WatchNET IoT

Connect Any Thing, Connect Any Where

Wireless
Smart Building Automation (IoT)

Ai
WatchNET®

5 Key Benefits of Smart Buildings

Reduce Energy Consumption
Smart IoT reduces building energy consumption. This translates into significant financial savings as well as much more efficient and effective approach to meeting green goals.

Improve Building Efficiency
Smart technology identifies overused and underused areas in the building, providing the opportunity to optimize space utilization which can save money and facilitate growth.

Predictive Maintenance
Detect building performance and activate maintenance procedures before an alert is triggered with strong insight on how the building is operating. It is easier to implement maintenance at the right time.

Increase Productivity
Smart buildings are designed to deliver more comfortable experience for occupants. They help ensure health and safety considerations are met, and as a result make people more productive.

Better Use of Resources
The data generated by a smart building provides key insight that can be fed into the planning and the use of resources. This means that there is no more guesswork when it comes to resource management.
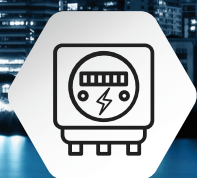
Measurable Key Metrics

HVAC System

Fire Alarm

Light

Power

CCTV

Temperature & Humidity

Accessing a Door

Generator

Water Leak Detection

Smart Parking

Occupancy

Wireless Smart Automation Using IoT (LoRa Sensor)

Low Power Consumption: LoRa (Long Range) sensors consume ultra low power and have extraordinary advantages.

Flexible Coverage: By individual requests, users can decide the transmission coverage. In general, the covered distance between two nodes is around 100〜200m, with enhanced RF power. Through the relay between routers and nodes, the coverage can go much further.

Wireless Control: Lighting switches, outlets, smart curtains, air-conditioning, etc.

Stay Connected: Users can control and monitor the system from anywhere in the world all the time.

Greater Expansion: The system is based on a LoRA profile, users can select a preferred scheme and customize it.

Time Scheduling: Choose the best time setting for electric appliances to conserve energy, keep costs low and ensure safety.

Easy & Quick Installation: Easy to install, quick to connect and can easily replace your existing lighting switches and outlets.

Smart IoT Monitoring Advantages

· For Property Managers, it is essential to monitor the unmanned properties and get real-time notifications & alerts.

· Helps in keeping an eye on the property & monitoring damages from severe temperature change, water leak, intrusion or trespassing.

· Watch*NET* IoT low-cost sensors help keep track of your property when you are away, thereby preventing vandalism and break-ins in neighbouring properties.

· Any unauthorized access by using open/closed sensors and motion sensors is immediately notified.

· Watch*NET* IoT's sensors help to monitor basements and near or around water heaters, toilets and faucets for water leaks.

· Watch*NET* IoT's light & voltage sensors help conserve electricity by getting alerts if lights/appliances are left on.

Gateways

Watch*NET* IoT's 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 accordingly to input logic to output devices. Basic or complex rules can be set on this gateway, that can work in an online or offline state within the network.

· Edge-based Data Processing
· LAN, WAN and Connectivity
· Low Bandwidth Consumption
· Built-in Wi-Fi Gateway

Wireless Smart IoT Gateway

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

WLRI-G11

Mini Smart Gateway

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

WLRI-G12

Watch*NET* IoT Cloud Software & Mobile APP

- ✔ Around-the-clock monitoring
- ✔ Compatible with over 100 sensors & devices (LoRa & NB-IoT)
- ✔ Real-time status update
- ✔ Instant alerts and notifications
- ✔ Customizable dashboard & floor layouts with quick data visualization
- ✔ Manage data from one platform
- ✔ Intuitive report with accurate historical records
- ✔ Powerful eMAP - data visualization with actionable decisions
- ✔ Enhanced data logging
- ✔ Impressive web-based interface and mobile APP
- ✔ Powerful offline linkage feature enables the devices to act in critical scenarios, even if the smart suggestions and warnings
- ✔ Intelligent analytical engine can provide smart suggestions and warnings

Measurable Key Metrics

HVAC System Monitoring & Control

While properly functioning HVAC systems are vital to your property, they may not be equipped with remote monitoring capabilities if they are older units. The installation of Watch*NET* IoT's current meters can help monitor a system's activity & health.

This can include predictive maintenance alerts to indicate how machines are running to assess the need for service. Smart technology can also optimize power consumption based on changing occupancy trends.

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

WLRC-IO3
Wireless Smart I/O Controller

WLRC-S18K1
Wireless 1-Gang Thermocouple Sensor - Type K

Wireless Lighting Control System

These commercial-grade indoor wireless light sensors 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 in smart buildings. The devices can be used along with the Watch*NET* smart power outlet (WLRI-P11M) to create an automated lighting system. Light sensors can be used as a part of predictive maintenance where light intensity is vital.

1. Detects the intensity of light in LuX of the environment.
2. Light controlling ON and OFF based on LuX of the environment.
3. Time scheduling for outdoor lights.

WLRI-S25
Wireless Occupancy/Light Temperature Sensor

WLRC-S20
Wireless Light Sensor

Wireless Temperature and Humidity Monitoring

The sudden rise or drop in the temperature/humidity in a building can be an indication of an ongoing or impending loss.

Prolonged heat and humidity can cause damage to building systems and materials if left unaddressed, leading to adverse indoor environmental concerns. Temperature sensors monitor temperature and humidity changes within facilities and enable on-site or remote adjustments to HVAC controls.

Adding Watch*NET* IoT's devices and sensors into your property management process can help to provide peace of mind when on-site monitoring is not feasible.

Consult our professional team for optimal solutions when managing the risks associated with reduced occupancy buildings.

WLRC-S17
Wireless Temperature & Humidity
Sensor For Low Temperature

Water Leak Detection Monitoring

A broken valve, burst pipe or malfunctioning sprinkler head, for example, can cause water damage in any building. The extent of the damage can be severe, especially if there are no occupants to notice and readily correct the problem.

Water or leak sensors can detect the presence of water flow. Watch*NET* IoT's devices can not only identify water leaks but also provide instant alerts & notify emergency responders. Some devices are programmed to automatically turn off the water or are accessible to management through an APP to be set off.

WLRC-D14
Wireless Water Leak
Detector with Rope Sensor

WLRI-S46
Wireless Water Leak
Detection and Location Sensor
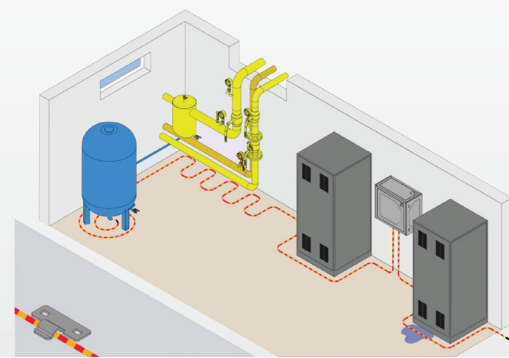
Energy Information Management

1-Phase or 3-Phase current meters can be used on any electric circuit breaker or electric wiring to monitor current draw and calculate the power used up by of connected equipment.

Wireless 1-Phase or 3-Phase current detectors are used to detect the electrical current from each input respectively. They are powered by a battery and receive IoT current through a current transformer and adopts an open-loop current transformer.

Can be used with other devices to give great insight for analytical data.

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

WLRC-M1250
Wireless 1-Phase Current
Meter with 3 x 250A Clamp

Wireless CO_2 / Temperature / Humidity Sensor

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

WLRI-S41
Wireless CO_2 / Temperature /
Humidity Sensor

Fire/Smoke Detection Monitoring

Fire and smoke damage, whether intentionally or not, are among the most common causes of loss in vacant buildings. Watch*NET* IoT's device can not only identify fire & smoke but also provide instant alerts and notify emergency responders.

It can detect smoke using photoelectric technology and send data for investigative purposes and notification.

WLRC-IDS1
Wireless Smoke Detector

Wireless Surface-Mounted Parking Sensor

This smart parking vehicle detection sensor can be used to detect the actual presence of vehicles parked in the parking space. It uses the wireless communication module to add 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 is parked/placed on the geomagnetic surface, it measures the geomagnetic intensity to judge the existence of the vehicle and the radar senses the car parked above the device.

WLRC-PS1

Security System Monitoring

If your property has reduced occupancy, it can be at a higher risk for burglary and vandalism. Building accents made from metals, like copper, are increasingly susceptible to criminal opportunists because of their material resale values.

Smart technology solutions are available to enhance your security with easier implementation than traditional solutions. IR motion sensors can track movement within a building, and magnetic detection sensors can detect intrusion through doors and windows, providing alerts to a property manager.

Surveillance cameras capture, be and triggered by motion sensors, and notify you if someone or something is detected on the property.
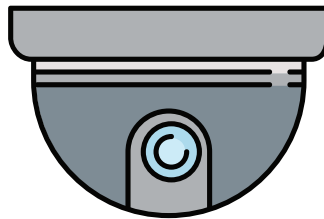

WLRC-D17
1-Gang Hall Type
Open/Close Detection Sensor

WLRI-SR1
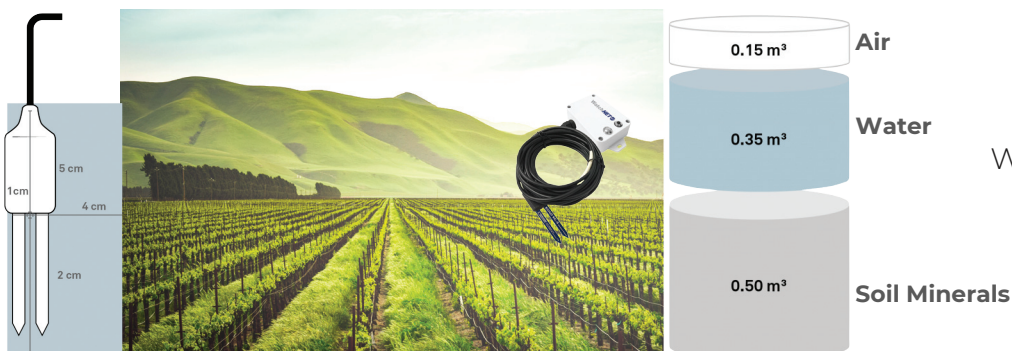Wireless Siren

Integrated CCTV

WLRI-S25
Wireless Occupancy/Light
Temperature Sensor

Indoor/Outdoor 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. These oil-water sensors provide promising new opportunities for automating greenhouse irrigation according to a plant's needs to obtain an accurate measurement.

WLRC-S22
Wireless Soil Moisture Sensor

5 cm
1cm
4 cm
2 cm

0.15 m³ **Air**

0.35 m³ **Water**

0.50 m³ **Soil Minerals**

Water Tank Liquid Level Monitoring

This sensor can monitor non flammable 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

Swimming Pool Water Quality Monitoring

This specialized water pH/temperature sensor is factory calibrated and ready to use out of the box. It is ideal to use in an indoor or outdoor facility that is away from the main building. A 12VDC power supply is required for the operation. Its wireless long-range signal makes it suitable to use in either a pool house or a farmhouse.

WLRI-S23
Wireless pH Sensor

Automating the manual test of water pH

Smart Building Monitoring Sensors

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Wireless Smart I/O Controller WLRC-IO3	**Wireless Occupancy/Light Temperature Sensor** WLRI-S25
Wireless Light Sensor WLRC-S20	**Wireless Temperature & Humidity Sensor For Low Temperature** WLRC-S17
Wireless Water Leak Detector with Rope Sensor WLRC-D14	**Wireless Water Leak Detection and Location Sensor** WLRI-S46
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Wireless 1-Gang Hall Type Open/Close Detection Sensor WLRC-D17	**Wireless Siren** WLRI-SR1
Wireless Soil Moisture Sensor WLRC-S22	**Wireless pH Sensor** WLRI-S23

Watch**NET**®

SECURITY SINCE 2000

20 YEARS

Watch*NET* IoT Industry Solution

Products of Watch*NET* are Certified with:

CE · FC · UL

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