



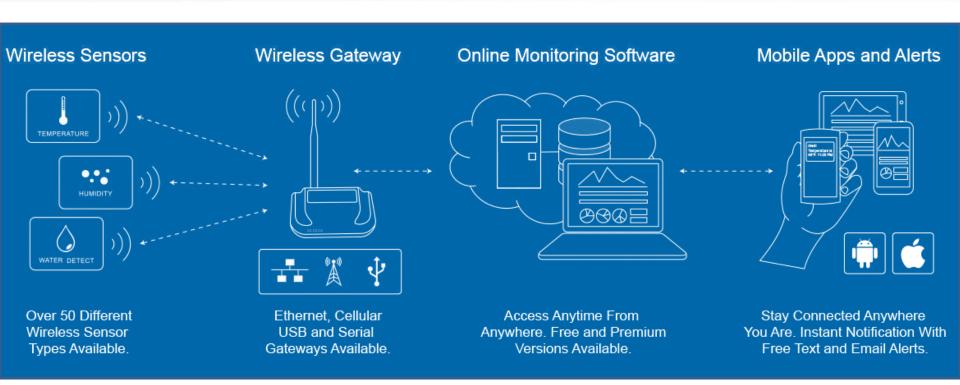
The Leader in Low-Cost, Remote Monitoring Solutions.

### **Wireless IoT Sensing Solution**

2018 Q2

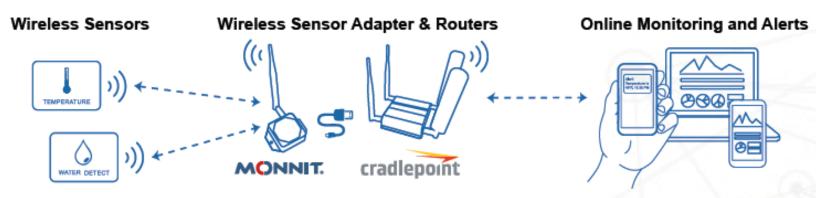


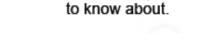
## **How Monnit Works**





## How Monnit & Cradlepoint Work





Wireless sensors monitor and

detect conditions you want

The wireless sensor adapter and router relay information between sensors and online monitoring software. Access sensor data from anywhere, anytime via online monitoring software. Remote alerts let you know if there is an issue.



## Cradlepoint Devices Verified

Cradlepoint Router Compatability: AER2100, AER1600, IBR900, IBR200, & Others.

#### COR IBR200



#### **IBR900**



#### **AER1600**



#### **AER2200**





## How It Works

1.



Create an online sensor monitoring account at www.imonnit.com.

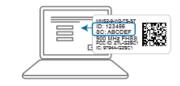
4.



Visit https://accounts.cradlepointecm.com a Cradlepoint site, to add your Monnit Adapter to your Cradlepoint Net Cloud account.

\*See User Guide for full details and walkthrough

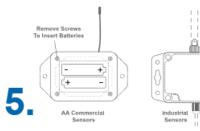
2.



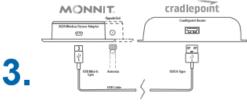
Follow the on-screen instructions to add devices to your account.

Flip Power

Switch



Insert batteries or use switch to power the wireless sensors on.



Plug both devices in, then connect the Monnit wireless sensor adapter via USB to the Cradlepoint Router.



View sensor data online or in the mobile app for Monnit to monitor the the things.



## Monnit ALTA Hardware

#### **Wireless Sensors**







1,000+ ft. non line-of-sight through 12-14 walls.

Long Battery Life

10+ years powered by 2 AA batteries.

Monnit Encrypt-RF™ Security

Integrated security (256-bit exchange and AES-128 CTR).

Onboard Data Memory

Store up to 512 readings per sensor.

Future Proof

Over-the-air updates allow products to be updated remotely.

100% Comprehensive Solution

No additional hardware, software or subscriptions are required. **No Monthly Fees**.







# 48 Unique ALTA Sensors (60+ Profiles)





















WATER

ROPE





**TEMPERATURE** 

**TEMPERATURE** 

DUCT **TEMPERATURE** 

**THERMOCOUPLE** 

HUMIDITY

WATER DETECT



















MOTION DETECTION

OPEN / CLOSED

**DRY CONTACT** 

CARBON MONOXIDE

ACTIVITY DETECTION

TILT

IMPACT DETECT

G-FORCE **SNAPSHOT** 

**VIBRATION** METER

0-20mA CURRENT METER





**VOLTAGE** DETECT



1-50 VOLT DETECT



0-20 AMP AC CURRENT METER



150 AMP SINGLE-INPUT AC CURRENT PULSE COUNTER METER



**BUTTON** 



50 PSIG **PRESSURE** 

METER





**300 PSIG PRESSURE** METER

QUAD **TEMPERATURE** 

LIGHT

METER

















PM2.5



ULTRASONIC 0-200 VOLT METER CURRENT METER

DIFFERENTIAL AIR PRESSURE

AIR **VELOCITY** 

AIR QUALITY



# Sensor Enclosures / Power Options





## Software Overview

- Secure, cloud-based sensor portal accessible on any internet enabled device
- Unlimited sensor history storage
- Notifications via text, email, and/or voice call
- Data analytics available in iMonnit Portal, or export to Excel or CSV.
- Webhooks/APIs allow integration with third party software
- Sensor mapping tools available
- Allows for complete configuration of wireless sensor's operation
- Android and iPhone apps available
- Guest account login
  - www.iMonnit.com
  - Username: guest
  - Password: m0nnitdem0







# Infinite # of Applications

#### **Wireless Temperature Sensors**

- Warehouse temperature monitoring to avoid frozen fire suppression systems.
- Warehouse temperature monitoring to avoid frozen fire suppression systems.
- Monitor vacant commercial property temperatures to avoid frozen pipes.
- Summer/winter (vacation) property monitoring for frozen pipes or excessive heat.
- HVAC system monitoring to detect failures or heating / cooling issues.
- Monitor temperature of K9 units (dog collar's and kennel).
- Art gallery temperature monitoring.
- Heat remediation of bed bugs (extermination).
- Freezer and cooler temperature monitoring to detect failure and prevent food spoilage.

#### **Wireless Water Temperature Sensors**

- Water Tank Temperature Monitoring
- Non-Combustible Liquid Storage Tank
   Temperature Monitoring
- Liquid Manufacturing Process
   Temperature Monitoring
- Pool Temperature Monitoring
- Aguarium Temperature Monitoring
- Wetlife Environmental

#### **Wireless Duct Temperature Sensors**

- · Air Duct Temperature Monitoring
- HVAC Operation & Testing
- Data Center Monitoring
- Coolers & Freezers
- · Environmental Monitoring

#### Wireless High Temp. RTD Sensors

- Boiler temperature monitoring to detect boiler failures.
- · Heater temperature monitoring.

#### **Wireless Low Temperature RTD Sensors**

- Freezer and cooler temperature monitoring to detect failure and prevent food spoilage.
- Environmental monitoring.
- Cadaver storage cooler temperature monitoring.

#### **Wireless Humidity Sensors**

- Greenhouse temperature and humidity monitoring.
- Environmental monitoring.
- Art humidity monitoring.
- · Humidor monitoring.

#### **Wireless Open/Closed Sensors**

- Commercial property door and window access.
- Residentia access.
- Bank owne access more

Many Listed by More | Application Online

# Application-specific IoT Solutions

## Sample Vertical Markets



















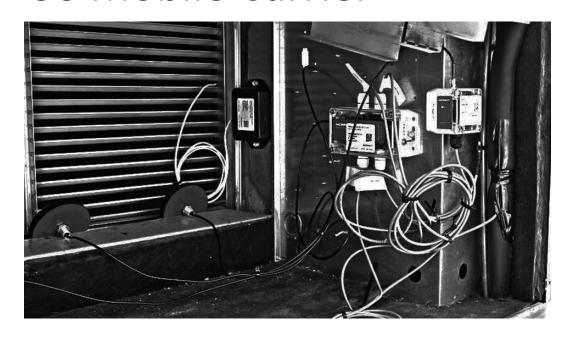




Small Business Remote Monitoring



### **US Mobile Carrier**



Remote Monitoring for Non-Scheduled Maintenance

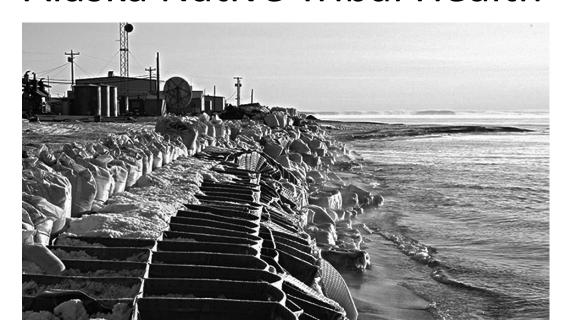
#### Cell Huts

- Real-time fault detection and diagnostics
- Provides for "Just-in-Time" maintenance
- Complete solution pre-configured prior to shipping for predictable installation





### Alaska Native Tribal Health



Remote Monitoring for Clean Drinking Water

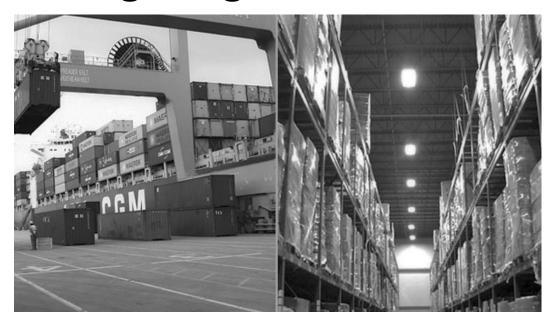
#### **Remote Water Plants**

- 500 sites in Alaska
- Extremely harsh conditions
- Vital to the health of over ½ million native people





## **Lineage Logistics**



Remote Monitoring for Refrigerated Warehousing

#### Cold Storage / Port Warehouses

- 1,000,000+ sq. foot refrigerated warehouses
- 110 sites in the U.S.
- Storage of enough food for every U.S.
   Citizen for three days





### Southwire Co.



Remote Monitoring for Smooth Operations

#### Wire Warehouses

- Largest manufacturer of wire, cables and cords in the world
- Track machine rotational speeds
- Track machine bearing temperatures







# Agriculture

Wouldn't it be great to have a deep understanding of the environmental conditions affecting the atmosphere around you? Monnit wireless sensors are perfect for growing crops in the optimal conditions. Track the temperature, humidity, light, air flow, or anything else which might cause problems. Monnit's automated system will then alert you via text, email, or voice call should conditions fall out of the optimal range.





## **Corporate Property**



Monnit provides a remote monitoring solution for any sized business. Our wireless sensor systems can help you detect and track building access, vehicles, assets, and people. Sensor alerts can be sent via email, text, or voice call depending on your custom notification settings. Now you can be alerted immediately of any unauthorized access to restricted areas after business hours or to just keep an eye on the delivery dock.





## Industrial Manufacturing



Each manufacturing environment is different based on the type of equipment needed. Monnit produces a wide variety of sensors to fit your specific application, but we don't want to stop there. If one of our sensors doesn't quite work for you, we can create a custom solution to fit any specific need. From simple vibration detection sensors to 100% fully customized networks, Monnit is here to help!





# Heating and Cooling



HVAC systems for large buildings require a lot of energy to provide the appropriate conditions for residents or employees. Track this energy consumption with an A/C current meter and use some of Monnit's other sensors to get a complete understanding of your heating and cooling system. Receive alerts directly to any internet-enabled device should an issue arise, allowing for quick action before conditions become uncomfortable.

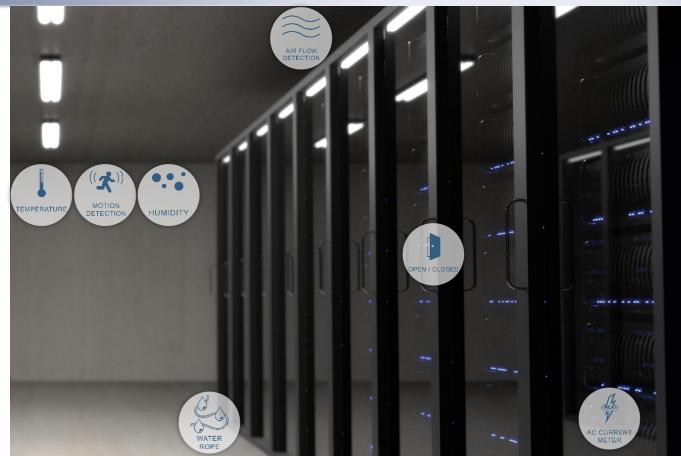




## **Data Centers**



Data centers are a critical piece of infrastructure for any company big enough to have them. Temperature, motion detection, and humidity sensors are perfect for keeping an eye on the conditions of your server room. Use a water rope detection sensor to ensure there are no unwanted leaks and air flow meters to keep rooms cool.





## Property Management



There are a wide variety of property management situations, from second homes to foreclosed houses awaiting sale. Monnit makes it easy to track homes which are not occupied 24/7. Never worry about a door being left open or water pooling up in the basement due to an unexpected leak. Receive alerts on your phone should a situation arise which would require swift action.





# Mobile Refrigeration



Cold transportation is a major part of the U.S economy. Fresh products are being sold in areas they never could have made it to in the past. Keep an eye on the temperature of your product while driving to safeguard against any surprises in route.





## **Food Services**



Walk-in refrigerators or freezers usually have several thousand dollars worth of product in them at any given time. In addition to costly repairs, food spoilage is another concern should one of the walk-in refrigerators malfunction. Monnit wireless sensors are a perfect solution, alerting you of any problems before irreversible damage occurs.





## **Small Business**



Small businesses differ drastically in terms of their products and/or services offered. Monnit has a complete line of sensors available to help any small business. All of our wireless solutions are relatively inexpensive, a private network can be set up for under \$500. Choose a couple of sensors that will work best and monitor conditions of your small business around the clock.





# Pharmacy / Laboratory



Labs have higher standards for atmospheric conditions compared to any other room. In addition to monitoring the atmosphere, use vibration meters to ensure centrifuges and other equipment is functioning properly. Temperature sensors are perfect for refrigerators or freezers to help avoid costly spoilage due to faulty machinery.





### **Monnit Customers**







































































































































### Resources

cradlepoint Landing Page @ Monnit.com

Email: <a href="mailto:cradlepoint@Monnit.com">cradlepoint@Monnit.com</a>

#### **Other Resources**

Case Studies & White Papers
Click Here

Applications by Sensor Type

Click Here

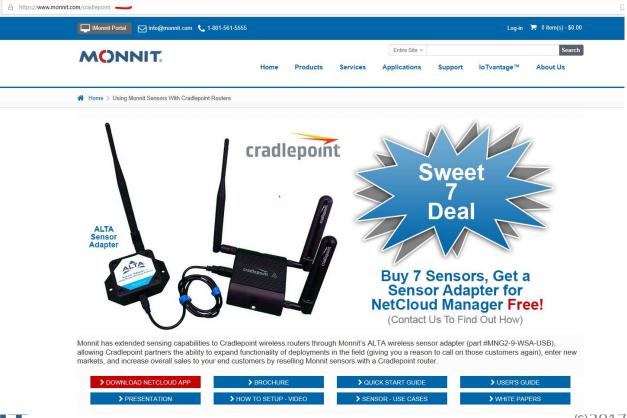
Sensor Data Sheets
Click Here







## Cradlepoint Resources @ Monnit





# Installation Support / Warranty



#### **Easy Setup & Integration**

Professional labor is not required. Setup an enterprise-grade wireless sensor network in less than 15 minutes!

IoT / RF Expertise + Technical Support

Available 8:00 – 5:00 pm (MST) Monday – Friday Phone support, online chat or email.

#### Warranty

Monnit hardware is backed by our standard one year warranty.

"Internet of Things" Solutions

## Contact Info

Nick Mecham - VP, Business Development

E: <u>cradlepoint@Monnit.com</u> or <u>nickm@Monnit.com</u>

T: 801-561-5555

