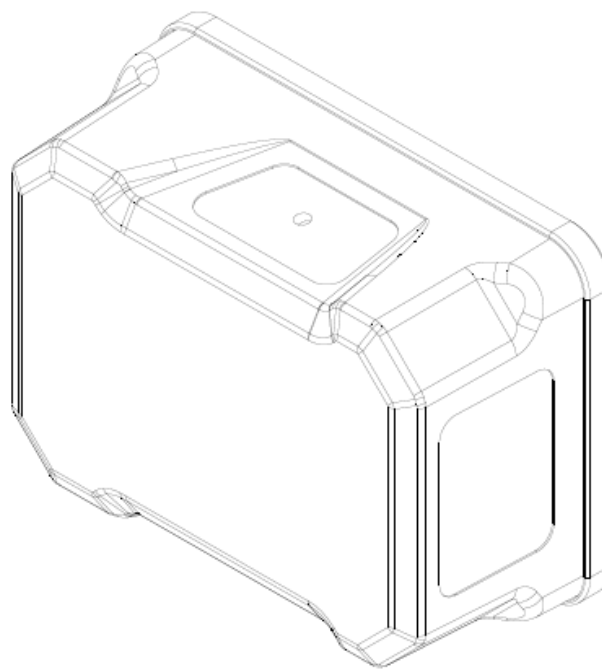


10067

Vibration sensor powered by energy
harvester



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SPECIFICATION

Power supply:

Patented Electromagnetic generator.

Working frequency span:

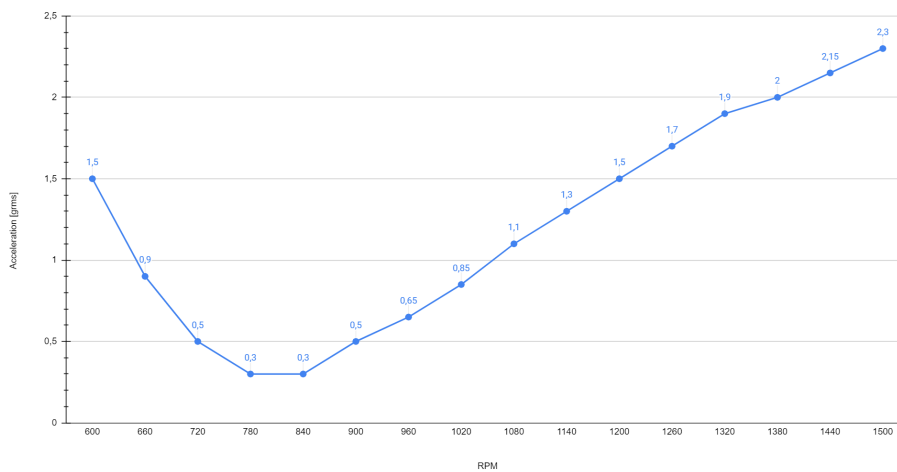
10-22Hz (600-1320RPM) @ $\geq 1.5g_{RMS}$.

Nominal rechargeable energy storage 1.32 Wh.

Vibration required for continuous operation:

Acceleration required for continuous operation

Body sensor configuration: Sampling rate 1kHz, duration: 3 seconds, interval: 5 minutes. Running 8h/day



Power consumption:

Sampling rate 1024Hz, duration: 3 seconds, interval: 5 minutes

~8 mW

Sampling rate 8192Hz, duration: 5 seconds, interval: 5 minutes

~10 mW

Stand-by

<1 mW

Shelf mode

~4 uW

Enclosure material:

Bottom plate: Anodized aluminum alloy, "Orange".

Casing: PA6, Black.

Ingress protection:

IP67

Typical weight w. pot magnets:

750g.

Dimensions: (excluding mounting accessories.)

135x98x60 (height x width x depth)

Dimensions: (w. pot magnets.)

135x98x64 (height x width x depth)

Operating Temperature:

-40°C to +80°C

Storage Temperature:

0°C to +45°C (-40°F to +140°F)

Relative humidity:

0 to 95%, non-condensing

Mounting interface:

3x Pot magnets / Universal AMPS 4xM5 hole pattern, 30x38mm.

Radio communication:

Tx Power:

0 dBm

Rx Sensitivity:

-98 dBm

Data Rates:

Up to 1 Mbps

Frequency:

2.400 to 2.483 GHz

Antenna Gain:

typ. 6dBi

Acceleration measurements:

3 Axis MEMS accelerometer
TDK InvenSense IIM-42352

Range
 $\pm 16g$

Sampling rate
Selectable: 256, 512, 1024, 2048, 4096, 8192, 16384.

Accelerometer measurement range
XY-plane: dc to 4kHz (± 3 dB point)
Z-axis dc to 1.6kHz (± 3 dB point)

Temperature sensor measurement accuracy:

Typ. ± 0.5 °C -40°C to 125°C
Typ. ± 0.25 °C, 0°C to +65°C

Edge data storage:

Non persistent 64Mbit RAM.

Timesynchronization offset:

Typ. <5 us

Expected product lifetime:

>5 years

CONTACT

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