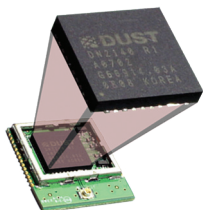
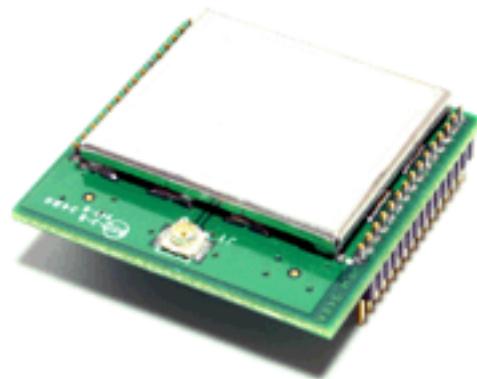


2.4 GHz Wireless HART

Ultra low power, ultra reliable
For your process field devices



Featuring Dust Networks®
IA-510(H)™ WirelessHART System



Measure Position Record Control
Flow Pressure Temperature Levels Weight

Enables smart field devices for process automation OEMs

The XDM251DH is a 2.4 GHz transceiver radio module that enables OEMs to easily and quickly add WirelessHART capability in their application for the global process automation market. It is the second module released in a family of ultra-reliable RF modules using technology from Dust Networks. The XDM2510H module combines the Dust Networks WirelessHART System on Chip (SoC) with Murata's easy-to-deploy module technology.

The XDM251DH delivers exceptional network reliability and long battery life in a fully functional, certified radio module that is easily interfaced to existing WirelessHART infrastructure for a wide variety of industrial applications.

The XDM2510H WirelessHART technology blends the reliability of self-organizing and self-healing mesh networking with synchronized power duty cycling to achieve very long battery life operation. The XDM2510H is certified for unlicensed operation in the USA, Canada and Europe (pending).

WirelessHART compliant

The XDM251DH provides a simple way to add WirelessHART functionality to process control field devices. This capability allows the field devices to join existing WirelessHART networks. The interface to the module is through a UART port utilizing a straightforward API.

Extremely long battery life

The XDM2510H network is time-synchronized so that all nodes can be battery powered and achieve over a decade of battery life. The XDM2510H offers substantially lower current consumption than competing WirelessHART modules.

Ultra easy integration

The XDM2510H networks are self-organizing and self-healing. Just power-up the modules and they are ready to join a WirelessHART mesh network and start reporting data. All of the XDM2510H nodes are the same; there are no end-nodes or router-nodes.



Front



Back

Rugged metal enclosure with mounting tabs and locking power supply connector

Companion product - XG2510HE Gateway

The XG2510HE gateway and network manager is multi-functional, combining standard Ethernet gateway functions with sophisticated networking, data, and security management capabilities for a network of XDM2510H products. The XG2510HE includes a WirelessHART compliant 2.4 GHz radio with a power amplifier, processor and memory, embedded networking software, and interfaces to host systems.

- Supervises network formation and management, including security
- Full industrial temperature operating range -40°C to +85°C
- Manages networks of up to 250 XDM2510H-based devices
- Ethernet or Serial communications interfaces
- 2.4GHz RF operation for international deployment

Optimum network performance

The network manager portion runs advanced algorithms to continuously optimize network performance and communications reliability, to accommodate changing RF and environmental conditions. The XG2510HE gateway continually monitors network performance and makes on-the-fly adjustments to insure ultra-high data communications reliability. Adjustments include black-listing poor performing channels on a node-by-node basis and then white-listing them when conditions improve.

Highly configurable to fine-tune your application

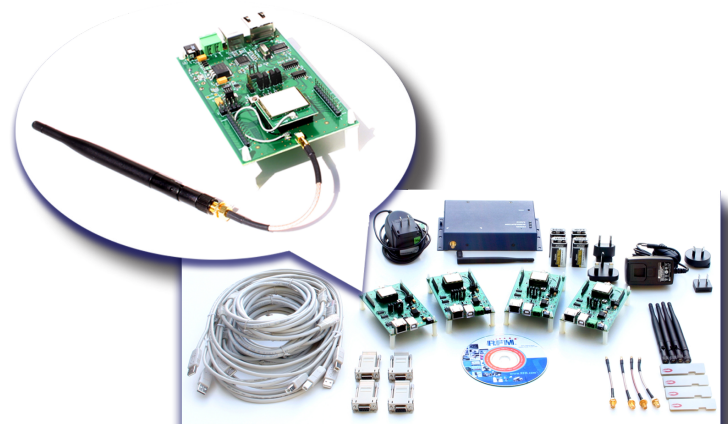
The XG2510HE features several APIs including an XML over an Ethernet connection, an XML API over the RS-232 aerial port using PPP, and a serial API through the RS-232 interface. All three APIs provide a plethora of information regarding the WirelessHART network performance as well as a wide assortment of configuration commands that allow the WirelessHART network performance to be fine-tuned for your application.

Fast-track your design -- order a developer kit

- Everything you need to get a 4 node network up and running in minutes
- 4 developer kit boards providing a simple means to interface to your device
- Utility programs that demonstrate network operation and performance
- Full documentation to speed integration into your product

XDM2510HDK contains:

- (4) XDM2510H modules
- (4) XDM2510H development boards
- (1) XG2510HE 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



How To Buy

Murata products are sold through a world-wide network of sales reps and distributors. Go to the Murata website at www.murata.com and visit the "Products - Wireless Connectivity Platforms" section to locate a sales/distribution partner near you.