



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

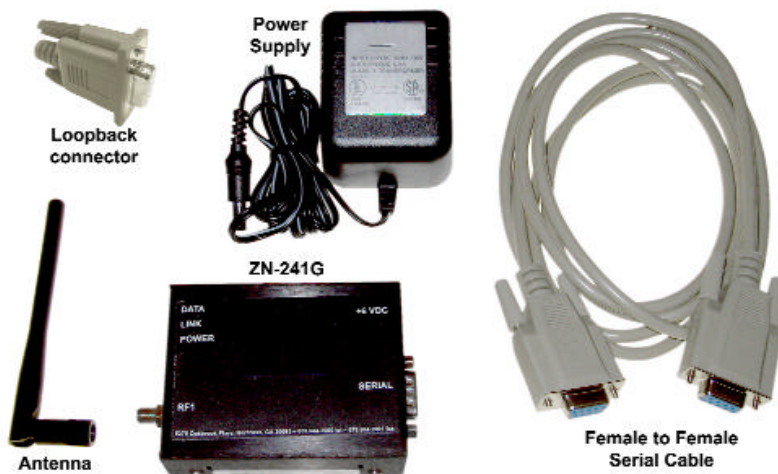
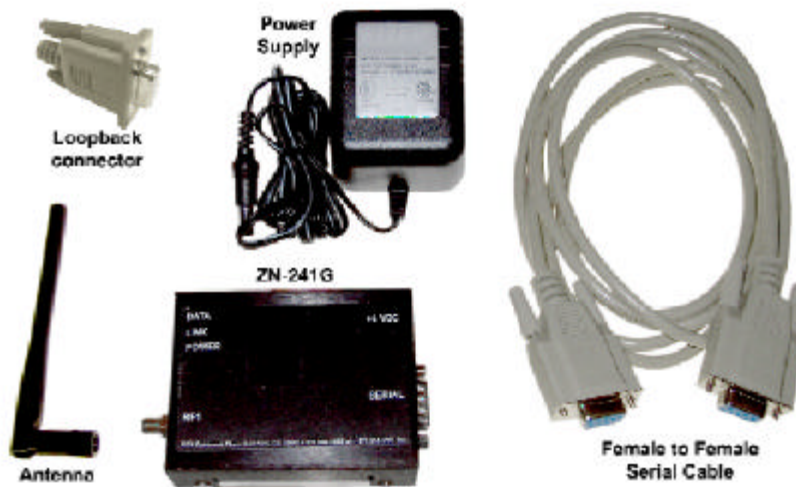
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|---------------------|--|
| RF Frequency | 2401 - 2483.5 MHz |
| Spreading Technique | Direct Sequence Spread Spectrum |
| Modulation | O-/QPSK |
| Transmit Power | +18 dBm at antenna connection; 100mW with 2dBi dipole antenna (included) |
| Receive 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.