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Next Wi-Fi Sensor
David
GENERAL INFORMATION GUIDE



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CAUTION SYMBOL EXPLANATION



The following caution symbol appears on the product. This symbol indicates caution and a potential risk of danger. Carefully read the warning attached with each symbol.

I. ABOUT Next Wi-Fi SENSORS

GENERAL DESCRIPTION

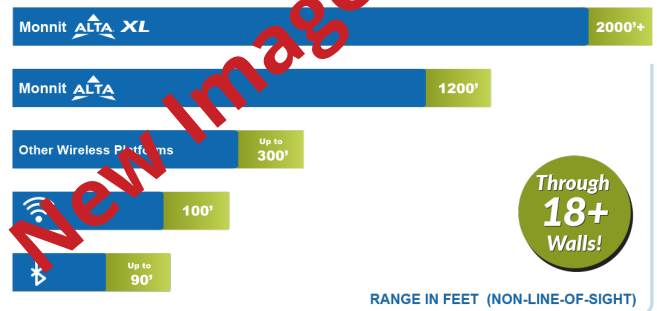
Monnit Next Wi-Fi Sensors provide remote monitoring for many use cases and conditions in nearly any industry application, such as food services, manufacturing, facility management, agriculture, petrochemical, logistics, pharmaceutical, and health care. They have a wireless range of up to 125 feet through five walls or 500-ft. line of sight.

Features of Monnit Next Wi-Fi Sensors

- Wireless Range: 125 ft through 5 walls, or a 500 ft line of sight¹
- Power: 2 replaceable 1.5V AA batteries (included)
- Communications: 802.11 b (2.412-2.484 GHz)
- Wi-Fi Security: OPEN, WPA, WPA2, WPA3
- Wi-Fi Provisioning: Bluetooth via an app.
- Typical Battery Life:
 - 10-minute Heartbeats = ~ 2 years²
 - 2-hour Heartbeats = ~ 5 years²
- Data logs up to 4096 readings if the Wi-Fi connection is lost (non-volatile flash), persists through the power cycle)
 - 10-minute Heartbeats = ~ 22 days
 - 2-hour Heartbeats = ~ 266 days
- Over-the-air updates (future-proof)
- Power/Utility Button: Powers device on/off, triggers data transmission, changes operating mode, etc.
- LED Indicator: Indicates status and activity
- Free iMonnit Basic Online Wireless Sensor Monitoring and Notification System to configure sensors, view data, and set alerts to be sent via SMS text and email



Wireless Range Comparison





1. Actual range may vary depending on the environment.
2. Battery life varies with Heartbeat, Wi-Fi security, distance from router, Internet downtime, sensor type, and other variables. Inquire about other power options if typical battery life is insufficient.



II. GENERAL SETUP PROCEDURES

It's important to understand the setup procedure for activating your Next Sensor. If you perform the following steps out of sequence, your sensor may have trouble communicating with the Wi-Fi access point and Monnit software. Please perform the steps below in the order indicated to ensure the best results.

1. Set up the Monnit Software of choice. (Create an account if this is the first time.)
 - a. iMonnit Premiere, iMonnit Enterprise, iMonnit Express, or Monnit Mine
 - b. <https://monnit.blob.core.windows.net/site/documents/software/iMonnit/IM-P-MUG-01.pdf> LINK
2. Add the Next Sensor(s) to iMonnit or other approved software.
 - a. <https://support.monnit.com/article/191-how-to-add-devices-in-imonnit> LINK
3. Add batteries, wait about seven seconds, then power on the Next sensor by pressing the power/utility button. The LED will turn green for two seconds indicating that the sensor has just powered on. If you haven't configured the Wi-Fi settings, the LED will double flash red. If already configured and able to connect to iMonnit, the LED will double flash green.
4. To provision the Wi-Fi settings for the first time:
 - a. Download and install the Bluetooth provisioning app on your phone. ADD FULL LINKS

Google 	IOS 
--	--
 - b. Open the app and permit access to precise location on Android devices if prompted and to Bluetooth devices on IOS.
 - c. Follow the on-screen prompts to configure Wi-Fi credentials on your device.
5. Once successfully configured and able to communicate with the server, the sensor will automatically exit Bluetooth mode and attempt to send data immediately.
 - a. If the data transmission is successful, the LED will double flash green or double flash red for communication failure. If a red double flash occurs, short-press the button to try the communication again. If communication fails again, see the Troubleshooting section.
6. Ensure the sensor connects to the configured access point and Monnit Software by checking for new data in the Monnit Software.
7. Install sensor(s) in final location.
 - a. Refer to this guide's Batteries and Installation section for useful general mounting, installation, and placement recommendations.
 - b. Refer to the sensor-specific configuration and installation guide for further installation and setup information. LINKS HERE

Note: Next Sensors send 10 transmissions 30 seconds apart when communicating with iMonnit for the first time after resetting or powering on before engaging the configured interval or Heartbeat.

Diagram pointing to button and LED referred to in instruction above. LED called Status LED for now. Button called Power/Utility button for now. This diagram may also work well in the ABOUT section. I defer to Marketing on this.



III. BATTERIES & INSTALLATION

Next Sensors are powered by two removable AA (1.5V) batteries (included).

You can purchase additional sensor batteries from Monnit directly. We encourage customers to recycle all old batteries.

Note: Next Sensors retain their configurations in non-volatile memory (without power). When batteries are replaced, the sensors will continue functioning and provide previously configured data.

POWER SENSOR ON/OFF

ON: Wait up to seven seconds after installing batteries then press and release the power button to power the sensor.

OFF: Hold the button down for up to 15 seconds to turn the sensor off. Release the button when the LED goes off.

David

INSTALLING/REPLACING BATTERIES

To install batteries, open the sensor lid by pinching the sides of the case and pulling away from the base. Then, insert the new AA batteries in the carriage and close the lid by pushing the lid and the case together until the clips snap.

If your sensor is attached to any other systems or voltages, we recommend powering off the other system and disconnecting this sensor.



WARNING: ONLY install new batteries from the same manufacturer when replacing batteries in Next Sensors.

Image should be added here to show how case works



SENSOR PLACEMENT

Place each Next Sensor within 125 feet of its Wi-Fi access point. Sensors should be installed to avoid transmissions through a lot of metal or concrete and repositioned to avoid such obstacles if communication is spotty. A sensor should also be placed at least one foot away from the Wi-Fi access point and other sensors.

Next Sensors should NOT be placed where they can be exposed to volatile or flammable gas. A Next Sensor should be deployed where it will be protected from operating temperatures outside those disclosed in the data sheet. We also recommend that you not place Next Sensors in fridges and freezers. A leaded sensor will still allow monitoring temperatures inside fridges and freezers.

A Power/Utility button is included on Next Sensors for your convenience. If you aren't using the sensor, turn the sensor off by holding the button until the LED turns off. If the sensor needs to be reset, you can cycle the power by turning it off and waiting 10 seconds before powering it back on.

Next Sensors aren't designed for wet environments, environments with fluctuating or excessive humidity, or where they'll be exposed to corrosive or deoxidizing gas or vapor (e.g., chlorine gas, hydrogen sulfide gas, ammonia gas, sulfuric acid gas, nitric oxide gas, etc.). Next Sensors also should not be placed in excessively dusty locations; places with salt water, oils, chemical liquids, or organic solvents; low- or high-pressure environments; areas with powerful vibrations; or in other places where similar hazardous locations exist.

MOUNTING A SENSOR

Next Sensors can be mounted to most surfaces using screws or double-sided tape (both included). The Next enclosure features keyhole mounting holes molded into the enclosure backplate and guides for the double-sided tape.

For masonry, use the double-sided tape or use appropriate screw anchors for #7, 7/16" (0.4375") screws. If the screws aren't available, use two #7 size screws of proper length for your application. If the included double-sided tape is unavailable, use one or more pre-cut, double-sided foam squares of dimensions 1/32" x 3/4" x 3/4", available from ULINE as model number S-11695, or the like.

CLEANING

When needed, clean the sensor with a damp but not dripping wet cloth where it's installed. Do not use cleaners or chemicals.



Is this warning correct and

WARNING: In placing the sensor, be aware that it has a mechanical impact rating of IK06, meaning the housing protects the sensor from a mechanical impact of one Joule. This is roughly equivalent to dropping a solid metal sphere weighing 500 grams from 20 centimeters onto the respective housing.

appropriate for Next?

This sensor is warranted for general mechanical impact based on a documented Risk Analysis performed by Monnit. Therefore, the IK06 rating is justified because the sensors should be:

- Installed in locations that unauthorized persons or the general public can't easily access
- Accessed during normal use for occasional operations such as adjustment, programming, or maintenance

We recommend adhering to these stipulations because using the sensors in a manner inconsistent with the above may impair their IK06 protection.



III. GENERAL AND Wi-Fi SETTINGS CONFIGURATION (iMONNIT)

GENERAL SETTINGS CONFIGURATION

These are configurable settings for almost every Next Sensor.

1. **Heartbeat:** How often the sensor transmits data to the server when not in the Aware State.
2. **Aware Heartbeat:** How often the sensor transmits data to the sever when in the Aware State.
3. **Server Address:** The server the sensor communicates with. If the sensor is unlocked, this setting is editable, If not, this setting isn't visible.
4. **Server Port:** Port used for server communication. If the sensor is unlocked, this is editable, If not, this setting isn't visible.

Wi-Fi SETTINGS CONFIGURATION

These setting configurations control what Wi-Fi access points the sensor can communicate with and how the IP address is assigned.

1. **Sensor IP Address:** Determines if the sensor uses DHCP to obtain an IP address.
2. **IP Address:** The IP address the sensor will use on the network it joins.
3. **Subnet Mask:** A 32-bit number that helps routers direct data packets to the correct place on a network.
4. **Default Gateway:** IP address of the devices serving as the gateway to the Internet. Typically, your Wi-Fi-enabled router.
5. **DNS Server:** IP address of the device that resolves DNS queries for the network. Often, your Wi-Fi-enabled router.
6. **Primary Wi-Fi Network:** The first configurable Wi-Fi network. The sensor will typically try to connect to this network first.
 - a. **SSID:** The text name of your Wi-Fi access point.
 - b. **Security Type:** Open, WPA, WPA2_PSK, WPA_WPA2_PSK, WPA3_PSK, WPA2_WPA3_PSK
 - c. **Security Key:** The passkey for the access point can be left blank if set to open security.
7. **Secondary/Tertiary Wi-Fi Network:** The second and third configurable Wi-Fi networks.

NOTE: For sensor specific setting configurations refer to the specific sensor's configuration and installation guide.



III. OPERATING MODES

STANDARD

The sensor will communicate data to iMonnit using the configured settings in this mode.

BLUETOOTH

In this mode the sensor is disabled (no sensor data will be generated) and Bluetooth is activated. Short button presses only reset the Bluetooth auto exit timeout.

PAIRING: While in the pairing state the LED flashes blue and the sensor is discoverable by the provisioning app.

PAIRED: When paired, the sensor is connected to the provisioning app and Wi-Fi credentials can be configured.

If the sensor loses connection with BT on the app device, it will automatically revert to the pairing state. The sensor will automatically exit BT mode after 10 minutes to save power.

CRITICALLY LOW BATTERY

When the battery voltage falls below 2.15 volts, the sensor enters a low power data logging only mode. Wi-Fi and Bluetooth are fully disabled in this mode to save power so provisioning and data transmissions are not allowed. If the sensor had already sent data to the server when the battery level dropped it will continue logging data to flash. Typical green LED flashes for button and power activity are replaced with red LED flashes. If the sensor is powered on with a critically low battery it will not log data since it requires time from the server to generate data. The LED will also flash solid red for 2 second instead of green upon boot or power cycle. To exit this mode the average battery voltage must rise above 2.3 volts.

David



IV: Button/LED Behaviors:

Button Behaviors

Function	Action	Behavior
Power On	Short press button when sensor is powered off.	Sensor will power on and LED will turn solid green for 2 seconds. First comm after powering on will also produce a double LED flash. Red for comm failure and green for comm success. At this point the sensor will be in its standard operating mode.
Power Off	With sensor powered on, hold button till LED turns off then release.	Sensor will power off completely.
Generate Data	Short press button while sensor is on in standard operating mode and has already successfully communicated with the server since powered on/reset.	Sensor will produce a data point and attempt to transmit the data. LED will double flash green for successful data comm and red for failure.
Enter BT Pairing Mode	Hold button till LED turns solid Blue then immediately release while sensor is in standard operating mode.	Sensor will enter BT pairing mode. If sensor is sending Wi-Fi data when entering this mode LED will remain solid blue and sensor will finish sending data then enter BT pairing mode. LED will start flashing blue when fully in pairing mode.
Exit BT Pairing Mode	Hold button till LED turns magenta then immediately release.	Sensor enters standard operating mode and immediately tries to communicate with the server using the saved Wi-Fi settings. LED will double flash green for successful data comm and red for failure.
Reset Defaults	Hold button till LED turns red then immediately release while in standard operating mode.	Points sensor to iMonnit.com server and sets default sensor configurations. Calibration values are guarded if applicable.

LED Status Indicator (Standard)

Status	LED
Button Pressed	Solid Green
BT Pairing Mode	Flashing Blue
BT Paired	Solid Blue
Comm Success	Green double flash
Comm Failure	Red double flash
Firmware Update in Process	Continuous Yellow flash
Powering On	2 second Green flash

LED Status Indicator (Critically Low Battery)

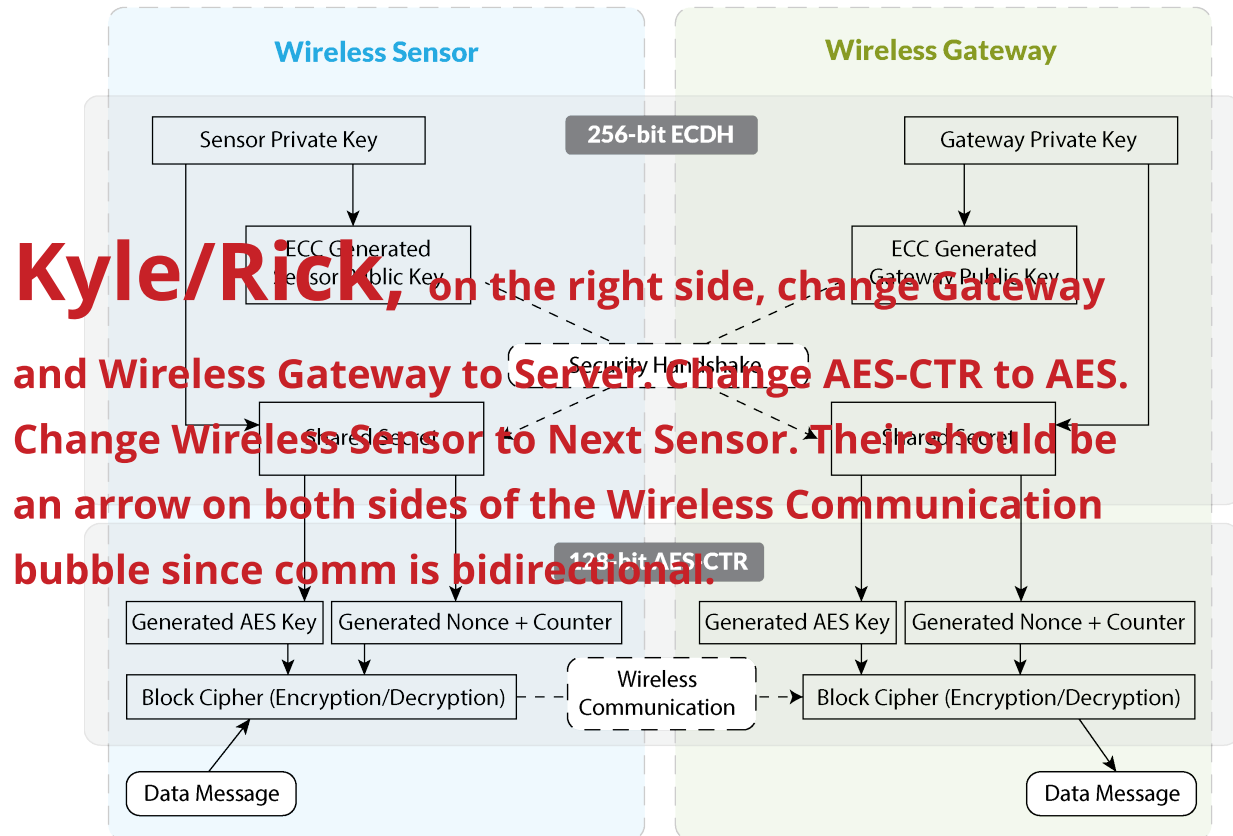
Status	LED
Button Pressed	Solid Red
Button Short Press	Red Double Flash
Powering On	2 second Red flash

NOTE: The Button is disabled during firmware updates.



IV. MONNIT DATA SECURITY

How Monnit Encrypt-RF™ Works



Your data security is a top priority at Monnit. Next uses a powerful combination of hardware, software, and firmware security to ensure your data is fully secure.

HARDWARE/FIRWMARE SECURITY

Every piece of Next hardware implements read locked flash preventing third parties from downloading any data saved directly on the device. Monnit Next sensors also use secure boot technology that makes it impossible for malicious applications to run on the device.

David

SENSOR TO SERVER SECURITY

Monnit's sensor-to-server, secure communication tunnel, **Encrypt-RF™**, is generated using ECDH-256 (Elliptic Curve Diffie-Hellman) public key exchange to generate a unique symmetric key between each pair of devices. Sensors and gateways use this link-specific key to process packet-level data with hardware-accelerated 128-bit AES encryption, minimizing power consumption to provide better battery life. Monnit proudly offers robust bank-grade security at every level, thanks to this combination.

iMONNIT SECURITY

The iMonnit system is the cloud software and central hub for configuring device settings. All data is secured on dedicated servers operating Microsoft SQL Server. Access is granted through the iMonnit user interface that requires Two-Factor Authentication (2FA) or an Application Programming Interface (API) safeguarded by 256-bit Transport Layer Security (TLS 1.2) encryption. TLS is a blanket of protection to encrypt all data exchanged between iMonnit and you. The same encryption is available to you whether you are an iMonnit Basic or Premiere user. You can rest assured that your data is safe in iMonnit.



V. TROUBLESHOOTING

Symptoms	Detailed Problem Description	Solution
<p>Not Checking into iMonnit</p>	<p>The sensor lost connection to the Wi-Fi access point and/or server or never connected.</p>	<p>Here are several options to address this issue:</p> <ol style="list-style-type: none"> 1. Bring the sensor 10 to 20 feet from the router without any obstructions between the sensor and router. 2. Verify the Wi-Fi access point / router is up and connected to the internet. 3. Place sensor in BT mode and double check the Wi-Fi credentials and server address are correct in the provisioning app. Double check for spaces on the end of any text values. 4. Power cycle the sensor. 5. Verify the specific Next device is permitted to connect and communicate to the internet through your router. May need to check with your network administrator. 6. If connecting when closer to the router. Move the sensor progressively further from the gateway ensuring at least two signal bars are showing. Keep in mind the signal bars represent the signal from the previous message, not the current message. We recommend taking two readings to verify signal strength. 7. If additional user action is required to access internet through the Access Point, such as logging in via a webpage, the Next sensor will not be able to communicate with the server. Next is not compatible with this type of connection.
<p>Access Point not Visible in Provisioning App</p>		<p>Here are some options to address this issue:</p> <ol style="list-style-type: none"> 1. If access point, router, or hotspot uses Wi-Fi-6 or higher, may need to set "Compatibility" mode on the access point to ensure the access point uses 802.11b. 2. The app only displays access points with security compatible with Next products. If the access point uses enterprise level security that requires one or more additional layers of validation, the app will not display these access points.

VI. SUPPORT

For technical support and troubleshooting tips, please visit our support library at monnit.com/support/. If you are unable to solve your issue using our online support, email Monnit Support at support@monnit.com with your contact information and a description of the problem. A support representative will call you within one business day.

For error reporting, please email a full description of the error to support@monnit.com.



VII. WARRANTY

(a) Monnit warrants that Monnit-branded products (Products) will be free from defects in materials and workmanship for a period of one (1) year from the date the Products arrive at the Customer's shipping address with respect to hardware and will materially conform to their published specifications for a period of one (1) year with respect to software. Monnit may resell sensors manufactured by other entities and are subject to their individual Warranties; Monnit will not enhance or extend those Warranties. Monnit does not warrant that the software or any portion thereof is error-free. Monnit will have no Warranty obligation with respect to Products subjected to abuse, misuse, negligence, or accident. If any software or firmware incorporated in any Product fails to conform to the Warranty set forth in this Section, Monnit shall provide a bug fix or software patch correcting such non-conformance within a reasonable period. Monnit shall provide the fix or patch after Monnit receives from the Customer (i) notice of such non-conformance, and (ii) sufficient information regarding such non-conformance so as to permit Monnit to create such bug fix or software patch. If any hardware component of any Product fails to conform to the Warranty in this Section, Monnit shall, at its option, refund the purchase price less any discounts, or repair or replace nonconforming Products with conforming Products or Products having substantially identical form, fit, and function. Monnit will then deliver the repaired or replacement Product to a carrier for land shipment to the Customer within a reasonable period after Monnit receives from the Customer (i) notice of such non-conformance, and (ii) the non-conforming Product provided; however, if, in its opinion, Monnit cannot repair or replace on commercially reasonable terms, it may choose to refund the purchase price. Repair parts and replacement Products may be reconditioned or new. All replacement Products and parts become the property of Monnit. Repaired or replacement Products shall be subject to the Warranty, if any remains, originally applicable to the Product repaired or replaced. The Customer must obtain from Monnit a Return Material Authorization (RMA) number prior to returning any Products to Monnit. Products returned under this Warranty must be unmodified.

The Customer may return all Products for repair or replacement due to defects in original materials and workmanship, if Monnit is notified within one year of the Customer's receipt of the Product. Monnit reserves the right to repair or replace Products at its own and complete discretion. Products returned under this Warranty must be unmodified and in original packaging. Monnit reserves the right to refuse Warranty repairs or replacements for any Products that are damaged or not in original form. For Products outside the one-year Warranty period, repair services are available at Monnit at standard labor rates for a period of one year from the Customer's original date of receipt.

(b) As a condition to Monnit's obligations under the immediately preceding paragraphs, Customer shall return Products to be examined and replaced to Monnit's facilities, in shipping cartons which clearly display a valid RMA number provided by Monnit. The Customer acknowledges that replacement Products may be repaired, refurbished or tested, and found to be complying. The Customer shall bear the risk of loss for such return shipment and shall bear all shipping costs. Monnit shall deliver replacements for Products determined by Monnit to be properly returned, shall bear the risk of loss and such costs of shipment of repaired Products or replacements, and shall credit a Customer's reasonable costs of shipping such returned Products against future purchases.

(c) Monnit's sole obligation under the Warranty described or set forth here shall be to repair or replace non-conforming products as set forth in the immediately preceding paragraph, or to refund the documented purchase price for non-conforming Products to the Customer. Monnit's Warranty obligations shall run solely to a Customer, and Monnit shall have no obligation to the customers of a Customer or other users of the Products.



Limitation of Warranty and Remedies

THE WARRANTY SET FORTH HEREIN IS THE ONLY WARRANTY APPLICABLE TO PRODUCTS PURCHASED BY THE CUSTOMER. ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY DISCLAIMED. MONNIT'S LIABILITY WHETHER IN CONTRACT, IN TORT, UNDER ANY WARRANTY, IN NEGLIGENCE, OR OTHERWISE SHALL NOT EXCEED THE PURCHASE PRICE PAID BY A CUSTOMER FOR THE PRODUCT. UNDER NO CIRCUMSTANCES SHALL MONNIT BE LIABLE FOR SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGES. THE PRICE STATED FOR THE PRODUCTS IS A CONSIDERATION IN LIMITING MONNIT'S LIABILITY. NO ACTION, REGARDLESS OF FORM, ARISING OUT OF THIS AGREEMENT MAY BE BROUGHT BY A CUSTOMER MORE THAN ONE YEAR AFTER THE CAUSE OF ACTION HAS ACCRUED.

IN ADDITION TO THE WARRANTIES DISCLAIMED ABOVE, MONNIT SPECIFICALLY DISCLAIMS ANY AND ALL LIABILITY AND WARRANTIES, IMPLIED OR EXPRESSED, FOR USES REQUIRING FAIL-SAFE PERFORMANCE IN WHICH FAILURE OF A PRODUCT COULD LEAD TO DEATH, SERIOUS PERSONAL INJURY, OR SEVERE PHYSICAL OR ENVIRONMENTAL DAMAGE SUCH AS, BUT NOT LIMITED TO, LIFE SUPPORT OR MEDICAL DEVICES, OR NUCLEAR APPLICATIONS. PRODUCTS ARE NOT DESIGNED FOR AND SHOULD NOT BE USED IN ANY OF THESE APPLICATIONS.

VIII. CERTIFICATIONS

United States FCC

This equipment has been tested and found to comply with the limits for a Class B digital devices, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



WARNING: Changes or modifications not expressly approved by Monnit could void the user's authority to operate the equipment.

RF Exposure



WARNING: To satisfy FCC RF exposure requirements for mobile transmitting devices, the antenna used for this transmitter must not be co-located in conjunction with any antenna or transmitter.



Monnit and Next Wireless Sensors

This equipment complies with the radiation exposure limits prescribed for an uncontrolled environment for fixed and mobile use conditions. This equipment should be installed and operated with a minimum distance of 23 cm between the radiator and the body of the user or nearby persons.

All Next Wireless Sensors Contain FCC ID: ZTL-G2SC1. Approved Antennas

Next devices have been designed to operate with an approved antenna listed below, and having a maximum gain of 20 dBi. Antennas having a gain greater than 20 dBi are strictly prohibited for use with this device. The required antenna impedance is 50 ohms.

- Xianzi XQZ-900E (5 dBi Dipole Omnidirectional)
- HyperLink HG908U-PRO (8 dBi Fiberglass Omnidirectional)
- HyperLink HG8909P (9 dBd Flat Panel Antenna)
- HyperLink HG914YE-NF (14 dBd Yagi)
- Specialized Manufacturing MC-ANT-20/4.0C (1 dBi 4" whip)

Canada (IC)

English

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the Equivalent Isotropically Radiated Power (E.I.R.P.) is not more than that necessary for successful communication.

The radio transmitters (IC: 9794A-RFSC1, IC: 9794A-G2SC1, IC: 4160a-CNN0301, IC: 5131A-CE910DUAL, IC: 5131A-HE910NA, IC: 5131A-GE910 and IC: 8595A2AGQN4NNN) have been approved by Industry Canada to operate with the antenna types listed on previous page with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

French

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la Puissance Isotrope Rayonnée Équivalente (P.I.R.É) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

Le présent émetteurs radio (IC: 9794A-RFSC1, IC: 9794A-G2SC1, IC: 4160a-CNN0301, IC: 5131A-CE910DUAL, IC: 5131A-HE910NA, IC: 5131A-GE910 et IC: 8595A2AGQN4NNN) a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne figurant sur la page précédente et ayant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.



UK / CE

There is no restriction for the commercialization of Monnit ALTA 868MHz and 433MHz wireless products in all the countries of the European Union. The European Community provides specific directives for the electronic equipment introduced on the market. All the relevant information is available on the European Community websites.

ALTA wireless products comply with the specific harmonized standards, regulations, instruments, and directives listed in the table below. For more information on product compliance, please contact Monnit Sales or Support and request a copy of the manufacturer's Declaration of Conformity (DoC) for the relevant product(s).

Directive / Instrument / Regulation	Part	Harmonized Standard(s) / Standard(s)
Low Voltage Directive (LVD) (2014/35/EC) Electrical Equipment (Safety) Regulations 2016 (S.I. 2016/1101)	All parts	EN 61010-1:2010 IEC 61010-1:2010/ AMD1:2016
ElectroMagnetic Compatibility Directive (EMCD) (2014/30/EU) Electromagnetic Compatibility Regulations 2016 (S.I. 2016/1091)	Emissions Requirement	EN 55032:2015/ A11:2020
	Immunity Requirement	EN 55035:2017/ A11:2020
Radio Equipment Directive (RED) (2014/53/EU) Radio Equipment Regulations 2017 (S.I. 2017/1206)	Electrical Safety Article 3.1(a)	EN 61010-1:2010 IEC 61010-1:2010/ AMD1:2016
	EMC Article 3.1(b)	ETSI EN 301 489-3 V2.2.0 (2021-11)
	RF Spectrum Efficiency Article	ETSI EN 300 220 V3.2.1 (2018-06)
	Internet of Things Cybersecurity Article 3.3(d)-(f)	EU 2022/30 ETSI EN 303 645 V2.1.1 (2020-06)
Restriction of Hazardous Substances (2011/65/EU) Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 (S.I. 2012/3032)	RoHS II and RoHS III	IEC 63000:2016/ AMD1:2022
Registration, Evaluation, and Authorization of Chemicals (REACH) Regulation 1907/2006	Article 33	SVHC 224 (June 10, 2022)



IX. USER SAFETY REQUIREMENTS

READ CAREFULLY



WARNING: It is the responsibility of the user to enforce the country regulation and the specific environment regulation.



WARNING: This product is not certified for use in hazardous locations (HAZLOC) where there is a risk of explosions.



WARNING: IF THE SENSOR IS USED IN A MANNER NOT SPECIFIED BY THE MANUFACTURER, THE PROTECTION PROVIDED BY THE EQUIPMENT MAY BE IMPAIRED. *Do not disassemble the product; any mark of tampering will compromise the warranty validity. We recommend following the instructions of this user guide for correct setup and use of the product. Please handle the product with care, avoiding any dropping and contact with the internal circuit board as electrostatic discharges may damage the product.*



WARNING: The device has a mechanical stress rating of **IK06**, meaning its housing and/or its readings could be compromised by an impact with greater energy than one Joule.

Justification of a mechanical impact rating less than five Joules exists by: (1) a documented Risk Analysis performed and maintained by Monnit; (2) installation of the sensor in locations that cannot easily be touched by unauthorized persons or the general public; (3) the equipment being only accessible in normal use for occasional operations such as adjustment, programming, or maintenance.



WARNING: DO NOT rely solely on the sensor system to prevent: (1) one or more fatalities; (2) disabling injury or illness; (3) chemical release with acute or public health impact; (4) chemical release with temporary environmental or public health impact; (5) system or facility loss; and/or, (6) major subsystem loss.

Note: Every device has to be equipped with a proper antenna with specific characteristics. The antenna must be installed with care to avoid any interference with other electronic devices and has to guarantee a minimum distance from the body (23 cm). In case this requirement cannot be satisfied, the system integrator has to assess the final product against the SAR regulation.





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Change Log			
Revision	Author	Date (yyyy/mm/dd)	Change
1	Justin Taylor	2024/7/2	Original release
2			
3			
4			
5			
6			