

### Features

- ◆ License-free bands 868MHz to 928MHz
- ◆ Transmit range @ 0dBm > 250 meters (LoS)
- ◆ External power amplifier option
- ◆ IEEE 802.15.4 compliant
- ◆ Low power consumption
- ◆ Integrated PHY and Thin Hardware MAC
- ◆ 48-pin QFN (7x7 mm) package

### Operating Reference Data

Frequency Range ..... 868MHz to 928MHz  
 Typical Receiver Sensitivity ..... -98dBm  
 Temperature Range..... -40°C to +85°C  
 Supply Voltage, Core..... +2.4 V  
 Typical Supply Current (Tx active) ..... < 31mA  
 Typical Supply Current (Rx active) ..... < 27mA  
 Typical Supply Current (Sleep with/RTC)..... < 3 µA  
 Typical Supply Current (Off Mode)..... < 2 µA

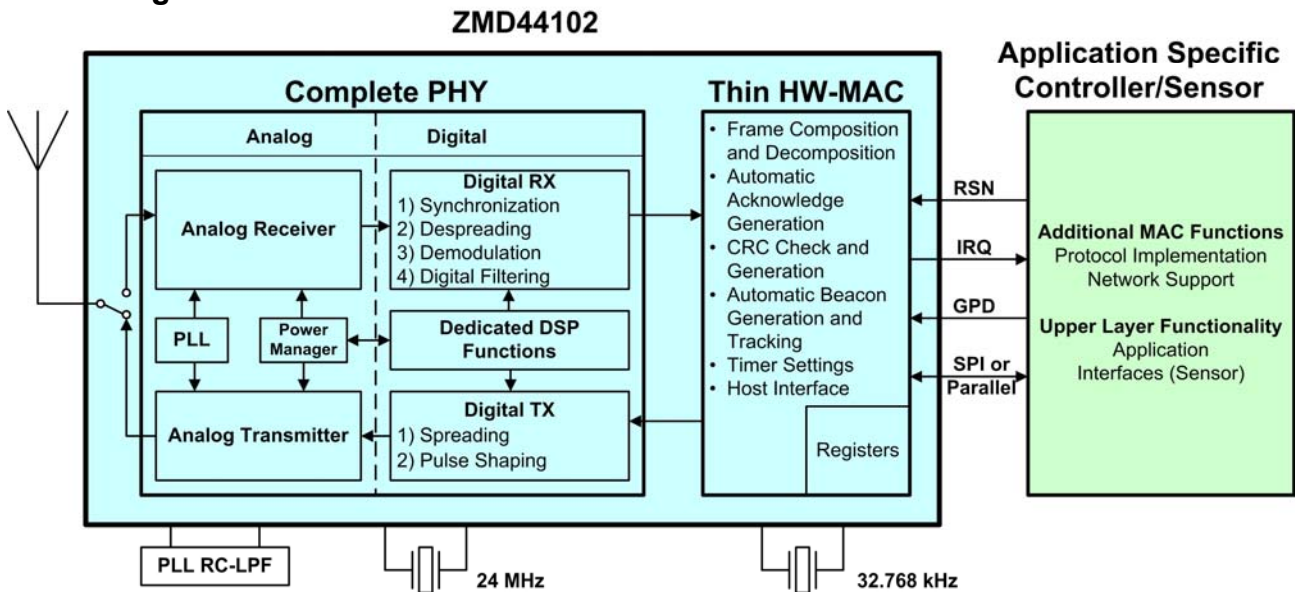
### Description

The ZMD44102 is a robust, fully-integrated RF transceiver, operating in the license-free European band of 868MHz to 870MHz and multi-channel American band of 902MHz to 928MHz. The long range and barrier penetration characteristics of the ZMD44102 optimize data transmissions up to 40 kbps. Benefiting from direct sequence spread spectrum technology, the transceiver ensures reliable data passage in hostile RF environments. The ZMD44102's high level of integration includes a Thin Media Access Controller, reducing external components and system installation costs.

### Applications

- Automatic Meter Reading
- Hazardous Sensor Monitoring
- Wireless Sensor Networks
- Industrial Automation
- Health Monitor Networking
- Home Control
- Building Automation

### Block Diagram



#### For more information:

[www.zmd.biz/zigbee](http://www.zmd.biz/zigbee)

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