted on door openings. The long-distance wireless range makes this device ideal to monitor underground parking lot exit doors.

- 2 x 3.6V ER14505 AA lithium batteries (3.6V2400mah/section)
- Receiving Current (max): 11mA @3.3V
- Transmitting Current (max): 120mA/3.3V
- Sleeping Mode: Model WLRC-D17 23uA & Model WLRC-D172 26uA
- Wake up Mode: Model WLRC-D17 0.8mA-8mA@3.3V & Model WLRC-D172 - 6.3mA@3.3V
- Low Voltage Threshold: 3.2V
- Data Transfer Rate: 0.3kbps ~ 0kbps(LoRa)

- Commercial doors and window monitoring
- Residential doors and window monitoring
- Freezers and coolers open/close monitoring and count
- Alarms and Alerts when the door is open/closed in undesignated time
- Data Centers / IT Server rooms
- Access Control Systems
- Underground exit doors
- Storage room monitoring
- Cargo bay door monitoring

## WLRC-081561596 Bed Pad Sensor

## PRESSURE PAD ACTIVITY SENSOR

These sensor pads are designed to monitor patients prone to restlessness or falling out of bed. Once the patient's weight is removed from the pad, the alarm will go off and alert the caregiver. The alarm can be resets manually or automatically ones attention has been is given by the caregiver. All activities Ex: time of alarm, time of acknowledgment will be recorded to improve response time quality.

- Vinyl Cover Protects Bed/Chair Pads
- Dimension L:112mm x W:65mm x H:32mm
- Environment Temperature: -20°C ~ 55°C / -4°F ~ 131°F

\* WLRC-081561596 will work only with WLRC-I14 (at an additional cost)

#### Applications:

- Track patient behavior & chair occupancy time to analyze daily activities
- Elder care monitoring
- Alerts Caregivers to Patient Falls
- Immediate audible/visual alert on nursing station/mobile phones



### WLRC-081561539 Chair Pad Sensor

These sensor pads are designed to monitor patients prone to restlessness or falling out of bed. Once the patient's weight is removed from the pad, the alarm will go off and alert the caregiver. The alarm can be resets manually or automatically ones attention has been is given by the caregiver. All activities Ex: time of alarm, time of acknowledgment will be recorded to improve response time quality.

- Vinyl Cover Protects Bed/Chair Pads
- Dimension L:112mm x W:65mm x H:32mm
- Environment Temperature: -20°C ~ 55°C / -4°F ~ 131°F

\* WLRC-081561596 will work only with WLRC-I14 (at an additional cost)

- Track patient behavior & chair occupancy time to analyze daily activities
- Elder care monitoring
- Alerts Caregivers to Patient Falls
- Immediate audible/visual alert on nursing station/mobile phones



## **SECURITY SENSORS**

WatchNET

## WLRI-S25 Wireless Occupancy/Light/Temperature Sensor

WLRI-S25 occupancy sensor is a three-in-one device that can give information about the presence, temperature, and light level of any room. These three factors combined can ideally monitor any room or area for the time occupied. It can be used as a security device to detect intrusion of all premises.

- 3-in-Idevice that can give information about the Presence, Temperature & Light level of any room
- Sensing Angle: Horizontal 110°, vertical 60° & Sensing Distance 2m to 12m / 6.56ft to 39.37ft

Applications:

- Area access monitoring
- Detect occupancy in a room
- Building automation
- Condition monitoring (light)
- Security/Intrusion



#### Wireless IR Blaster

WLRI-IRBI IR blaster can be used for IR signal learning from any remote control and reproduce the same signal to control equipment remotely. It can be used for controlling split AC units that only have built-in temperature control.

- Power Supply: DC12V
- Temp: -20°C~ 55°C (-4°F ~ 131°F)
- Working Current: 50mA / 12V / 0.6W
- Infrared Frequency: 38 KHz
- Infrared Transmission Range: 32m/104.99ft
- Built-in antenna

- Remote controlling of air condition
- TV, HiFi Audio, etc
- Any device that is IR control



The WLRI-EBI wireless push button can be used with our smart gateway to signal emergency or service requests in a facility. LoRa technology gives an exceptional wireless range for many other applications. This button can also be linked with our annunciator/siren to activate audio/visual signal.

- Working Voltage: 2.4V ~ 3.0V
- Standby Current: 13uA/3.0V
- Receiving Current: (max)11mA@3.0V
- Transmitting Current: (max)120mA/3.0V
- Low Voltage Threshold: 2.4V
- Data Transfer Rate: 0.3kbps ~ 50kbps
- Built-in antenna

- Applications:
- Emergency alert
- Push button for service
- Any other application requires push button

### WLRI-EB2

#### Wireless Emergency Button

A supervised wireless push-button that is reliable and has long battery life. It can be used for various functions that need notification instantly. Using our smart controller other devices can be linked such a siren or control devices.

- Input Power: 2xAAA batteries
- Temp: -20°C ~ 55°C (-4°F ~ 131°F)
- Operating Voltage: 2.1V-3V
- Standby Current: 14uA
- Transmitting Current (max): 120mA/3.0
- Receiving Current (max): 11mA/3.0V
- Communication Range : Up to 500m/0.310miles (depends on environment)

Applications:

- Emergency restroom help button
- Emergency button in parking garage
- School/Campus safety
- Construction sites and factories

WatchNET®

Watchnet

This wireless annunciator can be used with any Watch*NET* IoT devices to generate sirens which can be triggered by a condition/event of another device. This device has high powered speakers and LEDs to seek the attention of personnel around. Multiple alert tones can be assigned to different alarm conditions.

- Input Power: DC 9V ~ 24V
- Working Current: (max)250mA (DC 12V)
- Standby Current: (max)30mA (DC 12V)
- Built-in antenna

- Applications:
- Condominium concierge
- Shopping mall security desks
- Elderly care
- Disabled washroom alert
- Water leak sirens
- Smoke alarm sirens
- Activity detection alarms
- Emergency button sirens



### WLRI-3DPC 3D ToF People Counting Sensor

The 3D ToF People Counting Sensor is GDPR-compliant. By applying 3D ToF technology, it only gets 3D depth information and transmits them without involving personally identifiable information, 100% guaranteeing privacy protection at source.

- Max Tx Power 16 dBm (868 MHz)/22 dBm (915 MHz)/19 dBm (470 MHz)
- ToF FoV 92.5° Horizontal, 67° Vertical
- Detection Range 0.5 to 3m
- Installation Height  $\leq$  3m
- Accuracy >99.5%
- Advanced Setting Entrance and exit area customization

- Offices and meeting rooms occupancy monitoring
- Customer flow analysis on stores and shopping malls
- Passenger flow analysis on buses or subways



## WLRC-IDS1 Wireless Smoke Detector

WLRC-IDSI is an Investigative Device used for monitoring presences of smoke at enclosed area. This device can detect smoke using photo electric technology and sent data to our cloud platform for investigative purpose and notification.

Applications:

- Standby Current: 12uA@3VDC
- Alarming dBm: 85dBm@3m
- Current While alarming: 580mA/3VDC
- Alarming concentration: 0.65 ~ 15.5%FT
- Signal Range: Up to 400m/0,25miles
- Built-in antenna

\*WLRC-IDSI device is not to substitute for smoke detection mandated by local and government regulations/building code \*WLRC-IDSI is to be used as an investigative device for data collection purposes ONLY \*WLRC-IDSI is not a life safety device

## WLRC-PS1

### Smart Parking Management Sensor

## PARKING SENSOR

WLRC-PSI is the first IoT smart parking sensor with a dual technology detection system, to avoid false sensing. A rugged industrial composite material can withstand up to 5000lb weight. A combination of geomagnetic and redundant sensors simultaneously detects the presence or the absence of vehicles to give an accurate result every time. Long-range wireless communication makes it easier for indoor or outdoor parking management.

This smart parking vehicle detection sensor can be used to detect the presence or absence of parking

- Input Power: 2x 3.6V ER18505 (3.6V 4000mAh/section) in parallel
- Sleeping Mode: 80 uA
- Wake up Mode: 6.3mA@3.3V

vehicles in the parking space.

- Receiving Current: max 11mA @3.3V
- Transmitting Current: max 120mA/3.3V
- Built-in antenna

Applications:

Commercial building, offices, stair walls, server

rooms, school and hotel applications

- Intelligent parking detection
- Parking lot management
- Parking data analysis
- Remote notification/automation









Watch*NET* IoT has a wide range of agricultural sensors for indoor greenhouses or outdoor farms. We provide smart farming IoT solutions for indoor greenhouses or outdoor farms. Our farming setups are easy to install IP 65 rated long-range LoRa wireless sensors make it very economical and cost-effective.

## AGRICULTURE SENSORS

Smart data from farms are now possible without high installation costs associated with extensive labor charges and expensive equipment needed.

## WLRC-S22

#### Wireless Soil Moisture Sensor

This soil moisture sensor measures the quantity of water contained in a material, such as soil on a volumetric or gravimetric basis. To obtain an accurate measurement these oil-water sensors provide promising new opportunities for automating greenhouse irrigation according to plant needs.

- Water Content Detection Accuracy: ±3%VWC
- Moisture Content Resolution: 0.1% VWC in mineral soil, 0.25% VWC in growth medium
- Moisture Content Detection: Range 0-100%VWC
- Built-in antenna

Applications:

- Soil moisture content detection
- e-farming
- Indoor / Outdoor greenhouses
- Home / Office plant monitoring

## WLRI-S23

#### Wireless pH Sensor

This specialized water pH/temperature sensor is factory calibrated and ready to use out of the box. Ideal to use indoor facilities. 12VDC power required for operation. Wireless long-range signal makes it ideal for a pool house, farmhouse, etc.

- PH Sensor: Alarm Sound Intensity (85dBm at 3m / 9.84ft)
- Operating Temperature Range: 0° ~ 65°C / 32° ~ 149°F
- Range: 0~14PH, Accuracy: ±0.01PH & Working Pressure: <0.2MPa</li>
- TX Power: 19dBm±1dBm
- Built-in antenna
- Spread Technique LoRa/FSK

- Swimming pool pH level & temperature
- Agricultural water pH level
- Commercial laundry
- Aquariums pH/temperature
- Drinking water

### WLRC-S34

#### Wireless Soil Moisture / Temperature / Electrical Conductivity Sensor

Indoor / Outdoor precision farming

• High yield Greenhouses

Environmental monitoring

Sensor for monitoring soil moisture levels and soil temperature values in precision farming and environmental monitoring applications. It provides the data required for cost-efficient irrigation, crop yield optimization, and protection of natural resources. Designed to work in any type of soil. It has low current consumption and a 5TE interface.

- Soil Temperature Measurement Accuracy: ± 1°C@25°C / ± 30.2°F@77°F
- Soil Moisture Content Resolution: 0.08% VWC within 0-50% VWC range
- Soil Moisture Content Accuracy: ± 3% VWC (typical)
- Protection Class: Main Part IP65
- Environment Temperature Range: -20°C ~ 55°C (-4°F ~ 131°F)

## WLRC-S20

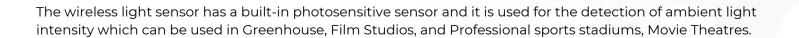
#### Wireless Light Sensor

This commercial-grade indoor/outdoor wireless light sensor can detect the intensity of light in LuX of the environment. This can be used in many industries where the intensity of the light matters, like Greenhouse, Film Studios, and Professional sports stadiums. This device can be used with WLRI-P11M smart power outlet, to create an automated lighting system. Light sensors can be used as a part of automation for grow-up operations where light intensity is vital.

- To detect ambient light intensity detection
- Illuminance Detection Range: 0.01 lux to 157K lux
- LoRaWAN™ Class A compatible
- Illuminance Accuracy: ±20% (in sunlight)
- Built-in antenna

#### Applications:

- Greenhouse/E-Farming
- Film Studio
- Movie Theatres
- Professional sports stadiums
- Simple automation







## WPBI-SE100 Sustainable energy for IoT devices

WPBI-SE100 is a renewable power bank with a 55mm x 100mm dye sensitized module, two 250F lithium capacitors, the IP65 of water resistance rating, and an LED light to indicate the power of the device The WPBI-SE100 can be charged through indoor light resources and supply power to IoT devices with low power consumption. With little power remaining, you can connect the WPBI-SE100 in parallel or adjust the bracket to face the module directly to the light resource to get sufficient power. WPBI-SE100, the renewable power bank, could help you enhance the company's reputation, get government subsidies for renewable power, and raise the possibilities of winning a government bid.

- Power Watch*NET*'s and third party devices thorough Type C and (DC port)
- Reduce costs to buy or change a new battery
- Lithium ion capacitor (LiC) for safer uses and longer lifespan
- Adjustable bracket to change the angle of module
- Connect in parallel to support high power consuming devices or receive frequent report
- Renewable Energy Power Bank. Never change battery again for IoT devices.

- Applications:
- Keep devices running without relying on traditional power sources
- Provide continuous power to IoT devices with low power consumption
- Air quality sensors can benefit with the use of renewable power source
- Reduce long-term cost on battery replacement of the IoT devices





# GENERIC SENSORS & ACCESSORIES

## WLR-BAT-36V 3.6V Industrial Battery

High capacity industrial grade AA battery for commercial applications.

- Nominal Capacity: 2400mAh
- Constant Discharge Current: max 100mA
- Pulse Discharge Current: max 200mA

- Applications:
- Intelligent instrument and meter
- Memory and standby power, Alarms and security devices
- IoT and wireless transmitters
- Military devices



### RENEWABLE ENERGY POWER BANK

## WLRC-RF

Applications:

and IoT devices

Detect LoRa signal strength

WLRC-RF is a portable device to detect WatchNET LoRa device's network signal. It scans the LoRa signal strength between the IoT device and the WLRI-G11/G12 gateway and display the detected data through LCD screen.

- Detect LoRa signal strength of a gateway coverage
- Display the detected data on the LCD display screen
- Compatible with LoRaWAN Class A
- Configuring parameters via third-party software platforms & reading the data and setting alarms via SMS text and email (optional)
- Applicable to the 3rd-party platforms: Actility/ ThingPark, TTN, MyDevices/Cayenne

## WLRI-POE5 POE SPLITTER Micro USB 5V

WLRI-POE5 PoE Splitter has RJ45 port and DC port with Micro USB. It is an economical and practical PoE remote power equipment base on IEEE802.3af standard. It can separate the power and data via cable transmission. Proper matching use with PoE switch or PSE injector which meet standard IEEE802.3af. Provides power and data at the same time for the terminal device does not support PoE. PoE splitter, output voltage of 5V use with the power supply equipment. It helps to expand wireless city, security monitoring and other PoE practical place, and is not restricted by layout of power line.

- Supports international standard IEEE802.3 af(12.5W)
- POE port Support 10/100Mdata transmission
- PD support 37V-57V voltage transmission
- Automatically detects power supply from PSE power supply module
- 5V/2.4A power output using Micro USB, the Micro usb port only for power-charging
- Supports the isolation circuit protection, can effectively protect electrical equipment
- Supports the short circuit, over voltage protection
- 1500V high voltage isolation

Applications:

 It is an economical and practical PoE remote power equipment base on IEEE802.3af standard

• To determine the best place to install the gateway

- It can separate the power and data via cable transmission
- It helps to expand wireless city, security monitoring and other PoE practical place, and is not restricted by layout of power line



())))



### WLRC-POE12

WLRI-POE12 PoE Splitter is compliant with IEEE802.3af standard, which can split data and power from PoE signal. It perfect matches camera enclosure and can split Ethernet and power from ethernet cable for these device which can not support PoE. It can work with standard PoE Switch or PSE device, compatible with mid-span and end-span, output 12V/1A power by DC terminal. It is widely used in security surveillance and network project.

- 1\*100 Mbps PoE powered port
- 1\* DC2.1 powered male
- 1\* RJ45 port
- Support IEEE 802.3af standard
- Transmission distance up to 100 meters/328ft
- Plug and play without management

Applications:

- It perfect matches camera enclosure and can split Ethernet and power from ethernet cable for these device which can not support PoE
- It can work with standard PoE Switch or PSE device, compatible with mid-span and end-span, output 12V/1A power by DC terminal
- It is widely used in security surveillance and network project



## **USB-4G-DONGLE** 4G/LTE Dongle for WLRI-G11A

This 4G dongle is a high-speed 4G LTE dongle that provides reliable internet connection for the gateways. Insert a sim card with data plan to the dongle and have access internet access whenever and wherever your devices are located.

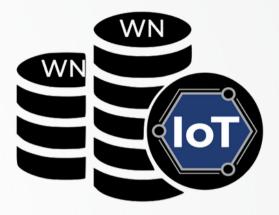
- Connects the device to the Internet via cellular
  network
- Suitable where Internet access is unavailable thro' Ethernet / Wi-Fi

- Provide internet connectivity to the gateway where Wi-Fi and Ethernet are not accessible.
- Plug in to your computer's USB port to provide internet connectivity



## WATCHNET IOT CLOUD - SOFTWARE SUBSCRIPTION

ORDERING INFO	
WN-SPD-10	Cloud Sensor Management Software Subscription (10s pack)
WN-SPD-15	Cloud Sensor Management Software Subscription (15s pack)
WN-SPD-25	Cloud Sensor Management Software Subscription (25s pack)
WN-SPD-50	Cloud Sensor Management Software Subscription (50s pack)
WN-SPD-100	Cloud Sensor Management Software Subscription (100s pack)
WN-SPD-250	Cloud Sensor Management Software Subscription (250s pack)
WN-SPD-500	Cloud Sensor Management Software Subscription (500s pack)
WN-SPD-1000	Cloud Sensor Management Software Subscription (1000s pack)





- $\cdot$  Customizable Dashboard & Responsive Data Visualization
- Real-time status update & Round the clock monitoring
- Offline Linkage & Instant alert / notification
- Powerful Analytics & eMAP
- Intuitive Reporting & Smart Notification
- Manage data in one place & perfect web-based interface / mobile app
- \* Cloud charges are applicable per device (Monthly)
- · Cloud based mobile internet platform
- $\cdot$  Secured data on dedicated servers with
- Online UI is where all your device settings can be Arranged, Supervised & Modified to reflect your unique environment.
- Access WatchNET IoT Cloud on an internet browser
- $\cdot$  Download the WatchNET App to your smartphone or tablet
- \* Cloud Charges per year



## WatchNET IoT Cloud Software & Mobile App

Watch*NET*'s IoT Cloud Platform offers a streamlined and low-maintenance solution for effortless deployment of Watch*NET* IoT devices across multiple locations, simplifying operations and boosting productivity.

All your environmental sensor data in one place @ WatchNET IoT Cloud

**Software installation is not required:** Say goodbye to slow & unreliable manufacturer software. Watch*NET* IoT runs from web browser, making it faster, more secure & easy to use.

**No need to manage licenses:** No need to worry about forgetting a license key again! Watch*NET* IoT Software as a Service (SaaS) cloud infrastructure means that you won't have to worry about software license keys.

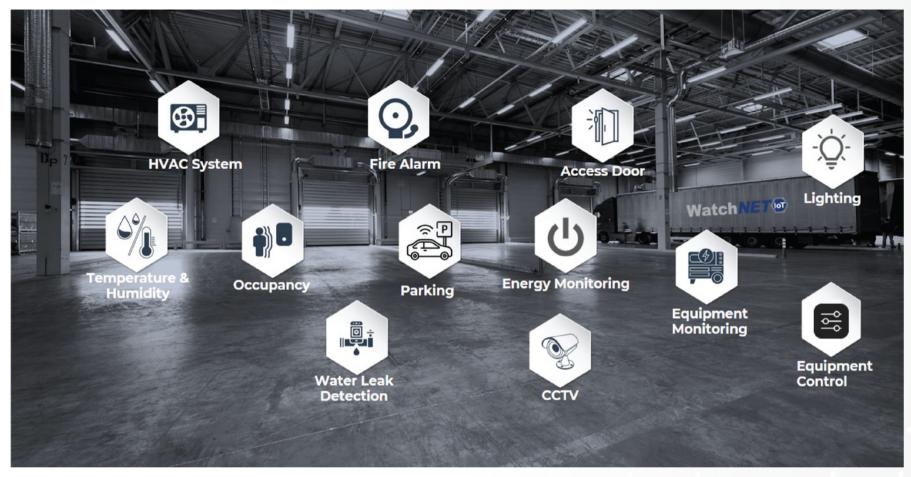
Any Device, Any Time & Any Where: As it is cloud based, you will always have access to your environmental sensors data. As long as you have access to an internet enabled device with a web browser, Watch*NET* IoT will always be by your side.

The ability to share & automate notifications to the facility managers has significantly reduced the workload and eliminated the risk of missing out on notifications.

- 1) Round the clock monitoring
- 2) Compatible with 100s of sensors & devices
- 3) Real-time status update
- 4) Instant alert & notification
- 5) Manage data in one place
- 6) Intuitive report with accurate historical records
- 7) Powerful eMAP
- 8) Enhanced data logging
- 9) Powerful web-based interface and mobile app



## WIRELESS SMART BUILDING AUTOMATION (IOT)



A smart building helps you monitor, manage, maintain, and support the systems inside your workplace. Facility / Property managers implementing IoT based smart building automation embracing LoRa technology that can maximize efficiency and reduce costs with minimal infrastructure and maintenance investment.

Commercial Real Estate companies to benefit from solutions that leverage LoRa devices and the LoRaWAN® protocol's deployed effortlessly taking advantage of long range & low power solutions.

Smart Building Automation (IoT) powered by LoRa devices, Real Estate businesses are able to equip properties with services that reduce maintenance and operating cost while creating value for dwelling inhabitants, and a potential revenue stream for the provided services.

## **SMART HOSPITAL MANAGEMENT**

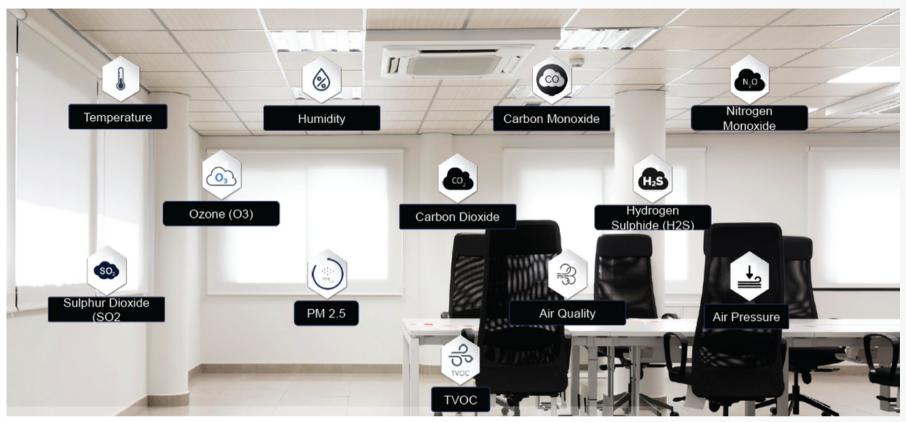


#### IoT Solutions for Smart Hospital & Health Care

Several healthcare organizations have already adopted IoT devices in their facilities to make SMART HOSPITAL. IoT technology is being installed in everything from X-Ray, Laboratories, Blood Bank, to patient rooms, and it's making healthcare facilities smarter.

A futuristic approach is inevitable in hospitals as future healthcare will look & operate very differently than they do now. Also, patients and healthcare professionals alike will be better for it.

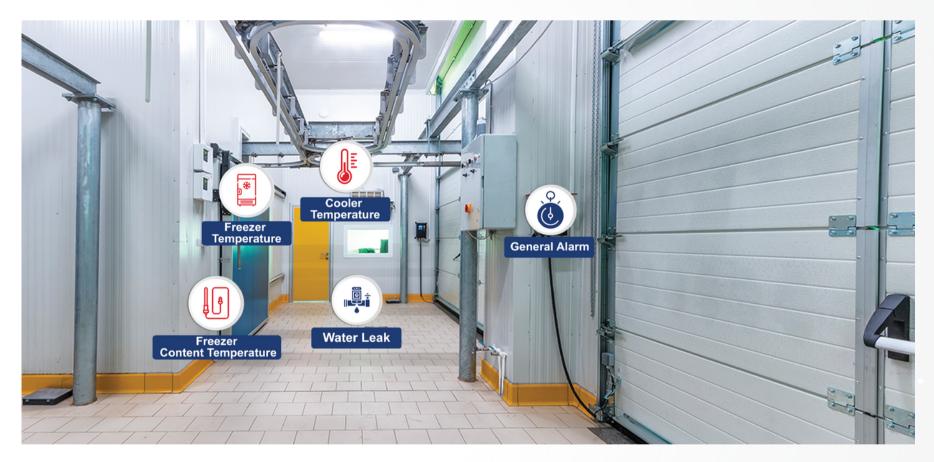
## **INTERNAL AIR QUALITY (IAQ) MONITORING**



Indoor air quality (IAQ) is the most important element within and around buildings. IAQ is known to affect the health, comfort, and well-being of building occupants. Perfect air quality has been linked to Reduction in Sick Building Syndrome symptoms, Absenteeism, Uplifting mood of occupants, Improvement in concentration, Organic Motivation, Enhanced Performance & Increased Productivity.

IAQ can be affected by gases (including carbon monoxide, radon, volatile organic compounds), particulates, microbial contaminants (mold, bacteria), or any mass or energy stressor that can induce adverse health conditions. Source control, filtration, and the use of ventilation to dilute contaminants are the primary methods for improving indoor air quality in most buildings.

# COLD STORAGE AUTOMATION & CLIMATE CONTROLLED STORAGE



Cold storage automation or special climate-controlled facilities like laboratories are at risk when the environment is not prioritized. Vaccines that are not stored and administered under ideal conditions cannot ensure the effect that's intended by manufacturers. Cold storage automation for food & also warehouses needs to be under similar environmental monitored conditions.

Government electronic complacence records & exchanges of health information put much pressure on employees to keep UpToDate logs on their storage. An automated process by the WatchNET IoT platform makes things easy for employees and corporations.

## **INDUSTRIES AND FACTORIES**



Industries, Factories, and large establishments share similar challenges in environmental monitoring. Many aspects, such as water leak, temperature, humidity, air quality carbon dioxide, etc have to be monitored constantly. Many time changing configurations of floor layouts need relocating of these sensors for optimum result.

Watch*NET* wireless sensors are easy, and the long-range signals make this task very easy. Preventive and predictive maintenance suggestions from our IoT platform can ensure smooth operation and very low downtime. Watch*NET* IoT provides fully scalable environmental monitoring solutions to keep an eye on the maintenance of machines by a variety of sensors.

## **IOT FOR RESTAURANT AND FOOD INDUSTRIES**



Why do we need IoT for Restaurants and the Food industry today? Supermarkets, Restaurants, Franchise Stores are becoming very busy these days as people prefer eating out and spending time choosing their food supplies carefully. With these changes happening rapidly, day to day operational challenges require environmental monitoring as a must. IoT for restaurants must not become an added burden to the food industry or an added task to their busy schedule.

Watch*NET* IoT Industrial quality wireless devices can be installed to monitor and measure key metrics through IoT for restaurants and food to ensure compliance that is required in the facility. Our devices not only monitor the environment but also learn employees' behavior equipment efficiency that will convert to energy savings and quick return on investment.

## **SMART PARKING MANAGEMENT**



#### Wireless Surface-Mounted Parking Sensor

This smart parking vehicle detection sensor can be used to detect the presence or absence of parking vehicles in the parking space. It uses the wireless communication module and adds vehicle status information to the gateway, and displays the collected data in the gateway.

This device uses a geomagnetic sensor and radar sensor for simultaneous detection. When the car parked/placed on the geomagnetic surface, this measures the geomagnetic intensity to judge the existence of the vehicle and the radar senses the car parked above the device.

# E-FARMING AND GREENHOUSE FARM MONITORING



Watch*NET* IoT devices provide reliable, flexible, & more efficient environmental monitoring solutions to master growers' greenhouse owners. The long-range LoRa wireless devices are easily installed that saves a lot of labor cost and is easily scalable to suit any future expansion.

Our dashboard includes E-Map and graphs gives great data visualization for quick actionable decisions for the best results. Soil Moisture, Soil Temperature, Electrical conductivity of water, CO<sub>2</sub>, Light, Air quality, Water presence of dryness, wind pattern and many other variables can be monitored.

Notes:







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