SMART



Wireless IoT Sensors Platform

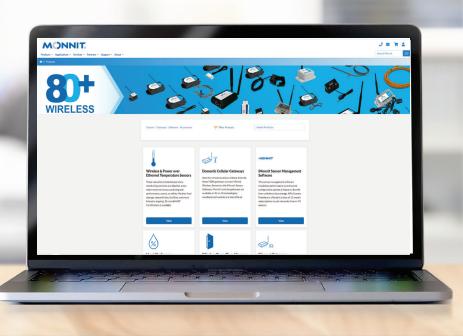
2021 Product Catalog







Conditions.



Dashboards / Alerts.

With over 10 years in developing IoT data, Monnit has entrenched its place as a global IoT leader with over 37,000 customers, over 15 billion data readings, and more than 2,000 product SKUs.

Monnit's intention is to be the global leader in touch points to Enterprise. Our team is dedicated to innovation and customer satisfaction.

HOW MONNIT WORKS



Software.



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For more information about our products or to place an order, please contact our sales department at brett@smartm2m.co.za or 0027823365990. Visit us on the web at www.smartm2m.co.za



Temperature Sensors

Wireless Standard Temperature Sensors

The ALTA Wireless Temperature Sensors uses a type NTC thermistor to measure temperature. The sensor outputs the ambient temperature in degrees Fahrenheit. The sensor is accurate to \pm 1° C (\pm 1.8° F). Increased accuracy to \pm 0.25° C (\pm 0.45° F) can be accomplished with user calibration.

Battery / Enclosure

Part Number MNS2-9-W2-TS-ST Coin Cell MNS2-9-W1-TS-ST Industrial MNS2-9-IN-TS-ST

Longer probe lengths are available for this product!





Wireless High Temperature Sensors

ALTA Wireless High Temperature Sensors use an RTD to accurately measure temperatures from -50°C to +370°C. The solution is perfect for high temperature critical applications such as ovens, heaters, furnaces and boilers.

Battery / Enclosure

AA Industrial **Part Number**

MNS2-9-W2-TS-HT-L03 MNS2-9-IN-TS-HT-L03

Longer probe lengths are available for this product!





Wireless Low Temperature Sensors

ALTA wireless Low Temperature Sensors use an RTD to accurately measure temperatures from -200°C to +162°C. This solution is recommended for medical grade coolers that cool at temps colder than -40C, cryogenic applications, as well as standard freezers and refrigerators.

Battery / Enclosure

AAIndustrial **Part Number**

MNS2-9-W2-TS-LT-L03 MNS2-9-IN-TS-LT-L03

Longer probe lengths are available for this product!







Wireless Duct Temperature Sensors

Wireless Duct Temperature Sensors in commercial, enterprise, and industrial-grade housings are available for duct monitoring. Each duct temp sensor features a probe temperature range of -40°C to +150°C (-40°F to +302°F) and an NTC type thermistor with UL listed plenum cable for superior accuracy.

Battery / Enclosure Part Number

 AA
 MNS2-9-W2-TS-DT-L08

 Coin Cell
 MNS2-9-W1-TS-DT-L08

 Industrial
 MNS2-9-IN-TS-DT-L08



Wireless Digital Temperature Sensor

Monnit's ALTA Digital Temperature Sensor has a range of -40°F to +257°F (-40°C to +125°C) to support cold food storage, clinical vaccine storage, research labs, and other health-related fields.

Battery / Enclosure Part Number

AA MNS2-9-W2-TS-SD-L03



Humidity Sensors

Wireless Humidity Sensors

ALTA Wireless Humidity Sensors allow you to monitor the relative humidity of the air within a room or enclosure. This solution is ideal for monitoring humidity within greenhouses, industrial spaces, museums, saunas, and humidors. They can also be used for residential applications such as controlling mold, mildew, or dust mites.

Battery / Enclosure Part Number

AA MNS2-9-W2-HU-RH
Coin Cell MNS2-9-W1-HU-RH
Industrial MNS2-9-IN-HU-RH







Open / Closed Sensor

Wireless Open / Closed Sensor

ALTA Wireless Open / Closed sensors provide information on the status of doors, windows, cabinets, etc. Know if a building or area is being accessed when it should not be, or if a door or window has been left open.

Battery / Enclosure

AA MNS2-9-W2-OC-ST
Coin Cell MNS2-9-W1-OC-ST
Industrial MNS2-9-IN-OC-ST



Infrared Motion & Occupancy Sensor

Wireless Infrared Motion Sensor

Monnit's Wireless ALTA PIR Motion Sensors detect motion via passive infrared (PIR) technology to augment facility security, protect inventory, or optimize building services through usage data.

Battery / Enclosure

AA

MNS2-9-W2-MS-IR

AA (Wide Angle)

Coin Cell

MNS2-9-W1-MS-IR



AC Current Meters

Wireless 20 Amp AC Current Meter

This low power, 20 Amp AC Current Meter remotely audits power consumption. The electric power draw of servers, vending machines, or workout machines can all be monitored using this current transducer.

Battery / Enclosure
AA
MNS2-9-W2-CM-020
Industrial
MNS2-9-IN-CM-020





Wireless 150 Amp AC Current Meter

Remotely monitoring your business with a 150 Amp AC Current Meter opens up many possibilities. This is enough to measure the power consumption of server systems and current used by low to medium power industrial equipment.

Battery / Enclosure Part Number

AA MNS2-9-W2-CM-150 Industrial MNS2-9-IN-CM-150



Wireless 500 Amp AC Current Meter

A one-phase high power 500 Amp AC Current Meter is ideal for measuring commercial generators' power consumption, heavy duty industrial equipment, or main breakers in industrial and commercial breaker panels.

Battery / Enclosure

Part Number MNS2-9-W2-CM-500

AA Industrial

MNS2-9-W2-CM-500 MNS2-9-IN-CM-500



Light Meter

Wireless Light Meter

These sensors enjoy a broad customer base because they help protect light-sensitive materials and irreplaceable art, enhance crop yields, and even play a vital role in security.

Battery / Enclosure

Part Number

AA Industrial MNS2-9-W2-LS-LM MNS2-9-IN-LS-LM





Three-Phase Current Meters

Wireless 20 Amp Three-Phase Current Meter

Incorporate this 20-amp Three-Phase, revenue grade device into facilities relying on powerful devices and systems, such as machine shops. Remotely monitor power consumption to track motor health or power system faults. Monitor min/max RMS current, duty cycle of each phase combined amp hours, and other metrics.

Battery / Enclosure Part Number
Industrial MNS2-9-IN-3P-020



Wireless 150 Amp Three-Phase Current Meter

Remotely monitoring your business with a 150 Amp AC Current Meter opens up many possibilities. This is enough to measure the power consumption of medium to heavy duty three-phase systems: environmental chambers, very large HVAC systems, or medium and heavy duty industrial motors.

Battery / Enclosure Part Number
Industrial MNS2-9-IN-3P-150



Wireless 500 Amp Three-Phase Current Meter

Use this sensor and be alerted about imbalances or power faults. The sensor uses $3 \times 0-500$ amp current transducers to monitor the main power for commercial buildings.

Battery / Enclosure Part Number
Industrial MNS2-9-IN-3P-500





Interface Meters

Wireless Dry Contact Sensors

The ALTA Wireless 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. When the sensor detects contact between the two end points, it will immediately turn on the RF radio and transmit the data to the wireless gateway and iMonnit Monitoring and Notification System.

Battery / Enclosure Part Number

AA MNS2-9-W2-DC-CF-L01
Coin Cell MNS2-9-W1-DC-CF-L01
Industrial MNS2-9-IN-DC-CF-L01

Longer probe lengths are available for this product!



Wireless 20 mA Interface Current Meter

Easily update existing scientific or industrial sensors to wirelessly collect process data. Remotely monitor current transducers, as well as oxygen, pH, magnetic flow sensors, and more.

Battery / Enclosure Part Number

AA MNS2-9-W2-MA-020
Coin Cell MNS2-9-W1-MA-020
Industrial MNS2-9-IN-MA-020



Wireless 0-5 VDC Interface Volt Meter

Easily monitor potential differences (voltage) between two electrical points. Use turnkey voltage meters to retrofit common industrial sensors, monitor batteries, renewable energy sources and more.

Battery / Enclosure Part Number

AA MNS2-9-W2-VM-005
Coin Cell MNS2-9-W1-VM-005
Industrial MNS2-9-IN-VM-005



Wireless 0-10 VDC Interface Volt Meter

Add turnkey Wireless Voltage Meters to commonly used industrial sensors and remotely monitor the voltage between two points. Get data from previously "dumb" devices to optimize operations.

Battery / Enclosure Part Number

 AA
 MNS2-9-W2-VM-010

 Coin Cell
 MNS2-9-W1-VM-010

 Industrial
 MNS2-9-IN-VM-010







Thermocouple

Wireless Thermocouple Sensors

The ALTA Wireless Thermocouple is available with either a hardwired thermocouple or a K-Type connector (for supporting various thermocouple types and ranges) to measure high temperature applications. The hardwired thermocouple option measures temperatures from -100C (-148F) to 400°C (752°F).



FIXED PROBE

Battery / Enclosure Part Number AAMNS2-9-W2-TS-TC-HW Coin Cell MNS2-9-W1-TS-TC-HW

K-TYPE CONNECTOR

Battery / Enclosure Part Number AA MNS2-9-W2-TS-TC-KP Coin Cell MNS2-9-W1-TS-TC-KP Industrial MNS2-9-IN-TS-TC-KP

Accelerometers

Industrial

Wireless G-Force Snapshot Accelerometer

The G-Force Snapshot sensor 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.

MNS2-9-IN-TS-TC-HW

Battery / Enclosure Part Number





Wireless Advanced Vibration Meter

The Advanced Vibration Meter uses an accelerometer to measure vibration and frequency on three axes. 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.

Battery / Enclosure Part Number AA MNS2-9-W2-AC-ADV Industrial MNS2-9-IN-AC-ADV-L10





Wireless Tilt Detection Sensor

With a measurement range of $0-180^\circ$ and accuracy of 0.5° , this sensor instantly reports (in degrees) when movement exceeds preset limits. If a guard arm is breached, the tilt detect sensor sends an alert via a text, email, or call. The device can sense whether it is "Up," "Down," and "Stuck." Any movement between these regions will be recorded.



Wireless Vibration Meter

The vibration meter reports data as speed (mm/s) and frequency (Hz) on all three axes, and how long the sensor was measuring during the interval. Measurement methods are: Peak acceleration RMS, peak velocity RMS, and true RMS.

Battery / Enclosure Part Number

AA MNS2-9-W2-AC-VM
Industrial MNS2-9-IN-AC-VM



Wireless G-Force Max-Avg Accelerometer

The G-Force Max/Avg sensor measures the maximum and average g-force values along X, Y, and Z axes. Custom Delta values allow for the user to set thresholds which, when exceeded, will trigger the sensor to report in immediately. Configurable data rates allow for more samples to be collected for every measurement with higher data rates resulting in faster reaction time. The data reported is useful for tracking periodic motion and event detection.





Wireless Tilt Sensor

Better understand your operations, machine health, or structure status by collecting inclination data or tracking pitch and roll with Monnit's ALTA Wireless Tilt Sensors. If a tilt sensor detects a deviation from your preset limits during measurement, an alert is issued via a text, email, or call.

Battery / EnclosurePart NumberAAMNS2-9-W2-AC-TLCoin CellMNS2-9-IN-AC-TLIndustrialMNS2-9-W1-AC-TL



Wireless Impact Sensor

The Impact Detection 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. This sensor has two operation modes that can be also selected by the user: High Performance and Low Power.

Battery / Enclosure

AA

Coin Cell
Industrial

Part Number

MNS2-9-W2-AC-IM

MNS2-9-W1-AC-IM

MNS-9-IN-AC-IM



Wireless Voltage Detection

Wireless 200 VDC Voltage Meter

Integrate a Wireless 200 VDC Voltage Meter to monitor the electrical status of items you depend on, like industrial lift trucks, solar PV panels, and power banks. Remotely monitor status and operation.

Battery / Enclosure Part Number

AA MNS2-9-W2-VM-200
Coin Cell MNS2-9-W1-VM-200
Industrial MNS2-9-IN-VM-200





Wireless 500 VAC Voltage Meter

Integrate a Wireless 200 VDC Voltage Meter to monitor the electrical status of items you depend on, like industrial lift trucks, solar PV panels, and power banks. Remotely monitor status and operation.

Battery / Enclosure F

Part Number

AA MNS2-9-W2-VM-500
Coin Cell MNS2-9-W1-VM-500
Industrial MNS2-9-IN-VM-500



Wireless 200 VDC Voltage Detection Sensor

This Wireless 200 VDC Voltage Sensor monitors the on/off status of equipment, machines, or battery levels. Track power sources up to 200 VDC for industrial vehicles, ATVs, adapters, PV solar equipment and more.

Battery / Enclosure Part Number

 AA
 MNS2-9-W2-VD-200

 Coin Cell
 MNS2-9-W1-VD-200

 Industrial
 MNS2-9-IN-VD-200



Wireless 500 VAC Voltage Detection Sensor

Wirelessly monitor voltage for critical equipment and systems up to 500 VDC. Keep an eye on sprinkler systems, HVAC, power couplings, and sump pumps. Know about electrical faults and act quickly to keep business moving.

Battery / Enclosure Part Number

AA MNS2-9-W2-VM-500
Coin Cell MNS2-9-W1-VM-500
Industrial MNS2-9-IN-VM-500





Water Detection Sensors

Wireless Rope Sensor

The ALTA Wireless Water Rope Sensor detects the presence of water anywhere along the surface of the rope. The sensor comes with 10 feet of water rope. Additional 10 ft. sections are available and can be connected up to 100 feet.

Battery / Enclosure

Part Number

AA MNS2-9-W2-WS-WR
Coin Cell MNS2-9-W1-WS-WR
Industrial MNS2-9-IN-WS-WR



Wireless Water Detect Plus Sensors

The Wireless Water Detect Plus Sensor employs a wall- or surface-mountable probe at the end of a 3' lead to detect water's presence (or absence). The probe is often used in sanitation or process applications to detect levels in reservoirs or vats of non-combustible liquid.

Battery / Enclosure Part Number

 AA
 MNS2-9-W2-WS-WP-L03

 Coin Cell
 MNS2-9-W1-WS-WP-L03

 Industrial
 MNS2-9-IN-WS-WP-L03



Wireless Water Detection Puck

Housed in a vulcanized hockey puck, this submersible sensor detects water's presence (or non-presence). Drop this sensor nearly anywhere to monitor for leaks / spills, e.g., production, manufacturing, or building maintenance.

Battery / Enclosure

AA

Part Number

MNS2-9-PK-WS-PS





Wireless Water Detection Sensors

These popular sensors detect the presence (or non-presence) of non-combustible liquids (e.g., water). Deploy in such applications as sump pump monitoring, water heater drip pan monitoring, or between dry wall and sub flooring.

Battery / Enclosure

Part Number

MNS2-9-W2-WS-WD-L03 AACoin Cell MNS2-9-W1-WS-WD-L03 Industrial MNS2-9-IN-WS-WD-L03



Pulse Counters

Wireless Pulse Counters

The ALTA Wireless 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. The wireless pulse counter is an electronic counter capable of counting passive (open/closed switch) or active (up to +15 VDC) pulses.

Battery / Enclosure

Part Number

AA MNS2-9-W2-PC-01 Coin Cell MNS2-9-W1-PC-01 Industrial MNS2-9-IN-PC-01



Pressure Meters

Wireless 50 PSIG Pressure Meters

Monnit's Wireless 50 PSIG Pressure Meters keep lab managers, field service engineers, and other professionals connected to processes and machinery. If line pressure deviates from user-set thresholds, this pressure sensor instantly alerts the user via a text, email, or call.

Battery / Enclosure

Part Number

AA MNS2-9-W2-PS-050 Industrial MNS2-9-IN-PS-050







Wireless 300 PSIG Pressure Meters

Indispensable to facility managers, fabricators, and legacy machine operators, Monnit's 300 PSIG Wireless Pressure Meter remotely monitors line pressures (gas, liquid, or vapors). If pressure exceeds user-defined limits, the user receives an alert via an email, call, or text.

Battery / Enclosure AA MNS2-9-W2-PS-300 Industrial MNS2-9-IN-PS-300



Button Press Sensors

Wireless Button Press Sensors

Need help providing swift customer service or deploying a large-scale sensor network? Instant alerts from Monnit's Wireless Button Press Sensors support you by streamlining sensor deployment and expediting customer service requests.

Battery / Enclosure

AA

MNS2-9-W2-TS-ST

Coin Cell

MNS2-9-W1-TS-ST





Gas Detection Sensors

Wireless Carbon Monoxide (CO) Sensor

This unique battery-powered sensor monitors job sites, offices, and residential complexes for carbon monoxide (CO). Within a small footprint, the MEMS-based device packs a 0-1,000 PPM measurement range and automated data logging.

Battery / Enclosure Part Number
AA MNS2-9-W2-GS-C1





Wireless Carbon Dioxide (CO₂) Sensor

Trusted by facility managers, this MEMS-based sensor monitors CO_2 levels in the air. Get an alert if CO_2 levels surpass preset limits. It's used to protect indoor air quality in greenhouses, marine vessels, and HVAC systems.

Battery / Enclosure

AA

Part Number

MNS2-9-W2-GS-C2



Wireless Hydrogen Sulfide (H₂S) Gas Sensor

This safety sensor tracks the presence of $\rm H_2S$ gas, which is toxic and flammable. Use to safeguard workers in oil / gas production, wastewater treatment, utilities, and other hazardous areas.

Battery / Enclosure

Part Number

AA MNS2-9-W2-GS-H2S



Resistance Sensors

Wireless Resistance Sensor

These sensors read the resistance across a resistive load up to 250K Ohms and are meant to connect to passive devices only.

Battery / Enclosure

Part Number

AA Coin Cell Industrial MNS2-9-W2-RS-ST-L03 MNS2-9-W1-RS-ST-L03 MNS2-9-IN-RS-ST-L03





Ultrasonic Ranging Sensors

Wireless Enterprise Ultrasonic Ranging Sensor

This enterprise-grade remote monitoring solution measures the distance between itself and objects in its path. Use for liquid-level detection, inventory status, object detection and other indoor or outdoor applications.

Battery / Enclosure AA

Part Number MNS2-9-W2-US-ST



Wireless Industrial Ultrasonic Ranging Sensor

Packaged in a weatherproof housing, Monnit's ALTA Industrial Ultrasonic Ranging Sensor measures levels or detects objects. Indoor and outdoor applications include vehicle / object detection, capturing liquid levels, and tracking inventory.

Battery / Enclosure

Part Number

Industrial

MNS2-9-IN-US-IN-MPL-PA



Air Quality Sensor

Wireless Air Quality Sensor

This mount-and-monitor device measures particulate matter that's coarse (PM10), fine (PM2.5), and ultra-fine (PM1) inside mines, production facilities, commercial kitchens and facilities, as well as business buildings. This unit is powered by line-power and has a battery backup.

Battery / Enclosure

Part Number

AA

MNS2-9-W2-AQ-P25A-LPO





Air Velocity Sensors

Wireless Air Velocity Sensors

The Air Velocity Sensor measures the pressure difference between two input ports, as well as ambient temperature and altitude to determine airflow speed in a system. Use in sensitive areas, e.g., hospitals and clean rooms.

Battery / Enclosure

AA

Part Number

MNS2-9-W2-PS-AV-LPO

Industrial MNS2-9-IN-PS-AV



Differential Air Pressure Sensors

Wireless Differential Air Pressure Sensors

This sensor measures the pressure difference between its two ports. Ideal for food service, healthcare, and academia. Common applications include clean rooms, pharmaceutical production, commercial kitchens, and HVAC or applications where negative air pressure monitoring is required.

Battery / Enclosure

Part Number

AA Industrial MNS2-9-W2-PS-DP-LPO

MNS2-9-IN-PS-DP



Food Probe Thermometer

Wireless Food Probe Thermometer

The ALTA Food Probe replaces manual temperature checks and enhances food quality and safety by bringing the power of remote data collection to commercial kitchens, food production, and restaurants.

Battery / Enclosure

Part Number

AAA

MNS2-9-W2-TS-FP





Vehicle Detection Sensor

Wireless Vehicle Detect / Counter Sensor

This easy-to-deploy sensor detects vehicle presence, counts traffic, and tracks the time a vehicle is parked. Ideal for fleet management, parking garages, service centers, curbside retail, and more.

Battery / Enclosure Industrial

Part Number MNS2-9-IN-VS-TT



Propane Tank Monitoring

Wireless Propane Tank Level Sensor

Remotely monitor propane levels from anywhere via a smartphone or PC. This turnkey propane sensor works with Sr & Jr R3D $^{\&}$ Remote Ready gauges. Prevent unnecessary in-the-field trips and maintain customer satisfaction.

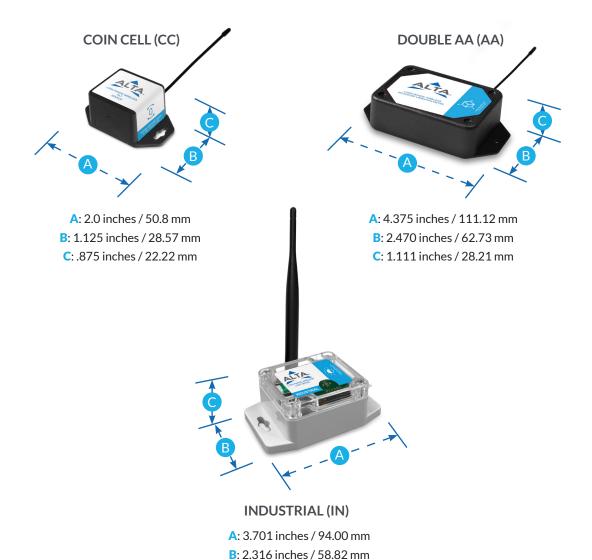
Battery / Enclosure

Industrial

Part Number MNS2-9-IN-HE-MG



Monnit Sensor Sizes



Dimensions for standard housing sizes. For sensors in non-typical housings, please refer to their data sheets.

C: 1.378 inches / 35 mm

SMART

SENSOR MONITORING AND REMOTE TECHNOLOGIES PTY LTD

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