

Machine Sentry Mobile v2 Data Sheet

Vibration Sensor Capability

Internal Accelerometer:	<i>Tri-axial (X, Y and Z axis) Low power MEMs Accelerometer</i>
Internal Accelerometer Max Frequency:	<i>X, Y, Z – 6000Hz</i>
Internal Accelerometer Amplitude Range:	<i>Switchable +/-2g, +/-4g, +/-8g, +/-16g (16g Recommended)</i>
External port:	<i>0-18v or ICP powered</i>
Sampling Frequency:	<i>Internal Accelerometer: 512 – 25600 samples per second External Port: 512 – 64000 samples per second</i>
FMax:	<i>Internal Accelerometer: 200 – 10000 Hz External Port: 200 – 25000Hz</i>
A2D Resolution:	<i>16bit</i>
Max Samples:	<i>32768 Mobile Mode, 16384 Fixed Mode;</i>
Max Lines:	<i>12800 Mobile Mode, 6400 Fixed Mode</i>

Temperature Sensor Capability

Temperature Sensor Type:	<i>Non-contact Infra-Red (12° Field of View)</i>
Temperature Sensor Range:	<i>-70 to 380 °C</i>

Connectivity

Device Support:	<i>Android 6.0.1+ Device (BT 4.2+ support recommended) or Machine Sentry Gateway</i>
Wireless Communication:	<i>Bluetooth LE 5.2</i>
Wireless Frequency band:	<i>2.4Ghz</i>
Wireless Range:	<i>~100m under ideal conditions</i>
Bluetooth Transfer rate:	<i>Typical 3 readings/second</i>
Storage Capacity:	<i>1000 reading sets at full resolution</i>

Power Supply

Battery Type:	<i>Lithium Thionyl Chloride 3.6v 8500mAh</i>
Battery Life:	<i>Mobile use: Up to 6 months (8 hrs / day – 5 days per week) Fixed use: Up to 3 years (5 minute sampling, Transferring 1 reading / hr / axis weekly via Android App) depending on configuration and ambient temperature</i>

Physical Characteristics

Dimensions:	<i>42mm Diameter x 118mm</i>
Weight:	<i>375g</i>
Operating Temperature Range:	<i>-20 to 60 °C</i>
Storage Temperature Range:	<i>10 to 25 °C</i>
Case Material:	<i>316 Stainless/Polycarbonate</i>
Magnet Type:	<i>Integrated dual rail magnet</i>

Hazardous Area Certification

ATEX / IECEx / UKEX:	<i>II 1G Ex ia IIB T4 Ga II 1D Ex ia IIIB T135°C Da</i>
HAZLOC:	<i>Class I and II Division 1 Grps CDFG T4 Class II Division 1 Grps CDFG T135°C Class I Zone 0 AEx ia IIB T4 Ga Class II Zone 20 AEx ia IIIB T135°C Da</i>