

Remote Monitoring
Wireless Sensors



Better and Smarter with IoT

//

No matter what you do,
stay on top of your operations

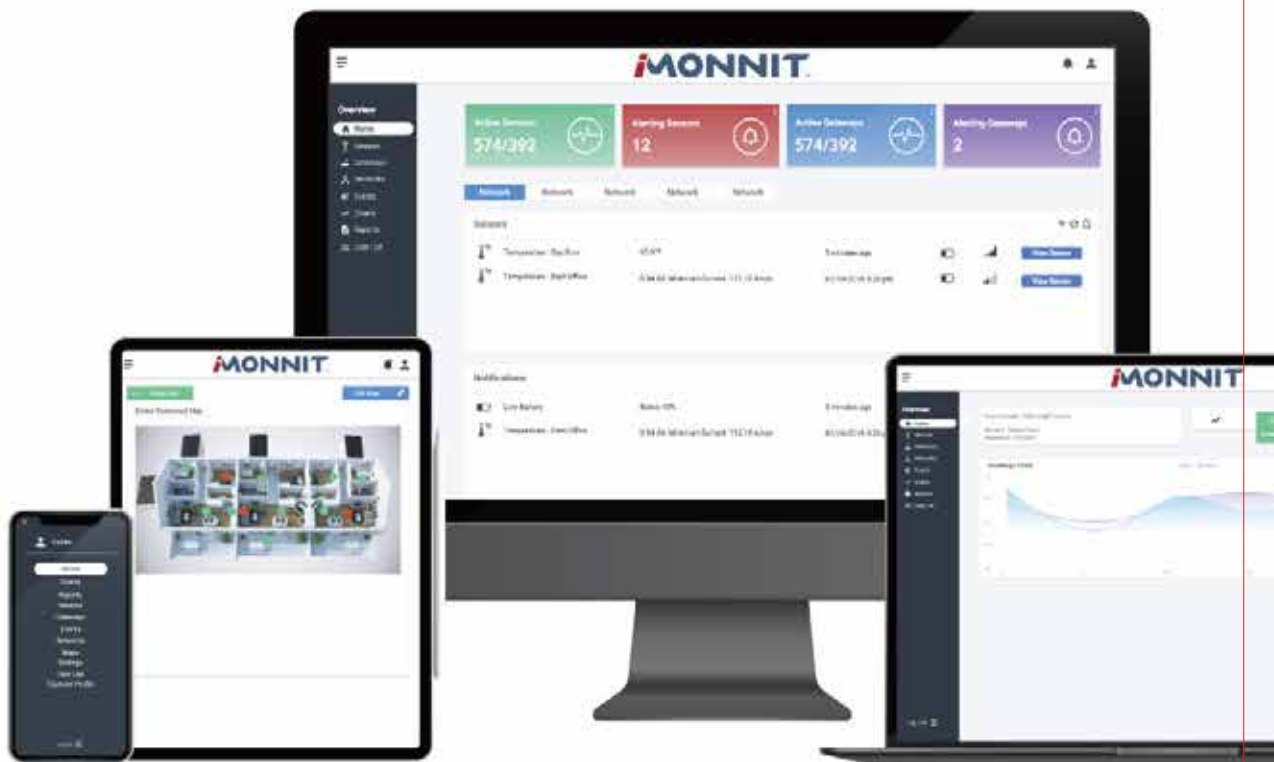
—whenever it is or wherever you are.”

MONNIT® KOREA

MONNIT KOREA

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Leader in IoT Wireless Sensor Solutions

MONNIT® KOREA



Over
80

plus
Sensors



Over
10

years
Experience



In
85

plus
Countries



Over
34

thousands
Clients



Over
15

billion
Readings



“

Any building can be
**Smarter,
Safer,
Secure!**

”

Monnit Korea is a leading provider of IoT wireless sensor technology. With our experience in various sensor manufacturing and platforms, we provide optimized and innovative solutions to customers across a wide range of industries. Our sensor includes technologies capable of measuring most physical characteristics, including pressure, position, temperature, vibration, humidity and etc.

With Monnit solutions monitoring of equipment, infrastructure and environments simplifies management, enables proactive maintenance, and can reduce workplace injuries and loss of valuable assets.

Our sensors are vital to the next generation of data-driven technology.



MONNIT's Strength

Low-power, wireless sensors and IIoT gateways are used by a broad spectrum of industries for smart monitoring of anything — from BMS to FM to Smart City.



Wireless Sensor Network

Easily integrated into existing monitoring system



Convenient User Interface

Cloud-based system available on all internet-accessable devices



Expenses Reduction

Labor and operation cost reduction through data analysis



Easy Setup and Use

Install in just a few minutes and get data immediately



80+ Sensor Types

Unlimited industry use cases



High Quality/Low Price

Hardware for affordable price/free basic software platform



Bank grade level security

Sensor data encryption on all levels of transmission



Superior signal range

300 m coverage in open space/ up to 16 walls penetration



Long Battery Life

Up to 10 years of use with regular AA batteries

Monnit Solution Process



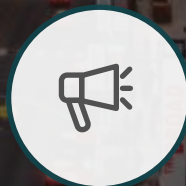
Data collection



Transmission of data to server



Server/ Cloud Data accumulation



Upon reaching the set thresholds



Immediate alarm to the manager

BANK GRADE SECURITY

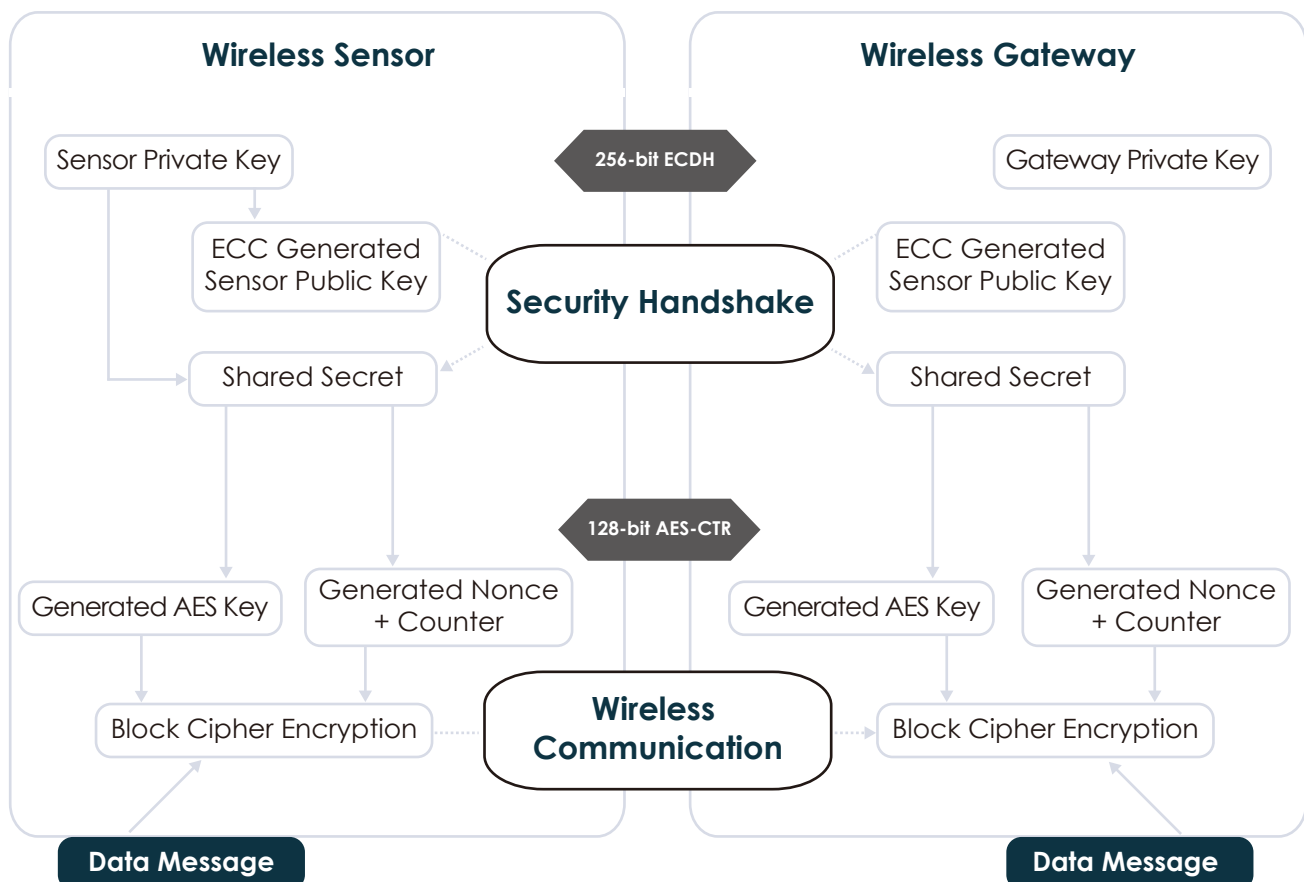
Monnit products use **Encrypt-RF®** bank level security, featuring a 256-bit exchange to establish a global unique key, and an AES-128 CTR for all data messages.

Security is maintained at all communication points from sensor to gateway, gateway to software, and back again.

▪ Upgraded security with Monnit SensorPrints™

Implementing 256-bit SHA3 authentication, SensorPrints creates a “fingerprint” for a Monnit Wireless Sensor that contains an authenticated sensor message. When data is transmitted from the sensor, it is accompanied by a generated authentication token. Upon receipt by the application, the token is evaluated via cryptographic hash function against a unique per sensor secret key. This step provides an unprecedented level of full-coverage security for any Monnit user wishing to secure their IoT devices and data.

이중암호화 구현 방식





WORLDWIDE CUSTOMERS



GLOBAL AWARD

2011

Utah Innovation Awards



Entrepreneur Excellence Award

2012

2015~2018

3 Year
Connected World Innovations Award, CRN's Internet of Things



Facilitiesnet Vision Award, Utah Best Of State
Manufacturer Of The Year Award

2019



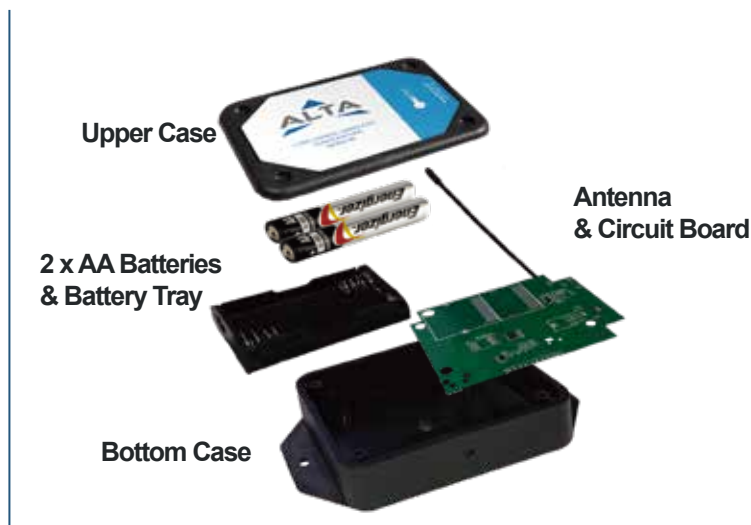
MONNIT® KOREA

Construction	Smart Factory	Smart Building	Logistics	Hospital	Soft. Platform
			Smart City	Smart Campus	Smart Farm

Sensor Type

AA-BATTERY SENSORS

Monnit AA sensors are the highest performing low power long range sensors among the existing worldwide with 10~12 years battery life and 300m signal coverage. Integrated on-board data storage allows ALTA sensors to store data messages if communication to a wireless gateway is disrupted.

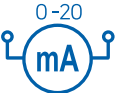
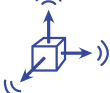
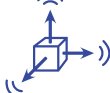
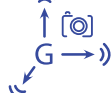
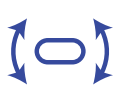


INDUSTRIAL SENSORS

The industrial sensor is the strongest and most robust type of MONNTT sensor. It is weather resistant that can withstand climate change such as wind. The sensor is sealed in a waterproof dustproof case rated IP65, NEMA 4X, CE. Powered by replaceable 3.6V (1800mAh) AA batteries. Industrial sensors can last for more than 10 years when the heartbeat is set to 10 minutes.



Sensor Map

					
TEMPERATURE	TEMPERATURE 3 FOOT PROBE	RTD HIGH TEMPERATURE	RTD LOW TEMPERATURE	DUCT TEMPERATURE	WATER TEMPERATURE
					
QUAD TEMPERATURE	THERMOCOUPLE	THERMOSTAT	ULTRASONIC	WATER DETECT	WATER ROPE
					
VOLTAGE METER (0 - 200v)	VOLTAGE METER (0 - 500v)	VOLTAGE DETECT	THREE PHASE CURRENT METER (150 / 500Amp)	AC CURRENT METER (150Amp)	AC CURRENT METER (500Amp)
					
CURRENT METER (0 - 20mA)	DRY CONTACT	SINGLE-INPUT PULSE COUNTER	MOTION DETECTION	VEHICLE DETECTION	LIGHT METER
					
OPEN/ CLOSED	BUTTON PRESS	ACTIVITY	VIBRATION	ADVANCED VIBRATION	G-FORCE SNAPSHOT
					
G-FORCE SNAPSHOT (Max-Avg)	IMPACT DETECT	TILT	PRESSURE	DIFFERENTIAL AIR PRESSURE	CARBON DIOXIDE
					
AIR QUALITY	CARBON MONOXIDE	HYDROGEN SULFIDE	AIR VELOCITY	HUMIDITY	CONTROL



Contents

1. Common Features

MONNIT® KOREA

AA Type			
Performance			Power Consumption
Wireless Range	Reliability (1-10)	Frequency	Battery Life
300m in open space	FHSS(9)*	940, 900, 868, 433 MHz	8 - 10 years (AA battery x 2) (Depending on communication speed)

Industrial Type				
Performance				Power Consumption
Wireless Range	Relability 1-10)	Frequency	Safety Standard	Battery Life
300m in open space	FHSS(9)*	940, 900, 868, 433MHz	UL508-4x specifications	8 - 10 years (Depending on communication speed)) Type : Replaceable 3.6V, 1800mAh (single AA sized)
Networking			Memory	
유형	보안		Update	Storage
Star (Highest rating)**	256-bit key exchange & AES-128 CTR Bank level security / dual encryption		Online remote firmware update	512messages Heartbeats 10min + 3.5일d/ 2hrs+ 42d

* Frequency Hopping Spread Spectrum (When a frequency is disturbed by a spread spectrum modulation method, it is retransmitted to other paths)

** Star Network : Top-rated networking method that provides connection to multiple platforms

2. Gateways



Ethernet Gateway

Specifications	Power	AC 220V	Memory 16,000 messages
	Frequency	920, 900, 868, 433MHz	
	Protocol	UDP, DHCP, TCP, SNMP, MODBUS TCP, DNS	

Ethernet Gateways allow your Monnit Wireless Sensors to communicate with the iMonnit™ System without the need for a PC. Simply provide power and plug the gateway into an open Ethernet network port with an internet connection. It will then automatically connect with our online servers, providing the perfect solution for commercial locations where there is an active internet connection.



4G LTE Cellular Gateway

Specifications	Memory	Storage of 15,000 sensor messages in case of communication failure
	Security	Encrypt-RF Bank-level security
	Battery	Up to 24 hours

Monnit LTE Cellular Gateways take advantage of the latest 4G LTE CAT-M1 cellular technology and backup battery, allowing your Monnit Wireless Sensors to communicate with the iMonnit system via cellular transmission even through power failure. This is the perfect solution for remote locations, or where an existing wired internet connection is not an option.



Serial Modbus Gateway

Specifications	Serial	RS232, RS485
	Serial signal	RS232 : TXD(OUT), RXD(IN) and Ground/Common RS485 : D+, D- and Ground/Common
	Network	RP-SMA connector 5.0 dBi Standard
	Power	4.5 ~ 36.0VDC

Modbus gateway can connect 50 wireless sensors per gateway to existing Modbus RS-232C and RS-485 sensing. The robust industrial case enables stable use in various harsh environments, and a wide range of power sources between 4.5-36.0 VDC can be connected.



Advanced Edge Gateway

Specifications	Hardware	CPU: Cortex-A53
		RAM: 1 GB LPDDR2 SDRAM
		Disk: 16 GB
		Operating System: Linux

Able to support custom edge based IoT applications the Advanced Edge Gateway is ideal for IoT OEMs and ISVs. Additionally, the Advanced Edge Gateway deploys as an MQTTS client, allowing data to be sent to MQTT brokers hosted on platforms such as Amazon AWS, Microsoft Azure, IBM Watson, or to a user's own broker. The gateway includes a local web interface

3-1. Electricity



INDUSTRIAL

Pulse Counter

Pulse counter can be connected to the pulse output of a system (water meter, power meter, etc.) to count the number of actuations within a given time frame.

- Application Water, gas & air flow meter production line tracking
- Max Counts more than 4 billion
- Input Voltage 0 ~ 15V(DC)
- Filter settings No filter, 4 Hz filter, 40 Hz filter
- Wire Length 90 cm



INDUSTRIAL

VDC 200 Voltage Detection

DC Voltage Detector detects the presence or absence of electricity. It is intended for use on battery or other DC sources, up to 50 Volts. The data is displayed as "Voltage Detected" or "No Voltage".

- Application Relays/switches, power supplies
- Full-scale Voltage 1 ~ 200VDC
- Voltage Detection Threshold Presence: >2VDC
Absence: <1.8VDC
- Wire Spec 22 AWG, Red(+), Black(-)
- Wire Length 30cm (expandable)



INDUSTRIAL

VDC 200 Voltage Meter

Voltage Meter measures the voltage between two electrical points. It can be connected to the power and ground of any voltage source and measure within stated accuracy up to 200 VDC.

- Application Vehicles batteries
Fire detectionsystem
- Resolution 0.01V
- Full-scale Voltage 0~200VDC
- Wire Length 30cm



INDUSTRIAL

VAC 500 Voltage Detection

AC voltage detection sensor can interface with other devices to detect voltage from 24 VAC to 500 VAC. The sensor notifies of the presence or absence of voltage. Perfect for monitoring electrical appliances.

- Application Sprinkler systems, HVAC, power couplings, machine room
- Full-scale Voltage 24 ~ 500 VAC
- Max Input Voltage 600VAC
- Conversion Time 228 μ s



INDUSTRIAL

VAC 500 Voltage Meter

Voltage Meter is an analog measuring device that reports the measured voltage on user specified intervals. It has three operating modes, in which you can obtain the voltage measurement in VACrms, the peak voltage, or the DC voltage.

- Application Power lines, machinery, generators, electrical motors
- Operation Modes VAC RMS,VAC Peak to Peak, VDC
- Full-scale Voltage 0 ~ 500 VAC
- Max Input Voltage 600 VAC



INDUSTRIAL

LOW
VOLTAGE

Dry Contact

Dry contact sensor detects when there is contact between the two wired end points. It can easily be integrated into existing switches or contact plates, can be configured to detect both closed and open loops alerting if contact is made or broken.

- Application Button/switch integration
Device/machine functioning
- Line length 30cm
- Detection Wires High impedance
- Trigger Contact (Loop closed)
No contact (Loop open)



INDUSTRIAL

LOW
VOLTAGE

0-20mA Current Meter

0-20 mA Current Meter is capable of measuring the current off another device or sensor up to 20mA VDC, by connecting the leads of the sensor to the positive and ground terminals of the device being measured.

- Application Current transducer, flow meter, infrared thermometer, sensors
- Accuracy Uncalibrated: 0.7mA, 0.35mA
Calibrated: 0.05mA
- Input Resistance 51Ω
- Full-scale Current 0~20mA (DC)



INDUSTRIAL

VAC
150/500

3 Phase Current Meter

The sensor measures the RMS current of an alternating current (AC) system using 3 current transformers (CTs) that wrap around the wires of a three phase power system. It reports Minimum RMS current, maximum RMS current, average RMS current, and duty cycle for each phase and the combined amp hours of all three phases.

- Application Current & Amperage monitoring
- Full-scale Current 0 ~ 150A / 0~500A
- Unit Ah, MJ, Kwh



INDUSTRIAL

VAC
150/500

AC Current Meter

AC Current Meter uses non-contact CT(current transformer) to measure current usage. This sensor displays the maximum, minimum, and average load currents and shows the current per hour (Ah, Wh).

- Application Current & Amperage monitoring
- Full-scale Current 0 ~ 150/500 Amp
- Frequency Range 50 ~ 100Hz
- Callibration Error +/- 0.2A
- Unit Ah, Wh, Kwh

MAKE SMART.

3-1. Electricity

3-2. Water Sensors

3-3. Temperature

3-4. Air

3-5. Accelerometer

3-6. Occupancy

3-7. Add-on Devices



INDUSTRIAL

Water Detection

The sensor detects when water is present by completing the circuit between the two lead wires. It can be configured to detect both the presence and non-presence of water.

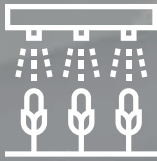
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|--------------------|--|
| • Application | Water heater, sump monitoring
plumbing leak detection |
| • Lead Wire Length | 90cm |
| • Detection Wires | High impedance |
| • Trigger | Water being detected |



Smart Building



Smart Construction



Smart Farm



Smart Factory



Smart City



INDUSTRIAL

Water Rope

Water Rope Sensor detects conductive liquids anywhere along the length of the detection rope by using two wires covered with conducting polymer and immediately sends an alert. The sensor rope dries quickly allowing the sensor to reset for next use.

- Application Leak detection
- Rope Length 3m(expandable to 30m)
- Rope Material PE + alloy lead
- Resistance 3Ω/meters



INDUSTRIAL

Ultrasonic

Ultrasonic Sensors can be used in a variety of applications for measuring distances between the sensor and objects in its path. The sensor sends out a high-frequency sound pulse and then times how long it takes for the echo of the sound to reflect back.

- Application Liquid level detection, inventory status
- Min Measurement Distance 10cm
- Max Measurement Distance 400cm

3-3. Temperature Sensors



INDUSTRIAL

Temperature

Temperature Sensor use a thermistor to accurately measure temperatures. These sensors are perfect for monitoring ambient temperatures around the sensors physical location.

- Application Server room, vacant property, warehouse, crop and livestock farm
- Operating Temp. $-40^{\circ}\text{C} \sim 125^{\circ}\text{C}$
- Accuracy $\pm 0.25^{\circ}\text{C}$



INDUSTRIAL

Temperature Probe

Temperature Sensor with Probe is optimized for measuring the internal temperature from the outside using a probe-type thermistor.

- Application HVAC(Air conditioning system), HACCP(Food safety management certification standard)
- Operating Temp. $-40^{\circ}\text{C} \sim 125^{\circ}\text{C}$
- Probe Length 90cm



INDUSTRIAL

High Temperature RTD

High Temperature Sensor uses a glass coated platinum RTD sensor to accurately measure temperatures from -50°C to $+370^{\circ}\text{C}$.

- Application Boilers, ovens, high temperature manufacturing facilities
- RTD Temp. Range $-50^{\circ}\text{C} \sim 370^{\circ}\text{C}$
- Accuracy $\pm 0.3^{\circ}\text{C}$

*RTD : Resistance Temperature Detector)



INDUSTRIAL

Low Temperature RTD

Low Temperature Sensor uses a glass coated platinum RTD sensor to accurately measure temperatures from -200°C to +162°C.

- Application Freezers & coolers
Cold chain
- RTD Temp. Range -200°C ~ 162°C
- Accuracy +/- 0.3°C

*RTD : Resistance Temperature Detector)



INDUSTRIAL

Thermocouple

Thermocouple Sensor is available with a hardwired thermocouple or K-type connector to measure high temperature applications.

- Application Pharmaceutical Laboratories,
Oil / Gas Factory
- Operating Temp. -100°C ~ 400°C
- Accuracy +/- 2.2°C
- Probe Length 152cm(K-type connector)



INDUSTRIAL

Duct Temperature

Duct Temperature Sensor uses an NTC thermistor with 2.4m lead wires to accurately measure temperatures in duct work, while maintaining a sealed environment.

- Application HVAC operation,
Air duct temperature
- Operating Temp. - 40 °C ~ 150°C
- Accuracy +/- 0.25°C
- Probe Length 244cm



INDUSTRIAL

Water Temperature

Water Temperature Sensor can collect temperature data of water or other noncombustible liquids using a sealed NTC thermistor with 90cm lead wires.

- Application Water/ liquid storage tanks,
swimming pool, aquarium, sauna
- Operating Temp. - 40 °C ~ 125°C
- Accuracy +/- 0.25°C
- Probe Length 90cm

3-4. Air Sensors



Hydrogen Sulfide(H₂S)

H₂S Sensors monitor the presence of toxic gas in the atmosphere. The sensor will deliver up to date readings to notify you the second gas levels breach a set threshold. Readings can be viewed online through graphs and downloadable spreadsheets.

- Application Oil & natural gas production
Sewers, wastewater treatment
- Measurement Range 0 ~ 50ppm
- Measuring Principle Electrochemical Reaction of H₂S
- Response Time < 40 seconds typical at 20°C
- Stabilization Time < 120 seconds



Carbon Monoxide(CO)

The mems based CO Sensor measures the the amount of CO gas in the surrounding air. The sensor returns carbon monoxide level and temperature values to the iMonnit System.

- Application Fireplaces, heaters, ovens
- Measurement Range 0 ~ 1000ppm
- Measuring Principle Electrochemical Oxidation of CO
- Response Time < 40 seconds typical at 20°C
- Stabilization Time < 120 seconds



Carbon Dioxide(CO₂)

The mems based CO₂ sensors have a small footprint and low cost but boast industry leading, premium performance specifications and are the longest lifetime sensors in the industry.

- Application Confined spaces
- Measurement Range 0 ~ 1000ppm CO₂
- Sensing Method Non-dispersive infrared absorption
Gold-plated optics
Solid-state source and detector
- Response Time 3min



INDUSTRIAL

Humidity

Humidity (RH) Sensor accurately monitors the relative humidity of the air temperature and dew point with high accuracy within a room or enclosure.

- Application Greenhouse, artgallery, museum, hotel
- Operating Range 0 ~100% RH
- Accuracy +/- 2%
- Response Time 8 sec



INDUSTRIAL

Air Velocity

Air velocity sensor measures the pressure difference between two input ports. Combined with the temperature and the altitude, the sensor determines at what rate the air is flowing in a system.

- Application HVAC, duct pressure
- Operation Mode MPS(Meter Per Second)
MPH(Meter Per Hour)
KMPH:(Kilometers Per Hour)



INDUSTRIAL

Differential Air Pressure

Differential pressure sensor measures the pressure difference between two ports. When viewing the sensor from the top, the right inlet port is the positive or high side pressure input.

- Calibrated and temperature compensated

- Application Hospitals, clean rooms, air flow
Building/room pressure
- Measurement Range Pressure: -500Pa ~ 500Pa
Temperature: -40C ~ 85C
- Media Compatibility Air, N2, O2



Air Particulate Meter

Air Particulate Meter measures PM1, PM2.5 and PM10 content using a laser that scatters based on the number and size of particles suspended in the air.

- Application Building/room air quality,
Construction/Demolition sites
Facoties, mines, petrochemicals
- PM1 0.3 ~ 1.0 Mg/m³
- PM2.5 1.0 ~ 2.5 Mg/m³
- PM10 2.5 ~ 10 Mg/m³
- Reaction Speed ~ 10sec



INDUSTRIAL

Pressure Meter

Pressure sensor measures pressure from a 5 volt pressure transducer. This sensor is capable of measuring pressures up to 21 kgf/cm² in compressed gas, noncorrosive liquid and vapor feed lines.

- Application Compressors, pumping system
- Measuring Medium Gas, liquid, vapor
- Measurement Range 0 ~ 300 PSIG
- Response Time 300msec
- Wire Length 1m



3–5. Accelerometer Sensors



INDUSTRIAL

Activity Detection

Activity Sensors can be used in a host of applications where detecting vibration (sudden movement) or counting the number of vibrations is required.

- Application Enhancement of restricted area security (Ex. window impact alert)
 Motor/machine usage cycle check
- Sensitivity 0.05g



INDUSTRIAL

G-force Snapshot

G-Force Snapshot Sensor Accelerometer activates at a set time interval (defined by user) and measures g-force along X, Y and Z axes. Primary use is as an inclinometer or tilt sensor.

- Application Smart factory machine malfunction detection
- Sensitivity 4096 count/g
- Sensitivity Range +/-2G, +/-4G, +/-8G (selectable)
- Accuracy +/-2.5%(force:X, Y, Z)



INDUSTRIAL

Tilt

Accelerometer - Tilt Sensor activates at a set time interval (defined by user) and converts accelerometer measurements to pitch and roll (0 to 180° -> -180° to 0°). The data is displayed in degrees with 0.1° of resolution.

- Application Earthquake detection, inclination Old building safety diagnosis
- Sensitivity 4096 coun/g
- Sensitivity Range +/-2G, +/-4g, +/-8g (selectable)
- Range 0°~180° / -180°~ 0°
- Resolution 0.1°



INDUSTRIAL

Impact

Impact Detect Sensor activates when g-forces are exceeded by a user defined threshold—up to 8 g-force. The user can key in the desired threshold for the g-force trigger. The data is displayed as "Force Deteced" or "No Force Detected".

- Application Parking vehicle shock monitoring Store/warehouse security
- High Performance Mode Output data rate : 800Hz High-pass filter cutoff: 16Hz
- Low Power Mode Output data rate : 12.5Hz high-pass filter cutoff : 0.25Hz



INDUSTRIAL

Vibration Meter

Vibration Meter Sensor uses an accelerometer to measure vibration speed (mm/s) and frequency (Hz) and duty cycle on all three axes.

- Application Bridges, railways, facilities Motor fault detection
- Speed Measurement range: 0~25.5mm/s Measurement resolution: 0.1mm/s
- Frequency Measurement range: 10~200Hz Measurement resolution: 1Hz



INDUSTRIAL

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 and temperature.

- Application Facility motor, building and bridge Tower crane monitoring
- Sensitivity Acc RMS/Acc Peak: 0 to 65.535mm/s² Velocity RMS: 0 to 655 35 mm/s Displacement: 0 to 655.35 mm
- Temperature -40°C ~ 125°C

3-6. Occupancy Sensors



Motion Detection

Motion detection sensor uses an infrared sensor to accurately detect movements made by people/animals within 4.5 m range.

- Application Restricted area access monitoring
Movement monitoring by area/
time zone
- Detection Range Horizontal : 100 °
Vertical : 80 °
- Detection Distance 4.5m / 3.7m / 2.7m(Set-up function)



INDUSTRIAL

Open-Closed

Open/Closed Sensor can be used to detect when a door or window is opened and closed using a magnetic switch.

- Application Restricted area access control
Automatic lighting system
- Switch SPST(1 circuit short contact point)
- Magnet Alnico magnet/Weatherproof
- Wire Length 38cm



INDUSTRIAL

Light Meter

Light Meter uses a highly sensitive photo-diode to detect and measure the intensity of light from 0-82,000 lux (luminescence/unit area). Can alert upon immediate detection of light or a change in light intensity.

- Application Art gallery, museum, greenhouse,
Facilities lighting
Energy management
- Max. Light Level 0 ~ 82,000.lux



Button

Button Sensor detects when the button has been pressed triggering a notification from the system. Best suits for situations where an immediate signal is needed.

- Application Hotel/motel front desk call
Restroom service/clean-up request
Emergency button
- Number of Operations 10,000,000

3-7. Add-on Devices



Thermostat

The thermostat is designed specifically for remote configuration and energy savings. It features an integrated motion sensor to auto detect if an area or room is occupied and can be set to enter an energy saving state when not needed. The thermostat allows to set a maximum and minimum temperature range for both occupied and non-occupied states.

- Application Smart office, hotel rooms, schools, sport centers, etc.
- Accuracy $\pm 3\%$ (10 - 90% RH)
- RH Operating range 0 - 100% RH



Control

The control allows a user to control two separate power relays, all through the iMonnit online sensors portal. Automatically control motors or electrical devices when a condition is detected by a sensor or group of sensors.

- Application Automatic control system
Sprinklers and pumps
- Activation Automatic/ Manual
- LEDs Power / frequency
Relay 1 status / Relay 2 status
- Max Operating Speed 20 times (1 minute interval)

4. Monnit Software

iMonnit Basic
Online Sensor Monitoring
FREE with no ongoing costs!

iMonnit Premiere
Online Sensor Monitoring
Minimal Annual Fee!

iMonnit HX
Heartbeat Credits

iMONNIT Basic / Premiere / HX

iMonnit monitoring software allows you to view and control the sensors in your network and receive alerts from them so you can take action. iMonnit comes in different options to meet the needs of any business.

From the turnkey cloud-based approach to extremely configurable on-prem options—allowing for air gap and other security requirements—iMonnit IoT software solutions accommodate firms around the globe.

- **iMONNIT Basic** is a free sensor management & configuration software where a customer can easily configure sensor check-ins, thresholds & alerts with a streamlined interface. Ideal for those new to remote monitoring or with small commercial networks.
- **iMONNIT Premiere** maximizes performance via enhanced configuration options & features at a small cost.
- **iMonnit HX** is an upgraded version of iMonnit Premiere, which allows you to collect precise data by setting a shorter data collection period.

iMONNIT®
 ONLINE WIRELESS SENSORS PORTAL



iMONNIT Enterprise

iMonnit Enterprise is available for large organizations with specific data/usage requirements. It provides the same feature set as the iMonnit Premiere online software but allows the organization to host and maintain their own sensor data.

Note: In order for gateways to be programmed for communication with your iMonnit Enterprise

- Minimum System Requirements

Windows Server 2012 or newer, 2 GB RAM,
2.0GHz Processor, ASP.NET Framework v4.5
Web Server, IIS 7, ASP.Net MVC Framework v4.0
SQL Server 2008 or Newer (Database Server)



Monnit MINE SDK

Monnit Mine; is an open software platform that provides the ability to integrate Monnit wireless sensors and gateways with your own software system.

Monnit wireless gateways can be unlocked, allowing them to be directed to a custom host or IP address, where an installation of Monnit Mine works as a translation application between Monnit wireless sensors networks and existing or custom software applications.



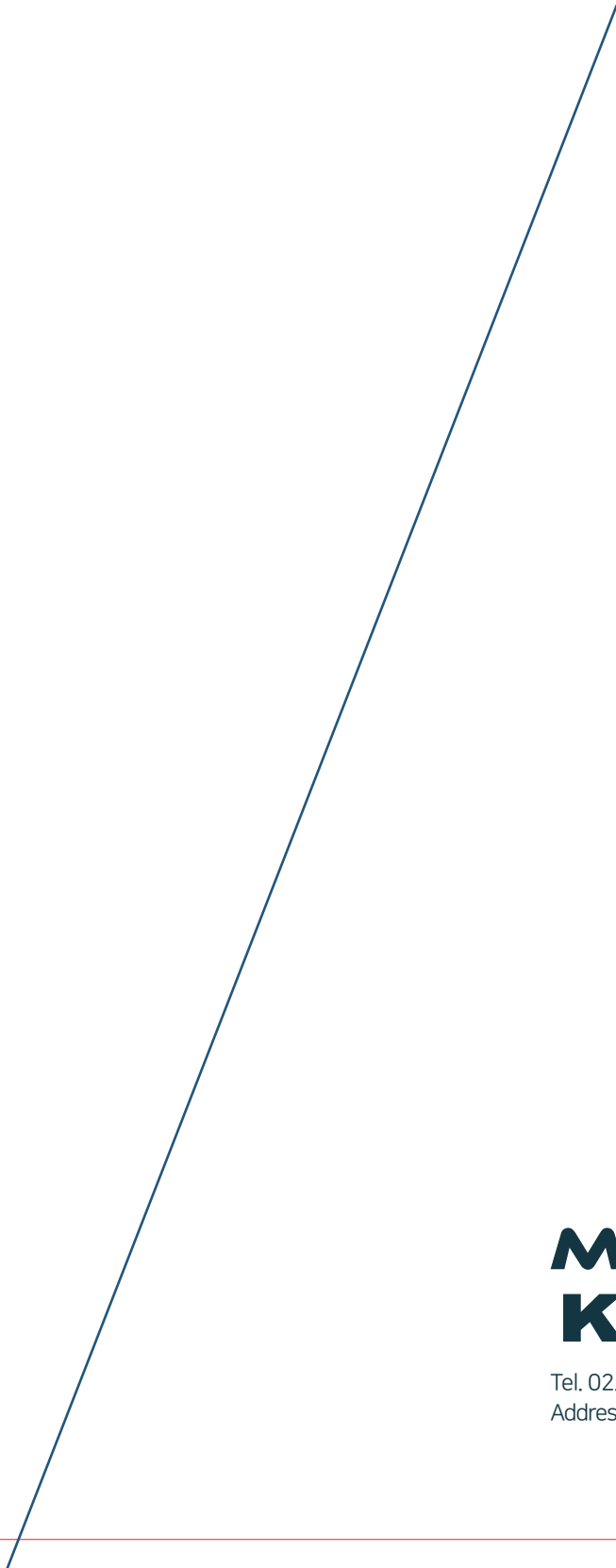
Gateway Unlock

Unlocking allows you to pair your Monnit Wireless Sensors & gateway with iMonnit Express software or your own backend system via Monnit Mine by pointing your Monnit Wireless Gateway to a custom host or IP address.

Monnit Wireless Sensor Network Monitoring - Feature Comparison

Features	iMonnit Basic	iMonnit Premiere / HX	iMonnit Enterprise MINE SDK
	Online Sensor Monitoring	Advanced Online Sensor Monitoring	Self Hosted Software
Price	Free	Call for Pricing	Call for Pricing
Basic configurations sensor name, heartbeat, measurement, notifications	✓	✓	✓
Advanced configurations Recovery settings, sub heartbeat Heartbeat in case of emergency		✓	✓
History reports	✓	✓	✓
Charts	✓	✓	✓
Data export CVS file download	✓	✓	✓
Calibration	✓	✓	✓
Monnit Link USB Gateway support	✓	✓	✓
Monnit Link Ethernet & Cell Gateway support	✓	✓	✓
Monnit Wi-Fi (MoWi) Sensors support	✓	✓	✓
Internet accessible	✓	✓	✓
Offline access			✓
Alert history	✓	✓	✓
Multiple users		✓	✓
Group configurations	✓	✓	✓
Access control		✓	✓
Email & 문자 알람	✓	✓	✓
In-app alerts	✓	✓	✓
Sensor mapping		✓	✓
Heartbeat min.	2 hours	10min / 1min.(HX)	1 second
# of networks	1	20	unlimited
# of sensors	500 per network	500 per network	500 per network
# of gateways	100	1,000	unlimited
# of users	1	unlimited	unlimited
Saved history	45 days	unlimited*	unlimited
Support service	online	online	online support on demand

* Past 12 months are viewable online. Older data can be made available— please contact Monnit Korea.



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 www.monnit.co.kr
 blog.naver.com/monnitkorea
 facebook.com/monnit.kor
 linkedin.com/company/monnit

Tel. 02.2088.1454 Fax. 02.2088.1453 E-mail. korea@monnit.com
Address. 2F, 13, Songi-ro, 30-gil, Songpa-gu, Seoul, S. Korea