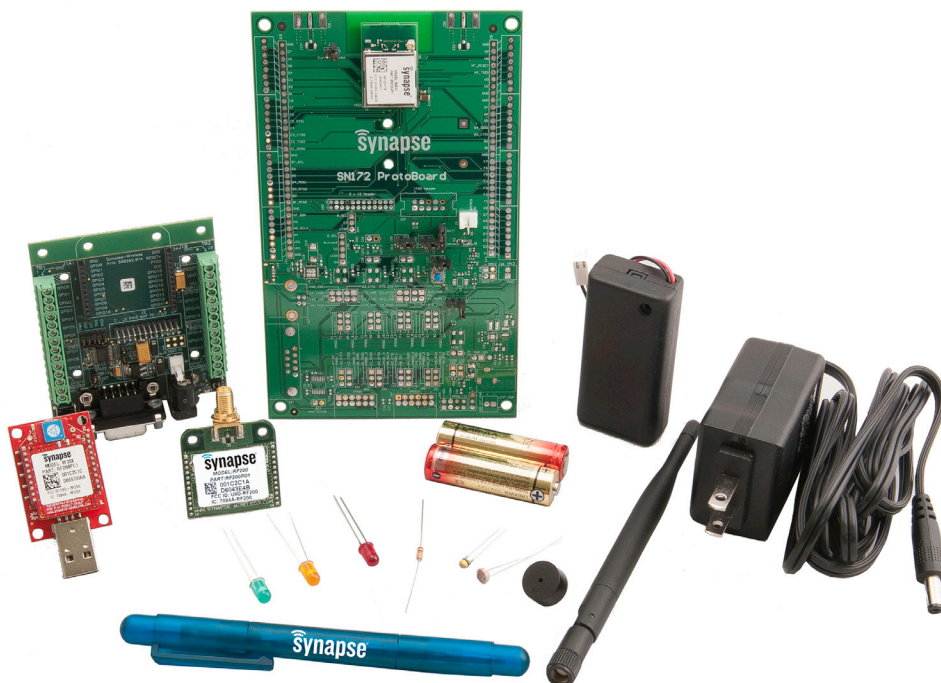# DK-200

200 Series Core IoT Development Kit

Get connected

The Synapse DK-200 Development kit provides all the hardware and software needed to get a mesh networked application up and running and kick-start your embedded wireless project.

The DK-200 features a product sampling of our 200 series RF radio modules, powered by the best-in-class Atmel ATMega128RFA1 single chip microcontroller/transceiver and enabled with our SNAP® network operating system for IoT applications.

Based on the IEEE 802.15.4 standard and featuring 2.4GHz operation with raw bandwidth communications up to 2Mbps and AES encryption for security, everything is included in this kit to jump start your development and gain a fundamental understanding of SNAP mesh networking and the capabilities of SNAP nodes.

Features

SN172 proto board w/ SM220UF1 RF module

- Battery powered for mobility
- Surface-mount module
- u.fl and compact "F" antenna options
- +20 dBm/ -103 dBm RF performance

SN171 proto board w/ RF200PD1 RF module

- Socketed module design for plugin design integration
- RP-SMA antenna option with 3.2dB external dipole antenna
- +15 dBm/ -103 dBm RF performance
- 12V wall power supply

SparkFun XBee Explorer USB board w/RF266PC1 RF module

- USB powered for mobile computing and access to Portal development software
- Socketed module design that is compatible with XBee form factor
- Chip antenna
- +15 dBm/ -100 dBm RF performance

synapse® Proven Solutions for the Internet of Things

Three modules are included in the kit, representing surface-mount and socketed solutions, as well as four different antenna options.

Two included prototyping boards provide a variety of wiring options to the analog and digital features on the modules. Interactive wireless application development is seamlessly supported by our included Portal desktop software, which can be dowloaded for free from http;//www.synapse-wireless.com.

Portal supports a fast, real time view of your SNAP network with features such as device configuration, monitoring, channel analyzing and data logging. Application programming is accomplished with a syntax-highlighted Python editor for the creation of application scripts that are wirelessly downloaded into SNAP nodes.

What makes Synapse unique?

It's simple: our technology and our partnership approach. As pioneers in the Internet of Things (IoT), we have successfully applied our patented SNAP® technology in complex environments to drive significant customer value.

To learn more, visit synapse-wireless.com or call 877-982-7888