



# WatchNET<sup>IoT</sup>

Connect Any Thing, Connect Any Where



Solutions for  
**Industries and  
Factories**



# Industries and Factories

The 4th Industrial Revolution, it defines the concept of Smart Factory. Behind this concept lies a mix of technologies serving the factory of the future.

Connect the machines to the Internet, through the Internet of Things (Industrial IOT – IIOT), collect the data in the Cloud, treat them through Artificial Intelligence algorithms, so as to optimize the Operations, reduce costs through preventive / predictive maintenance. In a general way, to allow an optimized and centralized management of its installations, its equipment, its machines. Offer better operational and business tools Collection.

## Machine Data

Whether it is to collect the hours of use, the number of startup cycles, the status of certain parameters, the recovery of errors and alarms, there is a sensor and an adequate communication protocol

## Dashboard & Reports

Process data and provide reports and dashboards for the various stake-holders: Support, Management, Customers.

## Preventive & Predictable Maintenance

Data analysis must anticipate failures or non-optimized processes. To be able to intervene quickly in the event of a problem, or even to prevent future

## How System works?

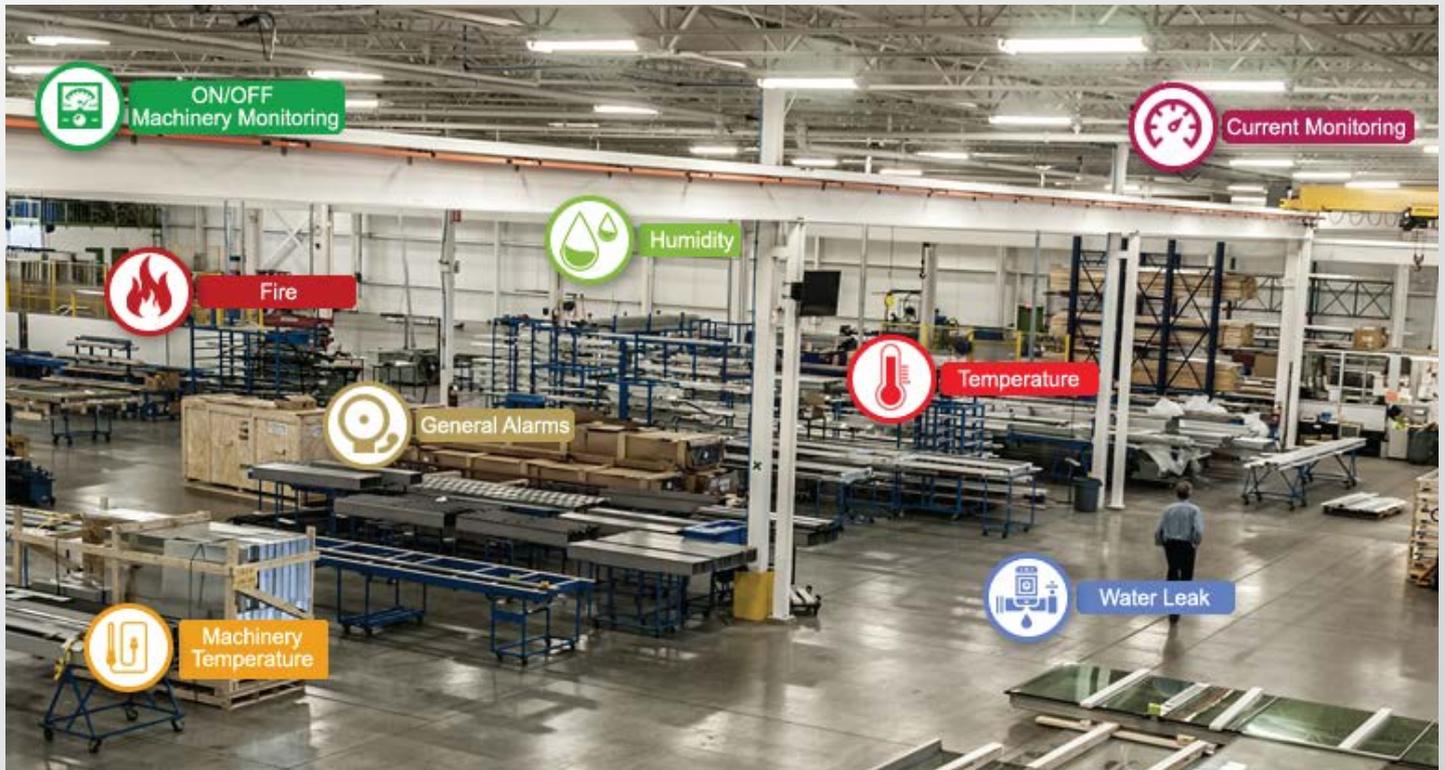


# Industries and Factories

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 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 down time.

WatchNET IoT provides fully scalable environmental monitoring solutions to keep an eye on the maintenance of machines by a variety of sensors.



# Measurable Key Metrics

Few of the metrics that WatchNET IoT can monitor and analyze Industries and Factories:

## Humidity at multiple location of the facility



### Wireless Temperature and Humidity Sensor For Low Temp **WLRC-S16L**

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 true our hosted web platform if the values go out of the optimal range. This sensor is rugged and IP65 rated for humid and moist environment. This device has a magnetic back panel that can be mounted on any metal surfaces.



## Temperature of the room/ facility at different points



### Wireless Temperature and Humidity Sensor For Low Temp **WLRC-S17**

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 true our hosted web platform if the values go out of the optimal range. This sensor is rugged and IP65 rated for humid and moist environment. This device has a magnetic back panel that can be mounted on any metal surfaces.



## Thermocouple to monitor the quick changes in high or low temperature



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

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.



## Sub metering and current monitor single phase or three phase



### Wireless 1- Phase Current Meter with 1x 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 an inbuilt 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



### 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 an inbuilt 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



## Air Quality sensor for . Co2, Pm2.5, temperature , humidity etc.



### Wireless PM2.5/ Temperature/ Humidity Sensor **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.



## Other special application devices



### Wireless Pulse Counter Interface **WLRC-I11**

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.



### Wireless Accelerometer and Surface Temperature Sensor **WLRC-S31**

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 24-hour operation.



### Wireless Light Sensor **WLRC-S20**

This commercial-grade indoor 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 predictive maintenance in marijuana growth labs where light intensity is vital.



### Vibration Sensor, Spring Type **WLRC-S19S**

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.



# 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 connectivity
- Low Bandwidth consumption
- Built-in Wi-Fi Gateway

## Integrated Wireless IoT Controller **WLRI-G11**

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.



## Mini Smart Gateway **WLRI-G12**

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



# WatchNET IoT Cloud Software & Mobile App

- 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





# WatchNET®

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Watchnet IoT Industry Solution

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