



ZG-2400M

ZigBee® ModBus Gateway

Features:

- *FCC certified for unlicensed operation*
- *2.4 GHz DSSS technology*
- *Small size, light weight*
- *ZigBee networking*
- *100mW transmit*
- *Class I Div 2*

Benefits:

- *Deployable in wide range of industrial settings*
- *Fast acquisition time and exceptional range*
- *Supports large number of nodes*
- *Redundant, self healing network*
- *World-wide use*
- *Low cost*

Allowing seamless integration of ZigBee networked sensors and devices into existing Modbus networks, the ZG-2400M combines a 2.4GHz 100mW ZigBee module and a Modbus-to-ZigBee translation engine in a Class I Div 2 certified DIN-rail mount product. The ZG-2400M operates over a -40°C to +85°C temperature range and accepts a +9Vdc supply voltage.

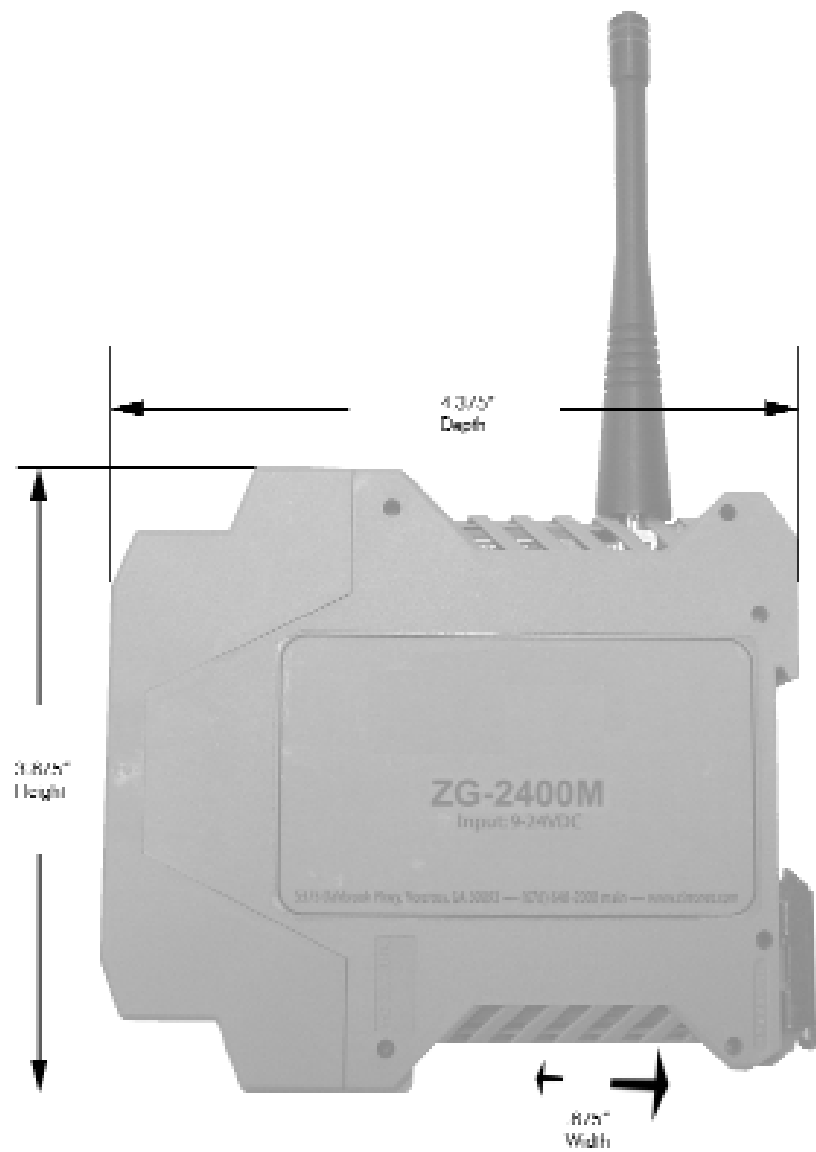


Specifications

RF Frequency	2400 - 2483.5 MHz
Spreading Method	Direct Sequence
Modulation	O-QPSK
Transmit Power	+18 dBm into 50 ohms / 100mW with provided dipole antenna
Receive Sensitivity	-94 dBm for 10-5 BER
RF Channels	16
RF Data Rate	250 Kbps
I/O	Full Duplex RS-232 Half Duplex RS-485
Operating Voltage	+9Vdc – +50Vdc
Current Consumption	120mA@9Vdc
Operating Temperature	-40°C to +70°C

Connectors

Serial Port	DB---9
Antenna Connection	Reverse SMA
Power	Two Pin Screw Terminal



Mesh Networking

The ZG-2400M is built around the RFM ZMN2400 2.4GHz ZigBee module. The ZG-2400M functions as a ZigBee network coordinator as well as a takeout point for the ZigBee network. The ZG-2400M supports multiple levels of routers to create sophisticated mesh networks that are self-forming and self-healing.

Seamless Integration

The ZG-2400M fits into existing Modbus networks by accepting Modbus commands, translating them into ZigBee format, and sending them to the appropriate ZigBee end device or router. The ZBWizard configuration tool is used to assign Modbus addresses to ZigBee end devices. A typical installation will find the ZG-2400M connected to a Modbus PLC through its half-duplex RS-485 or full-duplex RS-232 serial port. Instead of Modbus network wiring, the wireless ZigBee network will connect the various sensors and actuators with the PLC. The RFM companion family of ZN-2400 products are designed to operate as ZigBee signal conditioners/actuators for the remote devices.

Industrial Networking

The ZG-2400M is more than just a collection of parts with industrial temperature specifications. The components used in the ZG-2400M were carefully selected for the ability to operate in harsh industrial environments.

Experience

The extensive experience of RFM in RF goes into every ZG-2400M gateway. Our RF know-how and practical engineering have made RFM the choice of hundreds of engineers. Engineers know they can rely on RFM products and can count on unsurpassed technical support to help them get their jobs done.