



ZN-241G

General Purpose Wireless Serial Modem

Features:

- *Auto-Configuring*
- *100mW Transmit Power*
- *2.4GHz*
- *Seamless fit into existing wired networks*
- *Multiple Interfaces*
- *Automatic Relay*

Benefits:

- *Low Cost/High Power*
- *Easy to install and use*
- *Deployable in a wide range of uses*
- *Excellent range and coverage indoors and out*
- *License-free deployment around the world*
- *Reliable communications even when a direct path is blocked*

Built on 802.15.4 technology, the ZN-241G is ideal for a range of applications from simple RS-232 cable replacement to sophisticated multi-drop RS-485 networks and everything in between. Available in RS-232, USB and industrial RS-485 models, the ZN-241G has an Auto-Configure feature that removes the need for ANY modem configuration. For demanding applications, the ZN-241G is completely configurable to support a variety of different needs. With a full 100mW of transmitted power, the ZN-241G can cover an entire factory floor or bridge distances of a mile or more outdoors.



Radio Specifications

RF Frequency	2401 - 2483.5 MHz
Spreading Technique	Direct Sequence Spread Spectrum
Modulation	O-/QPSK
Transmit Power	+18 dBm at antenna connection; 100mW with 2dBi dipole antenna (included)
Receive Sensitivity	-95 dBm for 10-5 BER
RF Channels	16 User selectable
RF Data Rate	250 Kbps
Antenna Connector	Reverse SMA Male

Electrical Specifications

Operating Voltage	6VDC - 12VDC
Power Consumption	2W Max peak; 750mW typical
Operating Temperature	-40°C to +85°C
Serial Interfaces	ZN-241G — RS-232 ZN-241GU — USB ZN-241GI — RS-485 half-duplex
Indicators	Power Link Activity

Mechanical Specifications

	ZN-241G	ZN-241GU	ZN-241GI
Case Materials	Black Anodized Aluminum		
Dimensions (mm)	82.5mm x 64.24mm x 25.5mm		
Weight	122g		
Data Connector	DB9	USB Type B	Screw Terminals
Power Connector	DIN Connector		2 Terminal Connector



Value

Even with the high transmit power, the RFM ZN-241G is priced to fit any budget, making the choice to replace wires even more compelling. With the multiple interfaces and multiple operating modes, the ZN-241G delivers unsurpassed value for any application. The ZN-241G is built on standard 802.15.4 radio technology and provides a crisp 250Kbps over-the-air data rate using Direct Sequence Spread Spectrum methods. The result is a wireless network with plenty of data throughput for most applications and the robustness to provide reliable, worry-free data transmission.

Versatility

Operating in the international license-free 2.4GHz frequency the ZN-241G can be deployed around the world. With the choice of an RS-232, a USB or an RS-485 interface, the ZN-241G has a model to fit almost any application. The Auto-Configure feature makes setting up point-to-point links a snap. The broadcast mode coupled with the RS-485 interface, provides a simple replacement for half-duplex, multi-drop RS-485 wiring. The ZN-241G also has a fully-addressable multi-point mode to support more demanding applications. Whatever your need, the ZN-241G can handle it.

Even though the ZN-241G is a low cost wireless modem, it includes a repeater function to help overcome signal blockages. This function allows a remote node to relay data through another remote node when the direct path is blocked. Similarly, a remote node can receive data through another remote node when the direct path from the base is blocked.