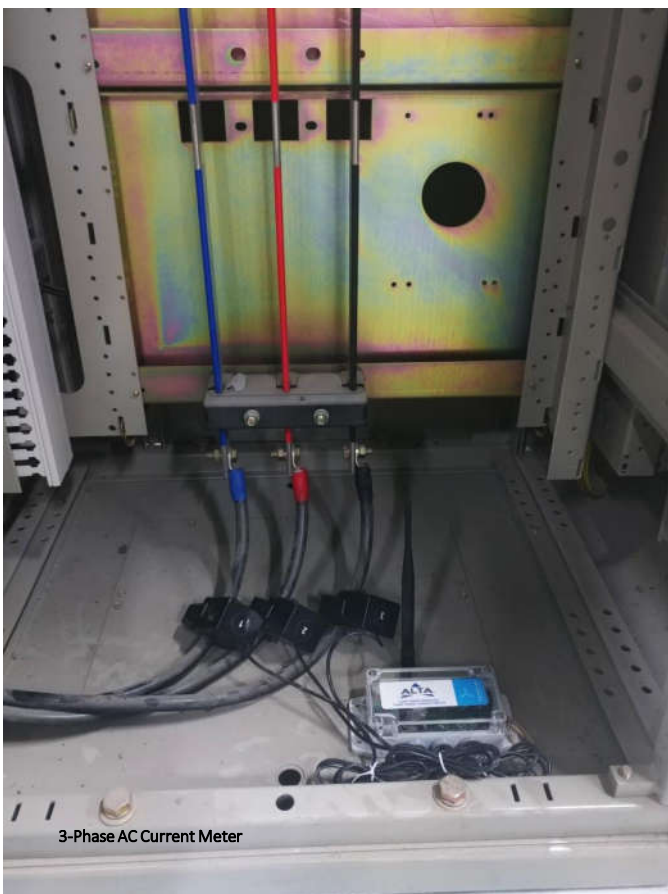


# Applications

MONNIT.  
KOREA

Building



3-Phase AC Current Meter

## Building

MONNIT KOREA

# HVAC

- ✓ Monnit wireless monitoring system helps to reduce number of manual check-ups by providing real-time data on major HVAC units status.
- ✓ Detecting areas for maintenance can also reduce energy costs by preventing unnecessary energy loads from malfunctioning equipment.
- ✓ 3-phase Current meter is able to track the current draw of each HVAC unit and contribute to energy reduction
- ✓ Differential air pressure sensors ensure that a greater amount of airflow is getting pumped back into the building, so individuals can breathe easily.



Differential Air Pressure



Quad Temperature Sensor



Humidity Sensor



Temperature Sensor

Building

MONNIT KOREA

# Boiler

- ✓ Temperature sensors notify via text, email, or voice call if the boiler temperature happens to fall out of the optimal range.
- ✓ A/C current meters track power use and ensure boiler pumps are up and running to maintain an effective, optimized operation.
- ✓ Gas Detection sensors prevent disastrous accident caused by gas leakage
- ✓ Pressure sensors measure the pressure in the pipe, 300 psi (21 kg/cm<sup>2</sup>) and responsible for providing data on critical fluctuations



AC Current Meter



CO Detection



Pressure Meter



Building

MONNIT KOREA

## Drainage / Pump / Water supply facilities

- ✓ Water detection sensor help t prevent overflow accidents caused by drainage pump malfunctions
- ✓ Impact detect sensor installed on the fire pump provides instant notification in case of activation and enables to react on immediately
- ✓ Vibration sensors inform about motor status to prevent failures
- ✓ Pressure sensors measure the pressure in the pipe, 300 psi (21 kg/cm2) and responsible for providing data on critical fluctuations



Impact Detection



Vibration Meter



Pressure Meter



Voltage Detection

Building

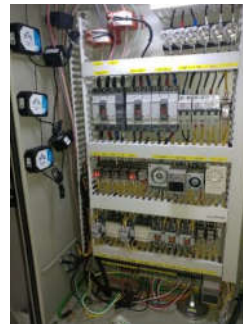
MONNIT KOREA

## Machine room / UPS Electrical panel

- ✓ Prevent overheating of transformer inside machine room with temperature sensors
- ✓ Get the real-time data on energy flow and consumption with AC current meters
- ✓ Ensure the proper power quality to the load in UPS room and prevent instability of the mains frequency, harmonic distortion, voltage highs/lows and disturbances such as a high-frequency transients or oscillations with voltage meter sensors
- ✓ Get instant notifications on the main alarms triggered by equipment malfunctions with voltage detection sensors.



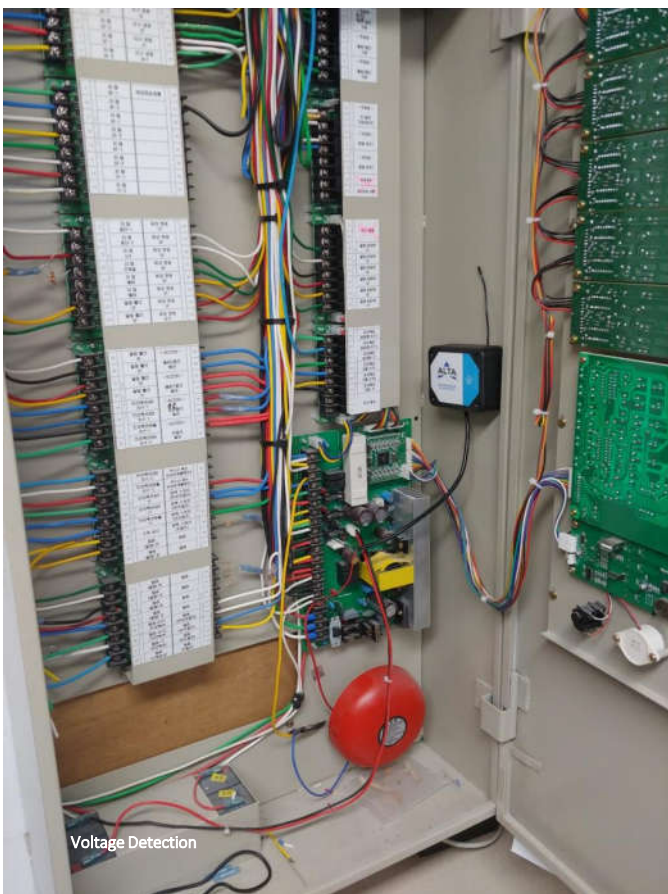
Temperature Sensor



AC Current Meter



Voltage Meter



Building

MONNIT KOREA

## Fire fighting facilitates / Alarm Panel

- ✓ Voltage detection sensor monitors the absence or presence of fire and triggers in case of fire detected. The message is sent directly to the person in charge no matter of his/her present location. This helps to react on emergency situation faster and prevent huge damages.
- ✓ The alarm panel in every building consists of hundreds alarms triggering on equipment and facilities status. Voltage detection sensors can be attached to the most important alarms and the manager is able to receive instant notifications directly to mobile.



Voltage Detection



Water Detection

Building

MONNIT KOREA

# Water Tank

- ✓ Monitoring water leakages around water tank facilities with water detection sensors can prevent flooding, mold and other high-cost damages.
- ✓ Water inside the level tank is hard to monitor. Ultrasonic sensors make it possible to prevent overflows and control the water supply to the tank automatically.



Water Rope



Ultrasonic Sensor





Factory



Factory

MONNIT KOREA

## Production Line Monitoring

Emergency repairs would cause everything to grind to a halt and will cost a lot to factory owners.

Early signs that material handling equipment is going to fail can be hard to detect.

Monnit solution is low-cost and easy to install and give a deeper insight on what is happening inside production facilities.

- **Vibration meter**

Installed on the motors of production line.

It collects the data on vibration fluctuations and triggers when there is a need for check up



Factory

MONNIT KOREA

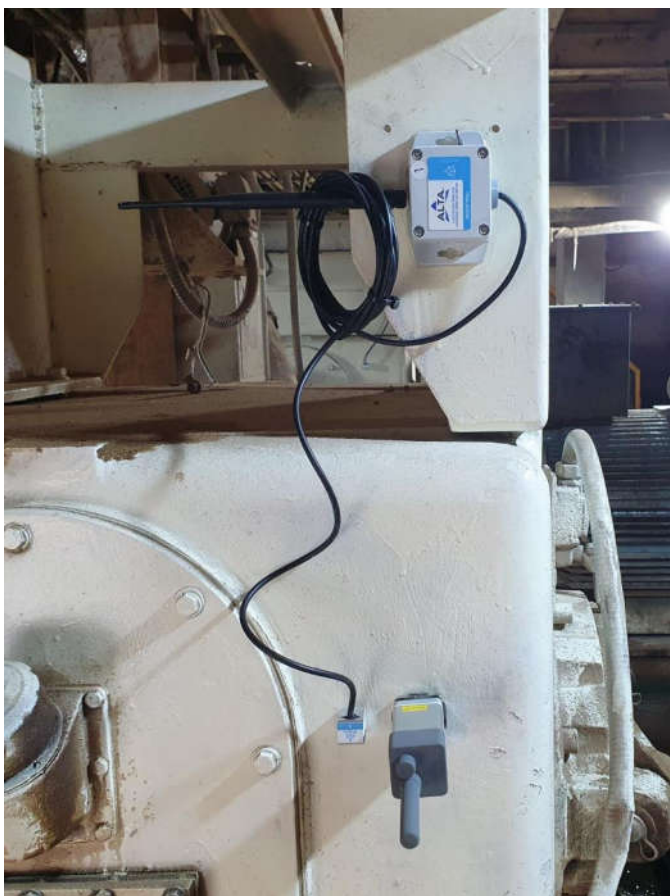
## Energy Monitoring

Many solutions have a large initial cost or offer a limited sensor line—requiring managers to monitor production line vitals via multiple systems.

Monnit solution includes more than 80 different kind of sensors to monitor the most vulnerable conditions inside the factory

- **3 Phase current meter**

Measures the amount of current and triggers when it falls over the certain range



Factory

MONNIT KOREA

## Equipment / Machinery Monitoring

Monnit industrial sensors equipped with waterproof and dustproof enclosure being capable to operate in the most harsh conditions.

It is plug and play solution suitable for heavy industries preventive maintenance.

- **Advanced vibration meter**

The sensor reports vibration (acceleration, velocity, displacement, or acceleration peak), frequency (Hz/RPM), and crest factor on all three axes. It also reports duty cycle (how much of the report interval that vibration was present), and temperature.



Factory

MONNIT KOREA

## Equipment / Machinery Monitoring

Monnit industrial sensors equipped with waterproof and dustproof enclosure being capable to operate in the most harsh conditions.

It is plug and play solution suitable for heavy industries preventive maintenance.

- **Advanced Vibration Meter**

Installed on the gas ventilation system, it reports vibration and temperature levels to prevent accidents



Factory

MONNIT KOREA

## Environmental Monitoring

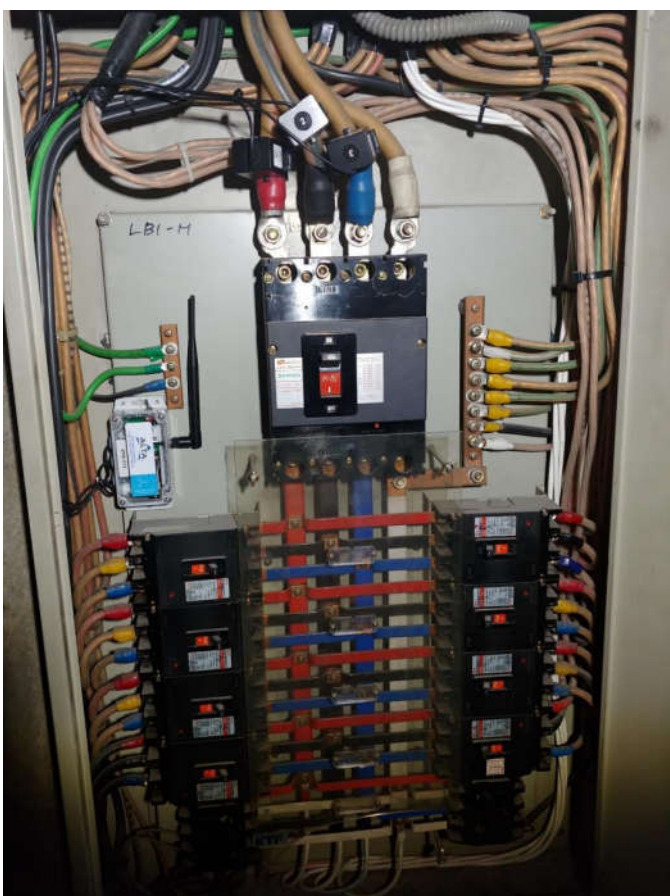
For food production facilities maintaining proper temperature and humidity can be crucial.

Monnit sensors help to oversee environmental fluctuations inside storages, refrigerators and factories making production and distribution process more smooth.

- **Humidity and temperature sensor**

Installed inside the food producing facilities, it monitors critical environmental conditions

Hospital



Hospital

MONNIT KOREA

## Energy Monitoring

Healthcare facilities are highly energy intensive. They are open 24/7/365, and can have numerous offsite facilities, making energy management a daunting task.

Managing energy across health facilities help to make informed decisins to reduce energy impacts on operating expenses

- **3-Phase Current Meter**

Sensors were installed all over the hospital to monitor energy consumption and flow





Hospital

MONNIT KOREA

## Refrigerator Monitoring

Maintaining a complex medical storage environment can be a major challenge. An overnight equipment failure can mean tens of thousands in losses.

Monnit IoT sensors can even trigger alerts for abnormal conditions that would be hard for someone to identify in person.

- **Temperature sensor**

Sensors send a real time data on conditions inside refrigerator for preventative maintenance



Hospital

MONNIT KOREA

## Environmental Monitoring

Maintaining proper quality of air inside the hospital is the basic in most important factor for preserving patients and employees health conditions.

Sensors are especially beneficial in cleanrooms by assessing and monitoring air pressure, quality and ventilation; all important considerations in a cleanroom environment.

- CO sensor
- CO2 sensor
- H2S sensor

Sensors monitor air conditions inside hospital laboratories for preventing damage to peoples health that can be caused by gas poisoning

Farm



Farm

MONNIT KOREA

## Water Temperature Monitoring /Control

Our advanced aquaculture monitoring tools provide real-time visibility into all aspects of your farm – and the data to make informed decisions. This gives a dramatic boost to the fish farming yield and productivity.

- **Water temperature sensor** provides real time information on temperature levels inside the pool
- **Controller** provides switch on/off for adjusting water temperature inside the pool automatically



Farm

MONNIT KOREA

## Equipment / Electricity Monitoring

Monitoring the equipment status and energy supply inside the farm can be crucial for preventing accidents and yield loss.

The real time-data and instant notifications on equipment status will give farm owners a peace of mind while protecting from high cost damage

- **AC Current meter** provides real time data on energy flow and consumption
- **Voltage detection sensor** sends immediate alarms in case of equipment failure



Farm

MONNIT KOREA

## Environmental Monitoring

Crops can be lost if the mixture of temperature, humidity, and light are incorrect. Monnit wireless sensors help farmers oversee and maintain the proper mix of atmospheric conditions. Individuals will then be alerted through an automated system should conditions fall outside of optimal ranges, allowing growers to maximize crop yields.

- **Humidity sensor**
- **Temperature sensor**
- **Light meter**

Real-time data on light, humidity and temperature levels inside the greenhouse



Farm

MONNIT KOREA

## Environmental Monitoring

Check temps and airflow in enclosures to ensure livestock well-being. Also monitor temperatures to help fend off disease or infections. Receive real-time alerts via text, email, or voice call should there happen to be any issues.

- **Humidity and temperature sensor**

Monitors environmental conditions and alerts if it falls above or below optimal ranges



Farm

MONNIT KOREA

## Environmental Monitoring

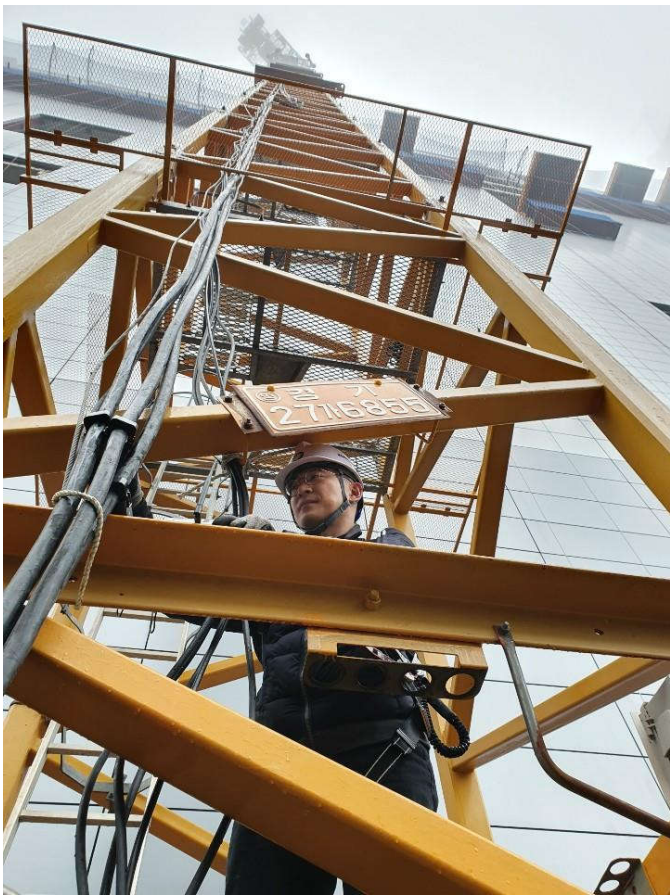
Monitor feeding equipment and automate the feeding process with Monnit system. This will help to reduce people on site and ensures that the cattle is being fed on time.

- **Ultrasonic sensor**

Monitors the level of grains inside the silo to inform when there is a need for feeding equipment to be refilled



Construction



Construction

MONNIT KOREA

# Accident Prevention

Monnit sensor solution helps monitor construction sites and uses data to predict patterns and prevent problems rather than only focusing on corrective actions once something goes wrong. This preventative approach helps save time and money, providing a more efficient jobsite.



- **Activity sensor** reports the number of times the tower crane was in use
- **Advanced vibration meter** monitors the condition of the crane and triggers in case of excessive vibrations



Construction

MONNIT KOREA

## Equipment / Machinery Tracking

Construction companies need to manage and maintain their equipment such as tractors, skids, excavators, dozers, backhoes, generators, etc. Monnit makes it affordable and easy to monitor this equipment by allowing builders to locate equipment, track usage, maintain equipment, avoid theft, and much more.

- **Activity sensor**

Installed on the forklift, it reports the number of times the vehicle was in use



Construction

MONNIT KOREA

## Concrete Curing Monitoring

Concrete temperature monitoring is critical to ensure the long-term strength and stability of concrete structures. Monitoring is necessary to verify:

- Temperature differentials did not go beyond safe limits
- Concrete did not cool more than 2.8°C per hour during the first 24 hours
- The core temperatures at various stages, in order to determine any necessary temperature control strategies to put in place
- Temperature consistency was maintained during the curing process.



- **Temperature sensor with probe**

Optimizes schedules and enhances efficiency with real-time collection of concrete temperature & strength.



Construction



# Safety & Environment on Site

Environmental monitoring enables construction and infrastructure projects to stay within permitted noise, dust, and vibration limits ensuring compliance with environmental plans, permits and other regulations, while mitigating and minimizing environmental impact.

The monitoring and management of environmental conditions also helps to protect against potential claims. So the ability to demonstrate the environmental commitment by considering the potential impact of the construction site on the surrounding environment is becoming increasingly important.

- Vibration sensor
- CO Detection sensor
- Temperature sensor
- Air quality sensor