MACHINERY MONITORING SYSTEMS, LLC

Data Sheet

SatAllite®

M1630
M1620
M1610

SatAllite smart sensors, the future of wireless sensing. Constantly powered by RF energy allows us to eliminate batteries and still provide continuous scanning and measurement of dynamic signals. SatAllite accelerometers are smart Triaxial devices that constantly measure waveforms, compare them to alarm levels and transmit an FFT upon exception. Overall levels below alarm limits are transmitted at User specified timeframes based on User data storage requirements and charging time.

Data transmission range is up to 1 mile (1.6 km) in open air. Actual range is installation dependent. Charging time and distance is based on location of our small Power Beacons that can be easily installed where needed.

Wireless, Battery-Free Continuous Monitoring

This system incorporates wireless, battery-free sensors with a Base Station and Charge Beacon. Base Station constantly communicates with the SatAllite sensors. Base-Stations are intelligent EDGE devices which process data in real-time while communicating with the client server and/or MMS cloud analytics software. The customizable features of the Sensor, Base Station and Power Beacons provide flexibility to deploy systems for difficult environments.

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M1630

Sensor	Specification
Sensor ID	Factory Set, Unique Number
Battery	N/A
Transmission Range	1 Mile (1.6 km) (Open Air)
Transmission Interval	Programable, Based on RF Strength
Certifications	FCC, IC, ANATEL
Hazardous Area Certification	UL, Ex, Class I Div. I. II (A-D) ATEX Zones 0-1 Installation dependent
Temperature	275F/135C
Frequency Response	15 KHz
Measurement Range	+/- 50g
Transmission Frequency (See below)	Distance from Charge Beacon (Open Air)
1 Minute	98 Feet (30 Meters)
8 Minutes	131 Feet (40 Meters)
15 Minutes	164 Feet (50 Meters)

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Base-Station	Specification
Beacon ID	Factory Set, Unique Number
Power	24VDC or 120VAC @60Hz 24VDC or 230VAC @50Hz
Receive Range	1 Mile (1.6m) (Open Air)
Receive Interval	Continuous
Certifications	FCC, IC, ANATEL
Hazardous Area Certification	UL, Ex, Class I Div. I. II (A-D) ATEX
Enclosure Rating	IP67, NEMA 4X

M1610

Charge Beacon	Specification
Beacon ID	Factory Set, Unique Number
Power	24VDC or 120VAC @60Hz 24VDC or 230VAC @50Hz
Charging Distance	Single Antenna 150 ft. (45 m) Dual Antenna 300 ft. (91 m) (Open Air)
Charging Interval	Continuous
Certifications	FCC, IC, ANATEL
Hazardous Area Certification	UL, Ex, Class I Div. I. II (A-D) ATEX
Enclosure Rating	IP67, NEMA 4X

International Operating Frequencies

Region	Frequency Range
Australia	918-926 / 920-926 MHz
Brazil	902-907.5 / 915-928 MHz
Europe	865.6-867.6 MHz
India	865-867 MHz
Israel	915-917 MHz
Japan	916.7-920.9 / 916.7-923.5 MHz
North America	902-928 MHz
Singapore	866-869 / 920-925 MHz