



ZigBit™ Development Tools

Easy-to-use Tools to Evaluate Modules and Develop Applications

MeshNetics offers the developers easy-to-use tools to evaluate the ZigBit 802.15.4/ZigBee module, and develop a module-based wireless solution. **Evaluation Kit** is a convenient way to assess range performance and power consumption of modules in the field. On top of this functionality, **Development Kit** also enables developers to write custom embedded applications using eZeeNet API. Each kit includes evaluation boards with sensors, accessories, software and documentation.

ZigBit Evaluation Kit (ZEK)

Free 45-Day Trial of Development Software



Evaluation Kit Contents:

- 3 x MeshBean evaluation boards with sensors
- 1 x ZigBit module mechanical sample
- 3 x AC power adaptors with cords
- 3 x USB cables
- 2 x RS232 cables
- 1 x software & documentation CD



MeshBean Evaluation Board

- Features ZigBit OEM module with PCB-printed antenna
- Supports standard extension connectors
- Includes temperature, light sensors and other peripheral devices on board

eZeeNet: A Robust IEEE802.15.4/ZigBee Software Stack

- Conforms to ZigBee 1.0 specification
- Tailored for easy-to-use networking in sensing, control, monitoring and data acquisition applications
- Supports mesh and tree network topologies

SerialNet: Serial AT Commands for Easy Application Prototyping

- Layered on top of eZeeNet IEEE802.15.4/ZigBee software stack
- Allows programming the board through AT-command serial interface
- No need to program the MCU directly
- Easy evaluation of eZeeNet stack functionality via AT-commands

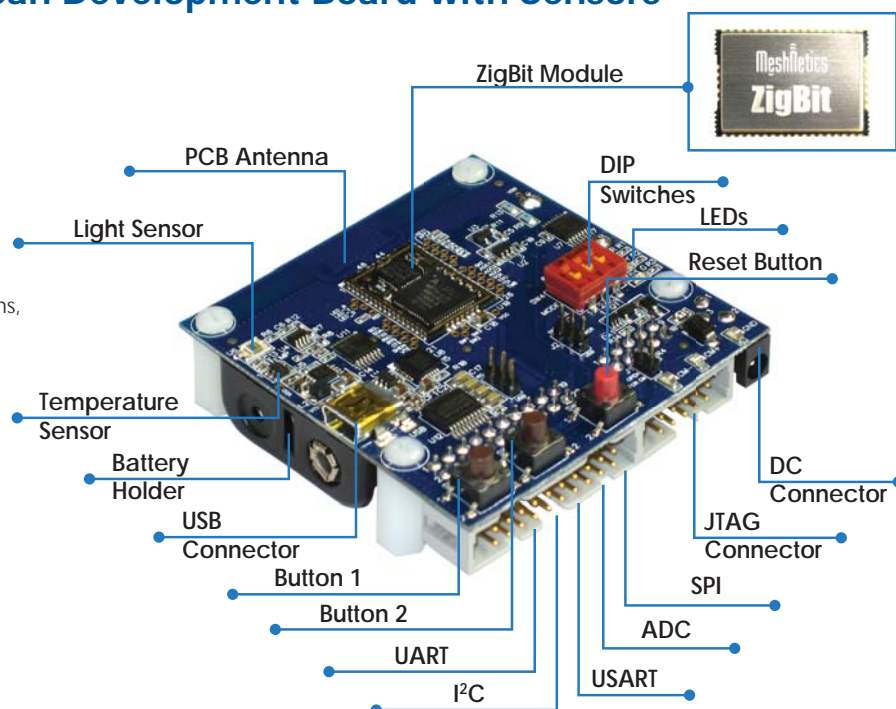
WSN Monitor: Software for Sensor Networks Visualization

- Visualizes typical data acquisition scenario
- Allows easy evaluation of range and network performance, incl. self-healing feature
- Supports visualization of network topologies
- Allows remote network configuration from your PC

MeshBean Development Board with Sensors

MeshBean Features

- 2-layer PCB board featuring ZigBit OEM module
- Two configuration options, based on ZigBit modules with dual chip antenna and PCB antenna
- Input options include DIP switches + 3 buttons, 4 ADC connectors, I2C light sensor and temperature sensors
- Output via 3 LEDs
- Input/output via USB and JTAG connectors, USART, 1-Wire and 9 GPIO pins
- Power options include USB, 2 AA batteries or mains power



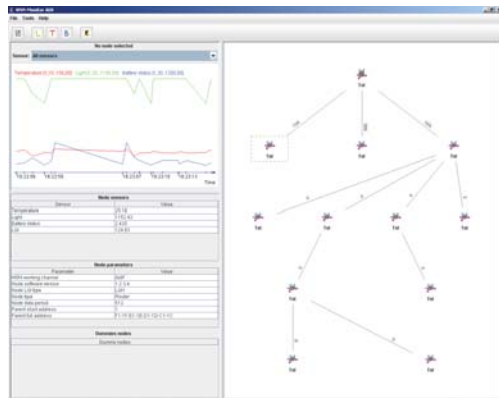
ZigBit™ Development Kit (ZDK)



Development Kit Contents:

- 3 x MeshBean evaluation boards with sensors
- 1 x ZigBit module mechanical sample
- 3 x AC power adaptors with cords
- 3 x USB cables
- 2 x RS232 cables
- 1 x software & documentation CD

WSN Monitor: Network topology view



Developer's Tools to Create Custom Applications

- ✓ Open source HAL to provide full programming support and integration of 3rd-party sensors selected by developer
- ✓ Sample applications to bootstrap application development
- ✓ Intuitive development environment from Atmel
- ✓ Support for client-programmed applications with direct access to ZigBee embedded software stack, i.e. eZeeNet and HAL (100% ANSI C99)
- ✓ Convenient reference drivers and APIs for UART, I2C, ADC, and 1-wire interfaces

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- Tailored for easy-to-use networking in sensing, control, monitoring and data acquisition applications
- Supports mesh and tree network topologies
- ✓ Provided as library objects with full API specification in headers

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- Supports visualization of network topologies
- Allows remote network configuration from your PC

NOTE: Options exclusive to the Development Kit have checkmarks next to them

Ordering Information

ZigBit Evaluation Kit
Part Number:
ZEK-A1281
Description:
2.4GHz IEEE802.15.4/ZigBee™ Evaluation Kit

ZigBit Development Kit
Part Number:
ZDK-A1281
Description:
2.4GHz IEEE802.15.4/ZigBee™ Development Kit

ZigBit Module Samples*

Part Number: ZDM-A1281-B0
Description: 2.4GHz IEEE802.15.4/ZigBee™
OEM Module
w/Balanced RF Port

Part Number: ZDM-A1281-A2
Description: 2.4GHz IEEE802.15.4/ZigBee™
OEM Module
w/Dual Chip Antenna

MeshBean Development Boards*

Part Number: WDB-A1281-P1
Description:
Sensor Evaluation Board
w/ZDM-A1281-B0 Module

Part Number: WDB-A1281-A2
Description:
Sensor Evaluation Board
w/w/ZDM-A1281-A2 Module

* - Additional MeshBean boards and module samples can be ordered separately

MeshNetics

Russia:

9 Dmitrovskoye shosse
Moscow 127434 Russia
Tel.: +7 (495) 725-8125
Fax: +7 (495) 725-8116
E-mail: info@meshnetics.com

United States:

1800 112th Ave. NE, Ste. 270-E,
Bellevue, WA 98004-2961 USA
Tel.: +1 (909) 512-MESH, (425) 452-1001
Fax: +1 (563) 405-2168
E-mail: info@meshnetics.com

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