

# New! 2.4 GHz ZigBee® Pro Module

**Low-Cost, Long-Range, Multi-Purpose**  
**Reliable Performance**

## ZPM3570

Tiny footprint of less than 0.63 in<sup>2</sup> includes  
 ZigBee chip, PA, LNA, chip antenna, and  
 1MB datalogging flash memory



**\$29.<sup>50</sup> Qty 1**  
 Volume Discounts  
 Available

### HOME AUTOMATION

*Automated Lighting*  
*Facilities Automation*  
*Flow / Temperature*

### SMART ENERGY / ENERGY MANAGEMENT

*Smart Thermostat*  
*Security*  
*Gas / Water Meter*

### BUILDING AUTOMATION

*Smart Appliances*  
*HVAC*  
*Smart eMeter*

## EXCEPTIONAL PERFORMANCE AT A VERY LOW COST

The ZPM3570 is a low cost, long range, multi-purpose, ZigBee PRO module. The ZPM3570 provides a 250 kb/s RF data rate with +20dBm (100mW) RF power coupled with a receive sensitivity of -103dBm to provide exceptional range and performance all in an FCC, IC and ETSI certified module. The ZPM3570 module also includes a 1MB flash memory to accommodate data logging requirements.

The ZPM3570 is built around Ember's EM357 ZigBee RFIC coupled with a power amplifier and low noise amplifier to increase the RF transmit power and receive sensitivity. The 100mW coupled with the -103dBm receive sensitivity provides exceptional range. The on-module antenna keeps device costs low by eliminating the cost of a separate antenna.

### ZigBee PRO Smart Energy and Home Automation

The two areas where ZigBee is developing significant traction is in the Smart Grid and Energy Management arenas. The ZMN3570 supports these applications through its support of the ZigBee Smart Energy and Home Automation profiles. An intuitive API simplifies connecting the ZPM3570 to an application processor to quickly implement products providing vendor interoperable Smart Energy and Home Automation operation. OEMs wishing to implement their own application in addition to the ZigBee stack can take advantage of the 32-bit M3 Coretex ARM processor in the module. This can eliminate the need for any separate application co-processor.

### 1MB Flash Memory for Datalogging

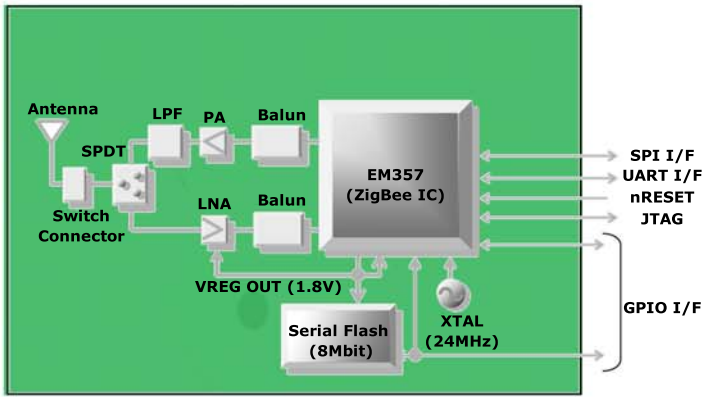
Included in the price and size of the module is a 1 MB flash memory. Unlike other modules where external memory is required to provide the datalogging functionality, the ZPM3570 has it on the module. One less thing for the designer to worry about.

### Small Size

At less than 0.63 square inches in area, the ZPM3570 is unsurpassed in providing a complete ZigBee PRO solution, with on-module chip antenna, and 1MB flash in such a small footprint. For many devices that need ZigBee PRO functionality, size is critical and real estate is at a premium. The ZPM3570 really delivers on this account. In addition to the small footprint, the surface mount design of the ZPM3570 eliminates the need for costly, in both dollars and board area, connectors.



## The ZPM3570 is Built Around Ember's EM357 ZigBee RFIC



- Coupled with a power amplifier and low noise amplifier to increase the RF transmit power and receive sensitivity.
- The 100mW coupled with the -103dBm receive sensitivity provides exceptional range.
- The on-module antenna keeps device costs low by eliminating the cost of a separate antenna.

- 2.4 GHz DSSS 802.15.4 Transceiver
- Point-to-Point, Point-to-Multipoint, Peer-to-peer, and Mesh
- Transmitter Power of 100mW(+20dBm)
- Receive Sensitivity of -103dBm
- Over-the-air module programming and configuration

- Smart Energy and Home Automation Profiles
- 128-Bit AES Encryption
- UART and SPI ports; Analog and Digital I/O for Sensor Applications
- 1MB flash memory to accommodate data logging requirements
- FCC, Canadian IC, and ETSI Certified for Unlicensed Operation

## Fast-track your design -- order a Developer Kit!

- Everything you need to get a ZigBee PRO network going in less than 10 minutes
- Two development boards providing a simple means to interface to your device and showcasing the features of the ZPM3570
- Utility programs that demonstrate network operation and performance
- Documentation to speed integration of the ZPM3570 into your product

### ZPM3570DK CONTAINS:

- (2) ZPM3570 development boards
- (2) USB and 2 Serial Cables
- 9V Batteries and Wall-mount Power Supplies
- Program CD with software and manuals

## How To Buy

RFM products are sold through a world-wide network of manufacturer's sales reps and distributors. Go to the RFM website at [www.RFM.com](http://www.RFM.com) and visit the "How to Buy" section to locate a sales / distribution partner near you.



Wireless is

**RFM**

[www.RFM.com](http://www.RFM.com)