Wireless Environmental Monitoring Solution

Agriculture
Data Centre
Industries & Factories
Internal Air Quality
Elderly Care
Smart Parking Management
Smart Hospital
GYM
Vacant Property

PRODUCT CATALOGUE

www.watchnetiot.com
Taking all Industries ahead with WATCHNET IoT

www.watchnetiot.com
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WatchNET IoT Cloud Software & Mobile APP

1. Round the clock monitoring
2. Compatible with 100s of sensors & devices (LoRa & NB-IoT)
3. Real-time status update
4. Instant alert & notification
5. Customizable Dashboard & Floor Layouts with Quick Data Visualization
6. Manage data in one place
7. Intuitive Reporting & Relevant Notifications
8. Powerful eMAP - Data Visualization with actionable decisions
9. Enhanced data logging
10. Powerful web-based interface and mobile app
11. Powerful OFFLINE LINKAGE feature enables the devices to act on critical scenarios even if the gateway is not connected to the internet
12. INTELLIGENT ANALYTICAL ENGINE can provide smart suggestions and warnings

Smart Gateways

WatchNET IoT gateways are one of the smart and intelligent devices within our IoT ecosystem.

It collects data from devices that do edge-based processing and then sends it to the cloud for storage, display, and analytics.

This gateway works as a stand-alone controller to link devices connected to it and triggers actions according to input logic to output devices. Basic or complex rules can be set on this gateway that can work online or offline state within the network.

- Edge-based data processing
- LAN, WAN and 4G connectivity
- Low Bandwidth consumption
- Built-in Wi-Fi Gateway
Wireless Smart IoT Gateway

This intelligent smart gateway provides cloud connection and control of devices connected. Supporting multiple technologies for communication such as LAN, WiFi, and 4G make this gateway deployment easy in any building. Easy installation and configuration make it ideal for small or large projects of environmental monitoring and control. The built-in powerful antenna is capable of receiving long-range signals.

- System: RTL8196EU (Realtek) processor, 32MB Flash, 16MB DDR2, LoRa R100 (SX1276) & 1xUSB2.0
- Built-in Powerful Antenna
- Supported: 2xEthernet, WiFi (2.4 to 2.4835 GHz) & 3G/4G Dongle
- Encrypt-RF™ Security
- Connects up to 100 wireless devices (plug & play)
- Button: LoRA, WPS, Reset

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

This small form factor smart gateway provides cloud connection and local control of devices connected to it. Economical and easy to install and configure makes it ideal for small projects of environmental monitoring. The built-in powerful antenna is capable of receiving long-range signals.

- System: MT7620A processor, 32MB Flash, 128MB DDR2, LoRa R100 (SX1276) & 1xUSB2.0
- Built-in Powerful Antenna
- Supported: 1xEthernet, RJ45 port (WAN)
- Encrypt-RF™ Security
- LoRaWAN ClassA Compatible 410~525MHz & 862~1020MHz (user select frequency)
- Reset Button
- Connects up to 50 wireless devices (plug & play)

Applications:
- Commercial/Residential monitoring
- Franchise stores and multi-location installation
Integrated Wireless IoT Gateway 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, 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 IIoT Devices)
- With External Antenna & Secure Connection, EU Frequency
- One RJ-45 data interface
- Frequency: 410~525MHz / 862~1020MHz (user defined frequency)
- Modulation LoRa/FSK

Applications:
- Commercial/Residential monitoring
- Condominium & apartment buildings
- Golf courses and open field areas
- Smart logistics
- Multi-site management & notification

Mini Smart Gateway with Antenna

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Integrated Wireless IoT Gateway with Antenna & HTTPS

WLRI-G11AH

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WLRI-G12AH

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- Built-in Powerful Antenna
- Supported: 2xEthernet, WiFi (2.4 to 2.4835 GHz) & 3G/4G Dongle
- Encrypt-RFTM Security
- Connects up to 100 wireless devices
- Button: LoRA, WPS, Reset

Applications:
- Commercial/Residential monitoring
- Condominium & apartment buildings
- Multi-site management & notification
Sensors

WatchNET IoT sensors are smart with LoRa technology and can report to the gateways from long distance. Sensors are smart that it doesn’t report all the events but it has the ability to recognize the reportable events. Thus, WatchNET IoT sensors saves battery life and also reduce the traffic.
Wireless Temperature & Humidity Sensor

Wireless Temperature & Humidity Sensor For Low Temp WLRC-S16L

This commercial-grade temperature and humidity sensor can be used to monitor the temperature and humidity of a low-temperature environment and notify personals 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.

Wireless Temperature and Humidity Sensor WLRI-S16

This indoor temperature and humidity sensor can be used to monitor the temperature and humidity of the environment and notify personals 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.

Wireless LoRaWAN node with integrated high-precision environmental sensors can measure changes in ambient temperature & humidity with more precision...

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

Applications:
- Office room temperature & humidity
- Restaurant dining area temperature and humidity
- Indoor stadium temperature & humidity
- Seminar halls temperature & humidity
Wireless Temperature & Humidity Sensor

This commercial-grade temperature and humidity sensor can be used to monitor the temperature and humidity of low-temperature environment and notify personals by SMS, email, or phone call through 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.

WLRC-S17

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

Applications:
- Walk-IN Freezers & coolers
- Cold storages
- Outdoor temperature in extreme conditions

Wireless Thermocouple Sensor - Type T

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

WLRC-S18T

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

Applications:
- Factories
- Food manufacturing units
- Freezers
- Boiler and furnace rooms
- High heat ovens
- Meat fridge
Wireless 1-Gang Thermocouple Sensor -Type K

WLRC-S18K1

This commercial-grade K Type thermocouple sensor can be used to monitor the temperature of the specific substance or environment and notify personals 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.

Wireless 2-Gang Thermocouple Sensor - Type T

WLRC-S18T2

This commercial-grade T Type thermocouple sensor can be used to monitor the temperature of the specific substance or environment and notify personals 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.
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 personals 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-RFTM Security
- Built-in Antenna

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

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...

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-RFTM Security
- Built-in Antenna

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

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.
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.

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.

WLRC-S19R

- Temperature Measurement Range: -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-RFT™ 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 off a force

WLRC-S19S2

- Temperature Measurement Range: -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)
- Improved interference immunity
- 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 off a force
**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.

**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.

**WLRC-S19S**

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

**Wireless Light & Occupancy Sensor**

The wireless light sensor has a built-in photosensitive sensor and it is used for the detection of ambient light intensity which can be used in Greenhouse, Film Studios, and Professional sports stadiums, Movie Theatres...

**WLRI-S25**

- 3-in-1 device 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 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.

WLRC-S20

- Sleeping Mode: 18uA
- Wake up Mode: 6.3mA@3.3V
- Low Voltage Threshold: 3.2V
- Transmitting current: (max) 120mA@3.3V
- Receiving current: (max) 11mA @3.3V

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

Detects soil temperature and moisture content and soil conductivity and transmits the detected data to other devices through the LoRaWAN network.

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.

WLRC-S22

- Wireless communication device that detects the moisture content of the soil
- 2x 3.6V ER14505 AA lithium batteries
- Moisture Content Detection: Range 0-100%VWC

Applications:
- Soil moisture content detection
- e-farming
- Indoor/Outdoor greenhouses
- Home/Office plant monitoring
Wireless Soil Moisture / Temperature / Electrical Conductivity Sensor

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. It is ideally suited for solar-powered remote applications.

WLRC-S34

- 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)

Applications:
- Indoor / Outdoor precision farming
- High yield Green Houses
- Environmental monitoring

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

WLRC-I122C

WLRC-I122C 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.

- Temperature Measurement Range: -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-RFTM Security
- Built-in Antenna

Applications:
- Sensor
- Measuring equipment
- Instrumentation
- Alarm status
- Equipment interface
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. The host body and the ultrasonic sensor communicate through the UART serial port and transmit the detected data to other devices through the wireless network for display. It adopts a wireless communication method that conforms to the LoRa™ protocol standard.

Wireless pH Sensor

This specialized water pH/temperature sensor is factory calibrated and ready to use out of the box. Ideal to use indoor or outdoor facilities that are away from the main building. 12VDC power required for operation. Wireless long-range signal makes it ideal for pool houses, farmhouses, etc.

Wireless Air Quality, CO2 & Liquid Level Sensors detect the carbon monoxide content in ambient air

- Wakeup current range: 0.8mA-20mA
- 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)

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

Wireless Air Quality, CO2 & Liquid Level Sensors detect the carbon monoxide content in ambient air

- pH Operating Temperature:
  0°C ~ 65°C (32°F ~ 149°F)
- Range: 0~14PH, Accuracy: ±0.01PH & Working Pressure: <0.2MPa
- Data Transfer Rate: 0.3kbps~50kbps

Applications:
- Swimming pool pH level & temperature
- Agricultural water pH level
- Aquariums pH/temperature & Drinking water
Wireless Carbon Monoxide Detector (CO)

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

**WARNING!**

1. WLRC-IDCO device is not to substitute for smoke detection mandated by local and government regulations/building code
2. WLRC-IDCO is to be used as an investigative device for information purposes ONLY
3. WLRC-IDCO is not a life safety device

Wireless CO2 / Temperature / Humidity Sensor

This wireless CO2 (carbon dioxide) detector makes it ideal to install in public places, greenhouses, gyms, etc. A proper CO2 measuring device is integral to a good facility safety system, as it gives a real-time CO2 measure and alarm to protect your employees from dangerous gases in the work area.

- 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

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

Applications:
- Greenhouses
- Gym and public areas
- Workplace
- Factory & manufacturing
Wireless Smoke Detector
WLRC-IDS1

WLRC-IDS1 is an Investigative Device used for monitoring presences of smoke at inclosed area. This device can detect smoke using photo electric technology and sent data to our cloud platform for investigative purpose and notification.

1. WLRC-IDS1 device is not to substitute for smoke detection mandated by local and government regulations/building code
2. WLRC-IDS1 is to be used as an investigative device for information purposes ONLY
3. WLRC-IDS1 is not a life safety device

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

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.

Applications:
- Commercial building, offices, stair walls, server rooms, school and hotel applications

WLRC-IDS1
- 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

WLRI-S24M
- 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)

Applications:
- Laboratories
- Gym and public areas
- Restaurants
- Factory and manufacturing
- Offices and other workplaces
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.

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.

WLRI-S43

- 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

WLRC-S43U

- 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)

Applications:
- Tank levels, Diesel fuel gauging
- Liquid assets inventory
- High or low-level alarms
- Process batch monitoring
- Remote monitoring
- Input to telemetry systems
- Irrigation control
Wireless 1 - Phase Current Meter with 1 x 150A Clamp-On WLRC-M1150

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

Applications:
- Compressor / Generator current monitoring
- Equipment working or not working status
- Overload current monitoring
- Predictive maintenance of machinery
- Smart energy management
Wireless Plug-and-Play Power Outlet with Consumption Meter

WLRI-P11M

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 3-Phase Current Meter with 3x150A Clamp-On

WLRC-M3150

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.

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

- Wireless Three Phase Current Meter
  - with 3 x 150A Clamp-On
  - 2 x 3.6v ERI4505 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
Wireless 1-Phase Current Meter with 1 x 250A Clamp-On WLRC-M1250

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.

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

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.
Wireless 3-Phase Current Meter with 3 x 250A Clamp-On

WLRC-M3250

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.

Wireless mA Current Meter Interface, 4~20mA

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

WLRC-M375

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.

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 Condition Water Leak Detection, Storage Tank Water Presence & Dry Condition Detection.

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.

Applications:
- 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
Wireless Water Leak 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.

Wireless 2-Gang Water Leak Detector

This commercial-grade water leak sensor can detect water presence immediately and notify personals 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-V11 automatic valve closure device water damage can be prevented immediately. (Works online or offline) Detects water presence or non-presence (wet/dry) of any conditions.

WLRC-D15

- 2 sections of ER14505 lithium batteries (3.6V, 2400mAh / section) in parallel
- Standby Current: 24μA
- 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

WLRC-D122

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

Applications:
- Residential / Commercial water leak detection
- Data Centers / IT Server rooms
- Air condition water leak detection
- Storage tank water presence detection
- Dry condition detection
Wireless Water Leak Detector

This commercial-grade water leak sensor can detect water presence immediately and notify personals 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-V11 automatic valve closure device water damage can be prevented immediately. (Works online or offline) Detects water presence or non-presence (wet/dry) of any conditions.

Wireless 2-Gang Water Leak Detector

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.
Wireless Water Leak Detector with Rope Sensor

WLRC-D14

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.

Wireless Water Leak Detection and Location Sensor

WLRI-S46

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 given.

- 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

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

- 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)

Applications:
- Server rooms
- Under raised flooring
- Tunnels
- Apartment water pipe raisers
Dry Contact can be connected to external devices, such as switches, buttons, relays, and reed switch outputs. It can detect the closure or disconnection signal of the dry contacts...

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™ Security
- Built-in Antenna & Communication Range Up to 500m/0.310miles
  * Actual transmission distance depends on the environment
  * Water Rope Extension with 5 clamps (Model No: WLRC-EX10) & U-Clamps for Water Ropes (Model No: WLRC-D14U)

Applications:
- 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
This smart parking vehicle detection sensor can be used to detect the presence or absence of parking vehicles in the parking space.

**Smart Parking Management Sensor**

WLRC-PS1 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 of the absents of vehicles to give an accurate result every time. Long-range wireless communication makes it easier for indoor or outdoor parking management.

**Generic Sensors & Accessories**

Generic sensors such as RS485, IR Blaster, Emergency Button, Wireless Siren, Smoke Detectors, Batteries & more that complements with our bespoke IoT equipments...

**3.6V Industrial Battery**

High capacity industrial grade AA battery for commercial applications.

**WLRC-PS1**

- Input Power: 2x 3.6V ER18505 (3.6V 4000mAh/section) in parallel
- Sleeping Mode: 80 uA
- Wake up Mode: 6.3mA @3.3V
- Receiving Current: max 11mA @3.3V
- Transmitting Current: max 120mA/3.3V
- Built-in antenna

**Applications:**

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

**WLR-BAT-36V**

- 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
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)

Applications:
- 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
Wireless Emergency Button

The WLRI-EB1 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.

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

Wireless RS485 Adapter

WLRC-A11 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.

Applications:
- Monitor legacy controllers and devices that communicate on RS485 bus
- Controls DVRs/PTZ Cameras on alarm
- Can do basic automation control with selected controllers
Wireless Emergency Push Button

WLRI-EB2

- Input Power: 2xAAA batteries
- Temp: -20°C ~ 55°C (-4°F ~ 131°F)
- Operating Voltage: 2.1V-3V
- Standby Current: 14μA
- 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 buttons in parking garage
- School/Campus safety
- Construction sites and factories

Wireless IR Blaster

WLRI-IRB1

- 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

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

This wireless annunciator can be used with any WatchNET 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.

WLRI-SR1

- Input Power: DC +12V
- 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

Wireless Smart I/O Controller

WLRC-IO3 is a Wireless Multifunctional Controller that can be used as an Input/Output device or AC/DC Motor controller. WatchNET 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.

WLRC-IO3

- 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
Interface

Interface devices are used to connect external dry contacts or pulse inputs. This can be used in various applications for monitoring, counting or receiving inputs for linkage to output devices.

Legacy systems that have alert sound or indicator light for status notification can be now made smarter and remotely monitored instantly.

**Wireless 2-Input Dry Contact Interface**

The 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
- 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

**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:**
- Tamper Switches
- Barn door access monitoring
- Freezer / cooler door access
- Convenience store cooler doors
- Forklift seat switches
- Dry contact sensor
- Control relay / alarms
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.

Wireless Dry Contact Interface

The WLRC-I14 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.
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 ERI4505 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

Applications:
- Sensing
- Measuring equipment
- Instrumentation
- Convert analog to the digital readout
The device is connected with two pulse detection interfaces, which can calculate the number of pulses and send the detected number of pulses to the gateway display. It uses the SX1276 wireless communication module. The purpose of the Pulse counter is to count the number of pulses during a specified amount of time. The time is dictated by the signal on the start/stop pin. When the start/stop pin is high, the algorithm is counting pulses.

- Input Power: 2x 3.6V ER14505 AA lithium batteries (3.6V2400mah/section)
- Sleeping Mode: 23uA (WLRC-I11) / 24uA (WLRC-I112)
- 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

Applications:
- Smart Agriculture
- Smart Cities
- Energy and Utilities
- Smart Operations
- Smart Building
- Smart Metering
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.

Wireless pH Sensor

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

WLRC-S22

- 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

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

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

WatchNET 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.

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

**Ultimate sensor for controlled Agriculture Environment**

The Agriculture Tag (AG-A9B) has been developed by WatchNET Inc. to provide a cost-effective solution for monitoring the environment in which plants are grown. The AG-A9B can accurately measure soil moisture and temperature/humidity of the surrounding air.

Furthermore, the orientation and movement status of the AG-A9B is also measured for plant security/integrity.

The sensor readings are communicated to the WatchNET Inc. platform via WatchNET hub devices. The WatchNET Inc. platform enables you to view the location and alert notifications, and easily configure system-level behavior based upon events for different business needs. The same controls are accessible to 3rd party applications via JSON API to the WatchNET server.

- Communication: Authenticated proprietary protocol over 2.4GHz
- Air temperature/humidity and soil moisture measurement every 60 seconds
- Reports proximity every 10 seconds to GSM or WiFi readers
- Reports ’movement’ and ’tip’ events
- Up to 80m/262.4ft range
- Reporting Range: 20m/65.6ft (indoors)
- 80m/262.4ft (outdoors / LOS)
- Number of tags-up to 2000 tags per reader
- Reporting interval 10 seconds

Applications:
- Measures Temperature / Humidity at the plant level
- Accurate Moisture measurement for each plant
- Notification of Tilt and Movement of Plants
- 24/7 inventory management and control of each plant
- Virtual Fence (Locate movement of plants within the facility)
- Real-time notifications and alerts by APP, SMS, and E-Mail
Wireless Soil Moisture / Temperature / Electrical Conductivity Sensor

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. It is ideally suited for solar-powered remote applications.

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. The host body and the ultrasonic sensor communicate through the UART serial port and transmit the detected data to other devices through the wireless network for display. It adopts a wireless communication method that conforms to the LoRa™ protocol standard.

WLRC-S43T

- 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)

Applications:
- Indoor / Outdoor precision farming
- High yield Greenhouses
- Environmental monitoring

WLRC-S34

- Wakeup current range: 0.8mA-20 mA
- 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)

Applications:
- Water level of water tank monitoring
- Water level of water well monitoring
- Horizontal distance detecting
- The level of material detecting
Remote Monitoring & Control

Output devices can be configured for audio and visual notification within the local ecosystem or global alerts. Long-distance LoRa bidirectional communication enables the platform to remote control connected equipment.

RS485 Interface can make any legacy equipment smart or integration to building automation systems.

**Wireless RS485 Adapter**

WLRC-A11 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

**Wireless Plug-and-Play Power Outlet with Consumption M**

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
- Typical Operating Current: 15mA/220VAC/1W
- Motor load: 1.5HP/240VAC
- Resistive load: 16A/250VAC; P:4000VA
- Relay Switch Life Times: 100,000 times

**Applications:**
- Gym equipment used cycles per day
- Medical storage refrigerators
- Food storage freezers
- Aquariums and reptile cages
- Remote On/Off connected devices
Wireless IR Blaster

WLRI-IRB1 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

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

Wireless Siren

WLRI-SR1

This wireless annunciator can be used with any WatchNET 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 +12V
- 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
Wireless Smart I/O Controller

WLRC-IO3 is a Wireless Multifunctional Controller that can be used as an Input/Output device or AC/DC Motor controller. WatchNET 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.

WLRC-IO3
- 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

Wireless LoRa Valve keeper

WLRI-V11

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

WLRI-V11
- DC Power Supply, DC12V
- Temperature: -20°C~ 55°C (-4°F~131°F)
- Data Transfer Rate: 0.3kbps~50kbps
- Built-in antenna

Applications:
- 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
The WLRI-EB1 wireless push button can be used with our smart gateway to signal emergency or service requests in a facility. LoRa technology gives exceptional wireless range for many other applications. This button can be also linked with our annunciator/siren to activate audio/visual signal.

**Wireless Emergency Button**

- Working Voltage: DC 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**

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
- Transmitting Current (max): 120mA/3.0V
- Receiving Current (max): 11mA/3.0V
- Communication Range: Up to 500m/0.310miles (depends on environment)

Applications:
- Emergency restroom help button
- Emergency buttons in parking garage
- School/Campus safety
- Construction sites and factories
Accelerometer & Activity Detection 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/recommended temperature. It can prevent equipment failure that requires 24-hour operation.

WLRC-S31

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

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

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.

WLRC-S33

- Temperature Measurement Range:
  -20°C ~ 55°C (-4°F ~ 131°F)
- Signal Range: Up to 500m/0.310miles
- TX Power: 19dBm±1dBm
- Rx Sensitivity:
  136dBm (LoRa) & 121dBm (FSK)
- Encrypt-RF™ Security
- Built-in Antenna

Applications:
- Monitor unattended traps
- Sudden force or glass break detection
- Outdoor parked vehicle monitoring
- Other movements and vibrations
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-1 device 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

Smart Parking Management Sensor

WLRC-PS1 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 of the absents of vehicles to give an accurate result every time. Long-range wireless communication makes it easier for indoor or outdoor parking management.

- Input Power: 2x 3.6V ER18505 (3.6V 4000mAh/section) in parallel
- Sleeping Mode: 80 uA
- Wake up Mode: 6.3mA@3.3V
- Receiving Current: max 1mA @3.3V
- Transmitting Current: max 120mA/3.3V
- Built-in antenna

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

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

- 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 non-inflammable liquids
- Track non-corrosive fluid levels
- Monitor sump pit water level

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.

WLRI-S43 - Wireless Liquid Level Sensor

- Operating Current: Less than 50mA
- Temperature Accuracy:
  ±2-3°C (±35.6-37.4°F), -40~125°C (-40~257°F)(NTC thermistor)

Applications:
- Tank levels, Diesel fuel gauging
- Liquid assets inventory
- High or low-level alarms
- Process batch monitoring
- Remote monitoring
- Input to telemetry systems
- Irrigation control
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.
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.
E-FARMING AND GREENHOUSE FARM MONITORING

WatchNET 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, Co2, Light, Air quality, Water presence of dryness, wind pattern and many other variables can be monitored.
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 compliance records & exchanges of health information put much pressure on employees to keep up-to-date logs on their storage. An automated process by the WatchNET IoT platform makes things easy for employees and corporations.
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 times changing configurations of floor layouts need relocating of these sensors for optimum result.

WatchNET 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. WatchNET IoT provides fully scalable environmental monitoring solutions to keep an eye on the maintenance of machines by a variety of sensors.
Looking for a Data Center solutions? With the recent trends in technology, how does the Internet of Things help in data center solutions? At the unprecedented rate at which technology is expanding, IoT for Data Center Solutions are redefining the game of data storage and analysis. Within the last few years, the numbers of connected devices have multiplied and are expected to escalate at an exponential rate! Data Center solutions provided by IoT are being increasingly used for several commercial and industrial solutions. To facilitate easy storage and access of data, data center solutions provide a robust platform for the smooth management of data.
Why do we need IoT for Restaurants and the Food industry today? Super Markets, 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.

WatchNET 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.
Health awareness is at an all-time high. From keto diets to intermittent fasting, from HIIT to yoga, everyone wants to stay fit and eat healthily. With the world changing at a face pace with IoT connecting everything and everyone around us, it is difficult for the fitness industry to stay behind in the race to an automated world. Gym automation system is the newest kid on the block! With the right gym automation system, you can create a central hub for member and lead management, taking your fitness club to the next level.

We, at WatchNET IoT solutions, provide an easy path to switch from your current gym software to an automated gym software. Our solutions allow you to set up and track payments, maintain your equipment, manage memberships, schedule, and manage class timings, besides providing a whole lot of data to analyze and aid in your business growth.
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, Uplift 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.
More older people than ever before are having to adopt health monitoring and unified communications solutions by optimizing automatic and intuitive IoT sensors, elder citizens can live more independently & maintain autonomy.

However, it's not the first time that the older generation is embracing the benefits of IoT technology in their well-being. Smart technology has gradually embracing into their lives over recent years.

The ability to remotely monitor senior citizens; receive alerts in case of emergencies, predict issues based on early warning signs, and intervene proactively offers peace of mind to both healthcare providers and families of senior citizens.
Many commercial real estate owners & property managers adapted to a new reality. Property owners sometime might be experiencing vacant buildings & possible reduction or absence of onsite maintenance staff and limited oversight into a building’s functionality and safety, properties may be more susceptible to loss or damage.

WatchNET IoT’s Vacant Property Monitoring system can be a powerful tool. It can help property managers to monitor property remotely – reducing time, effort and costs associated with property oversight. Wireless IoT devices can help provide notification of potential issues before they become severe. Many sensors and devices are designed to send alerts via text or e-mail and can allow property managers to stay connected in real time with mobile devices. WatchNET’s Vacant Property Monitoring provides the ability to monitor multiple properties in real time.
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.
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