Wzzard™ Condition Based Monitoring Starter Kit
Model BB-WSK-CBM-2

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LOWER ENERGY AND MAINTENANCE COSTS AND DOWNTIME THROUGH DATA-DRIVEN MAINTENANCE PLANS

Reactive Maintenance plans wait for a failure to occur, causing huge maintenance expenditures and expensive down time.

Preventative Maintenance plans eliminate the unplanned down time at the expense of sub-optimal and necessarily shorter maintenance cycles. The best maintenance plan would be to schedule maintenance just before loss of performance.

The Wzzard Condition Based Monitoring Starter Kit does just that by providing a non-intrusive, easily installed solution for monitoring the temperature and vibration level of your motor or bearing without disrupting existing operations.

- Includes everything you need to monitor temperature and vibration on one motor or bearing.

- No equipment downtime, simply attach the sensor with the included magnetic base, connect the sensor to the wireless Wzzard node and provide an Ethernet connection to the gateway.

- Dashboard, data trend lines, email/SMS alerts and data logging capabilities are supported.

- Easily expand the Starter Kit system simply by adding additional Wzzard nodes and sensors to your existing gateway.

- Fast deployment of Proof of Concept and Pilots. Easy to scale to hundreds or thousands of inputs from one location or multiple locations.

Easy to Deploy
- The Wzzard mesh wireless sensor node and sensor are battery powered and can easily be deployed without any special wiring. No need to install expensive or intrusive wiring.

- Plug-and-Play sensor wiring eliminates any errors.

- Wzzard's 2.4GHz wireless mesh technology continuously optimizes its channel selection to eliminate multipath interference, providing best-in-class reliability in difficult RF environments.

- Simple, cloud-based configuration of the gateway makes it easy to deploy and manage one device or many.

Scalable
- Grow from monitoring one machine or circuit to many simply by adding more sensor nodes and making simple dashboard edits

- Or expand to a multi-site system integrated into your preferred software platform. The popular MQTT protocol and JSON data format make it easy to integrate into third party software applications.

- Use the built-in Node-RED to create and customize your own applications without any advanced programming skills.

Rugged & Reliable
- Wzzard mesh wireless sensor node is IP67, -40 to +80 °C, rated for indoor and outdoor industrial use, no external enclosure required.

- Advanced SmartMesh IP wireless mesh protocol provides excellent point-to-point wireless reliability and becomes more resilient as more nodes are added to the system.

ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION
BB-WSK-CBM-2	Wzzard Condition Based Monitoring Starter Kit

Included Hardware
- (1) Wzzard Wireless Sensor Node Model# BB-WSD2M3101P2K (2 analog inputs, M12 connector, external antenna)
- (1) BB-HS-104T2505402, ultra-low power temperature/vibration sensor
- (1) BB-MH112-1A, magnetic mounting base
- (1) BB-WSDCBL-ACL-2, M12 cable with signal conditioning
- (1) SmartSwarm 342 Ethernet Network Gateway – 10-60VDC, 0.7A, Wzzard board. (Ethernet cable, antenna, power supply, connector set, DIN mount bracket.) *(Note: one gateway supports up to 100 wireless sensor nodes.)*

Included Software
Cloud license for WebAccess/DMP device management and configuration tool.

Node-RED flow with Web server for:
- Real time data display
- Historian trending
- Visual and email/SMS alerts
- External data source integration (weather, Twitter feeds, and more)

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BB-WSK-CBM-2_3419ds
Product specifications are subject to change without notice.

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SPECIFICATIONS

TEMPERATURE	
Sensor Type	RTD PT100
Accuracy	+/-1 degree °C
VIBRATION	
Sensitivity	250mV/g
Frequency Response	0.3Hz (18cpm) to 10kHz (600kcpm) ± 10%
Isolation	Base isolated
Range	8 g
Transverse Sensitivity	Less than 5%
Amplitude Linearity	±1%
PHYSICAL	
Total Net Weight	1.2 kg (2.65 lb)
Total Gross Weight	2.36 kg (5.2 lb)
Dimensions (by item)	Wzzard industrial wireless sensor node (BB-WSD2M3101P2K) = 115.93 x 95.25 x 65.15 mm ((4.56 x 3.75 x 2.57 in)
	Antenna, Wi-Fi, 2,4/5,8 GHz, 5 dBi, SMA-RP connector (BB-AW-A2458G-FSRPK) = 94.1h mm (7.64h in)
	Temperature/vibration sensor (BB-HS-104T2505402) = 67h x 25w mm (2.64h x 0.98w in)
	Magnetic mounting base (BB-MH112-1A) = 25.4diameter x 17.8h mm (1.0diameter x 0.7h in)
	M12 signal conditioning cable (BB-WSDCBL-ACL-2) = 2 m (6.56 ft)
	SmartSwarm 342 gateway (BB-SG3000525-42) = 125w x 97d x 55h mm (4.92w x 3.82d x 2.17h in)

NODE RED DASHBOARD