Wzzard™ Energy Monitoring Kit
Model BB-WSK-NRG-1

B+B SMARTWORX

Powered by **ADVANTECH**

www.advantech-bb.com

+ Monitor current consumption to reduce energy costs

+ Non-disruptive, snap & go setup - no downtime

+ Easily scalable at any time - to thousands of sensors

+ Built-in Node-RED™ software tool for easy deployment

+ IP66 indoor/outdoor rated (Wzzard node)

LOWER ENERGY COSTS THROUGH DATA-DRIVEN PROCESS OPTIMIZATION

Monitor Energy Use of Machines, Circuits & Processes

Today's leading manufacturers and facilities managers have energy reduction programs in place to reduce input costs and improve their environmental footprint. But often they're managing those programs with nothing more than a monthly utility bill and no insight into energy use or trends of their individual equipment, processes or circuits. Installing individual energy meters into existing equipment carries a high cost of installation and is disruptive to ongoing operations.

The Wzzard Energy Monitoring Starter Kit provides a non-intrusive, easily installed solution for monitoring current consumption of your equipment, processes or panels without disrupting your existing operations.

- Includes everything you need to monitor current consumption of up to three inputs - one three-phase load or three unique loads.

- No equipment downtime, simply snap on the current clamps connected to the wireless Wzzard node and provide an Ethernet connection to the gateway.

- Dashboard, data trendlines, email/SMS alerts and data logging capability.

- Easily expand the Starter Kit system by simply 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 Wireless Sensing node is battery powered and can be easily deployed without any special wiring. No need to install expensive or intrusive wiring.

- Clamp-on current transducers are easy to install without disrupting equipment. Simply clamp them over the hot power lead supplying equipment or a panel.

- 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 sensor nodes and making simple dashboard edits

- Or expand into a multi-site system integrated into your preferred software platform. The popular MQTT protocol and JSON data format makes 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 node is IP66, -40 to 80°C, rated for indoor and outdoor 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-NRG-1	Energy Monitoring Starter Kit (1 Wzzard Industrial Node with M12 connector, 3 Current Transformers, 1 M12 Cable, 1 SmartSwarm 341 Gateway).

Included Hardware
(1) Model WSD2MA3 Industrial Node - 3 analog-in unit with M12 connector and external antenna. (Supports up to 3 attached sensors.)

(3) Model JC10F50-V 50A - clamp-on current sensor.

(1) Model 520-10256-00 - M12 cable.

(1) Model SmartSwarm 341 Gateway - Ethernet network gateway with Wzzard board. (One gateway supports up to 32 wireless sensor nodes and up to 96 attached sensors.)

Included Software
Cloud license for SmartWorx Hub 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).

All product specifications are subject to change without notice.
BB-WSK-NRG-1_EnergyStarterKit_0417ds

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SPECIFICATIONS

Maximum Nodes per Gateway	32
Maximum Polling Rate	10 seconds
Measurement Range	0.3A to 50A
Minimum Reading (at 0 Amps input)	0.3A
Accuracy	+/-2.2%
Wireless Range	Up to 100 meters indoors; Up to 300 meters outdoors, line of sight, 2 meters above ground.

Node-RED DASHBOARD