



XDM2140DK

General Overview

The XDM2140 Development Kit is available as part number: XDM2140DK

The XDM2140 module is designed to provide ultra-reliable communications and ultra-low power for ultra-long battery life in a wide range of sensor network applications. The XDM2140 is tailored for use in battery and line powered wireless devices for applications that require proven performance and scalability.

The XDM2140's combination of an IEEE 802.15.4 transceiver and Time Synchronized Mesh Protocol (TSMP) blends the reliability of self-organizing and self-healing mesh networking with synchronized power duty cycling to achieve very long battery life operation.

The full-featured API of the XDM2140 gives it the flexibility to be used in a wide variety of applications, from energy management to building control to machine health monitoring. The XDM2140 requires no embedded programming, greatly reducing the development time and cost of a wireless sensor network application.

Kit Includes:

- 4 XDM2140 modules
- 4 XDM2140 development boards
- 1 XG2400E gateway
- 1 Ethernet and 5 Serial cables
- 9V batteries and wall-mount power supplies
- Antennas and RF cables
- Program CD with software and manuals
- Quick Start Guide

Key Features:

- Innovative radio design consumes 80% less power in receive mode than competing solutions
- Ultra-efficient power usage delivers over a decade of network operation on two AA batteries
- Automatic network-wide coordination for efficient power usage
- SmartMesh-XD protocol delivers better than 99.99% typical network reliability
- Frequency hopping provides interference rejection and minimizes multipath fading
- Mesh networking provides built-in redundancy
- Every XDM2140 acts as both an endpoint and a router, increasing network reliability with *mesh-to-the edge*[™]
- Automatic self-organizing mesh networking capability built in
- Provides all the module functionality with no embedded programming or complex configuration required
- Interface is well designed and multi-functional
- High-level Data Link Control (HDLC) serial interface includes bi-directional flow control
- Industrial temperature range -40 to +85°C
- XDM2140P version for plug in installation, XDM2140C version for solder reflow

2.4 GHz Mesh RF Module Development Kit

