

# MODEL M1

## WIRELESS VIBRATION SENSOR

Full-service, easy-to-install condition monitoring in a compact package.

Combined with our powerful, cloud-based, full- or self-service Waites diagnostics service, this high-frequency, high-G, 3-axis wireless vibration sensor will keep your equipment running properly and alert you long before unexpected failures occur. With over one hundred thousand sensors installed and monitored, Waites has saved its customers over \$50M in documented lost production (and/or increased production capacity) in less than under 2 years.

FCC ID: 2AUGB-N001

IC : 25402-N001



### POWER

Battery: (1) 3V Panasonic CR123A Industrial Lithium

Expected Battery Life: 6 years\*

\*based on reading intervals of Temperature every 15 minutes, RMS every 1 hour, Raw readings every 24 hours

### WIRELESS RADIO

802.15.4 Wireless 2.4GHz ISM Band with 3,000 ft LOS range

### TEMPERATURE SENSOR

Range: -40°C to 150°C w/ .5°C Resolution

### ENVIRONMENTAL

C1D1 Certified hazardous locations (Coming 11/1/2019)

Operating Temperature -40°C to 85°C

### ACCELEROMETER

M001: Tri-Axis, High Dynamic Range

X Axis: +/- 50g Fs = 22,400Hz, 8192 Lines of resolution

Y Axis +/- 16g, Fs = 5400Hz, 8192 Lines of resolution

Z Axis +/- 16g, Fs = 5400Hz, 8192 Lines of resolution

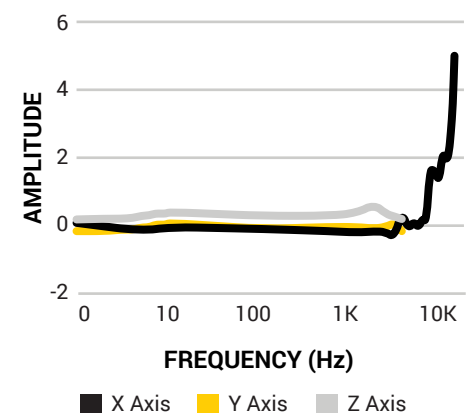
### PHYSICAL DIMENSION

2½" x 1¼" Ø / 63mm x 32mm Ø

1/4-28 mounting hole

With its compact size, the M1 can fit into practically any space, allowing your operation to monitor machines in even the tightest locations.

### FREQUENCY RESPONSE



# WAITES

## FCC WARNING

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, 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 instructions, 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.

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance between 20cm the radiator your body: Use only the supplied antenna.

## IC Caution:

RSS-Gen Issue 5 March 2019 "&" RSS-Gen num é ro 5 mars 2019

- English:

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
  - (2) This device must accept any interference, including interference that may cause undesired operation of the device.
- Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

RF exposure statement:

The equipment complies with IC Radiation exposure limit set forth for uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

- French:

Cet appareil contient des é metteurs / r é cepteurs exempt é s de licence conformes aux RSS (RSS) d'Innovation, Sciences et D é veloppement é conomique Canada. Le fonctionnement est soumis aux deux conditions suivantes:

- (1) Cet appareil ne doit pas causer d'interf é rences.
- (2) Cet appareil doit accepter toutes les interf é rences, y compris celles susceptibles de provoquer un fonctionnement ind é sirable de l'appareil.

Tout changement ou modification non express é ment approuv é par la partie responsable de la conformit é pourrait annuler l'autorit é de l'utilisateur à utiliser l' é quipement.

D é claration d'exposition RF:

L' é quipement est conforme à la limite d'exposition aux radiations de la IC é tablie pour un environnement non contrôl é . Cet é quipement doit é tre install é et utilis é avec une distance minimale de 20 cm entre le radiateur et votre corps.