

# ZP8D-24RM-LR

## Industrial Long Range 868 MHz Radio Modem

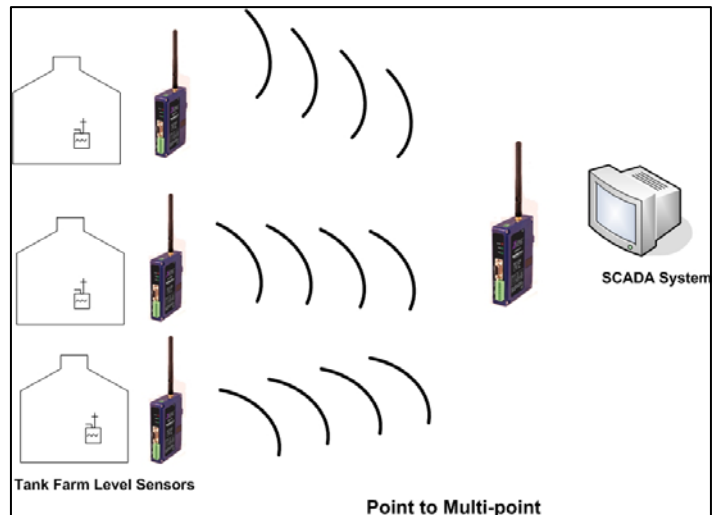
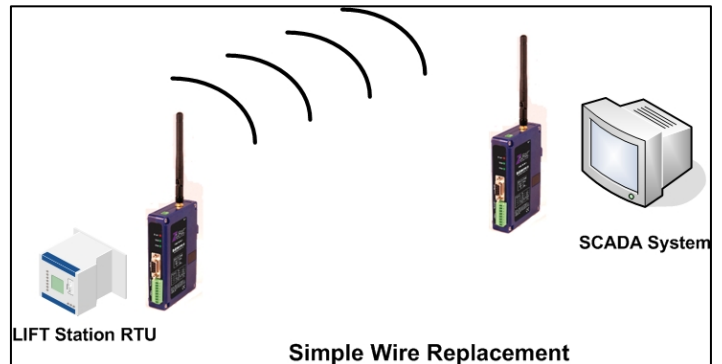
- ✓ RS-232/422/485 Wire Replacement
- ✓ Serial Data Rates up to 230.4 Kbps
- ✓ Modbus ASCII/RTU
- ✓ Long Range
- ✓ Adjustable Transmitter Power
- ✓ Wide Operating Temperature
- ✓ 10 – 48 VDC or 18 – 30 VAC Operation



Ideally suited for applications in which running cable is either too expensive or not practical. If you need to get a serial signal across a river, highway, or just to the other end of your warehouse Zlinx™ Radio Modems can do the job easier, faster, and less expensive than running cable. Easy plug-and-play setup saves installation time. Since they are Modbus compatible, no external converters are required.

Setting up and programming the modem is easy with the Zlinx™ Manager software. The software covers everything from basic to advanced settings and firmware updates.

- Long Range
- Industrial Grade DIN Mount Case
- European SRD G3 868 MHz Band
- Wide Operating Temperature, -40 to 85 C
- FSK Modulation
- LED Signal Strength Display
- Compact Omni Directional Antenna Included
- Software Adjustable Transmitter Output
- Point to point or point to multi-point operation

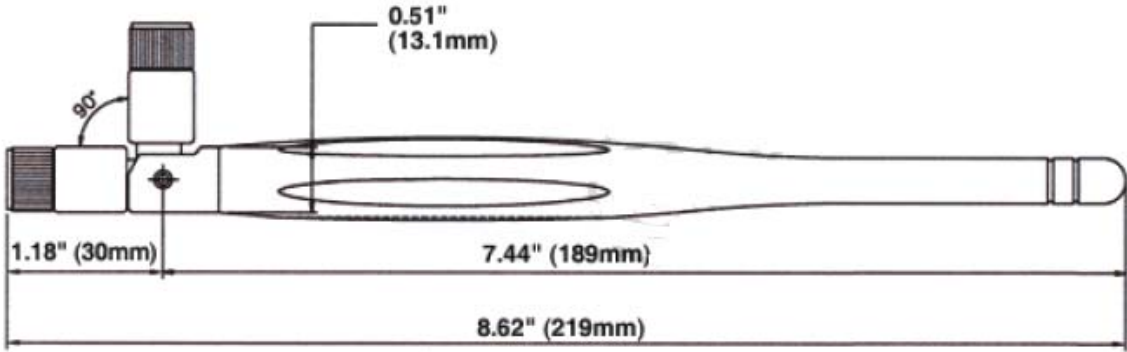
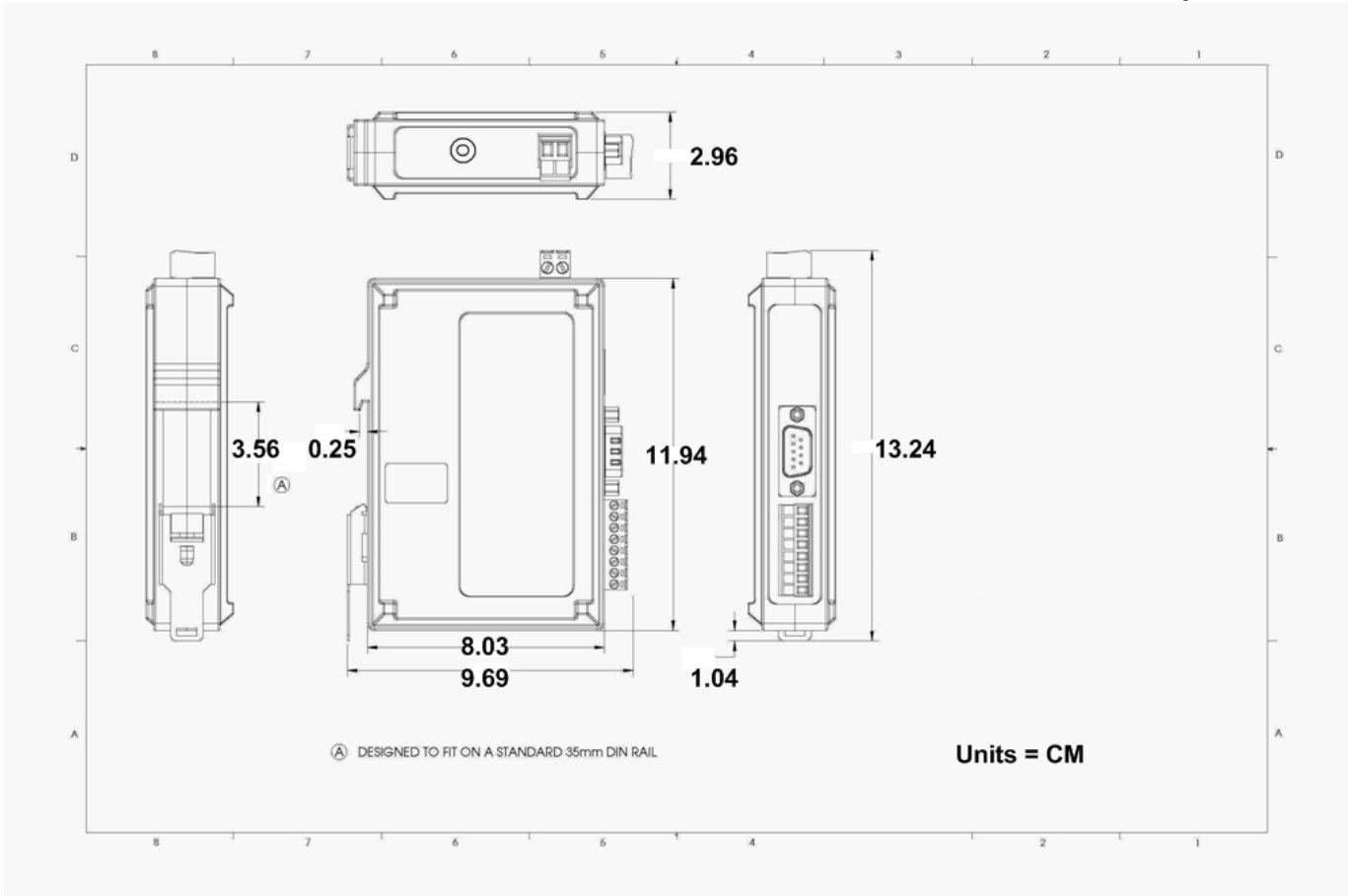


## Specifications

<b>RS-232</b>	
Connector	DB9 F, DCE
Signals	TD, RD, RTS, CTS, GND
Connector	Removable Terminal Block
Signals	TD, RD, GND
<b>RS-422</b>	
Connector	Removable Terminal Block
Signals	TDA(-), TDB(+), RDA(-), RDB(+), GND
Termination	120 Ohm, DIP Switch Selectable
<b>RS-485</b>	
Connector	Removable Terminal Block
Signals	TDA(-), TDB(+), RDA(-), RDB(+), GND
Modes	2 or 4 Wire
SD Control	Bit wise enabled
Termination	120 Ohm, DIP Switch Selectable
<b>Serial Data</b>	
Baud	1200 to 230.4
Data bits	7, 8
Parity	None, even, odd, mark, space
Stop bit	1, 2
<b>Link Failure Output</b>	
Connector	Removable Terminal Block
Type	Open Collector (PNP), Dry Contact
Current	40 mA
<b>Industrial Bus</b>	
	Modbus ASCII/RTU Compatible
<b>Power</b>	
Connector	Removable Terminal Block
Voltage	10 to 48 VDC or 18 to 30 VAC
Power Consumption	6.0W Maximum
Source	External – Power supply is not included
<b>Terminal Blocks</b>	
Wire Size	28 to 16 AWG
Torque	0.2 Nm (Newton-Meters)
<b>LED Indicators</b>	
Power (RED)	ON = Power Applied, OFF = No Power
RSSI / Signal Level	GEEEN = Strong Yellow = Adequate Red = Weak GREEN – Flashes with data
Wireless Data	GREEN – Flashes with data
<b>Enclosure</b>	
Material	Plastic
IP Rating	30
Dimensions	3.05 x 8.38 x 11.94 cm (without antenna)
Mounting	35 mm DIN Rail, Panel mount adapter is available, see ordering information
<b>Environmental</b>	
Intended use	Indoor outdoor within an enclosure
Op Temperature	-40 to 85 C
Storage Temp	-40 to 85 C
Op Humidity	10 to 95% Non-condensing
MTBF	172981 hours
MTBF Calc Method	Parts Count Reliability Prediction
<b>Agency Approvals</b>	
CE	Declaration of Conformity available For download
RoHS	Yes

<b>Radio Frequency</b>	
Standard	Proprietary RF
Range	Range depends on various conditions Ranges up to 40 km are possible
Frequency Band	869.4 to 869.65 (868 ) MHz
Transmitter Power	1mW, 23mW, 100mW, 158mW, 316mW
Receiver Sensitivity	-112dBm @ 24Kbps
RF Data Rate	24 Kbps
Duty Cycle	10% hourly duty cycle restriction
<b>Included Antenna</b>	
Connector	RP-SMA
Gain	3 dBi
Horizontal Beam	360 degrees
Impedance	50 Ohm
VSWR	< 2.0
Length	21.9 cm
Polarization	Vertical
Other	Articulated to allowing it to be used vertically, at a right angle, or any angle in between
<b>Security</b>	
Number of Channels	Single Channel
Addressing	PAN ID, 64-bit addresses
Encryption	128 bit AES
<b>Software</b>	
Programming OS	Zlinx Manager Software on CD Windows 2000, 2003 Server, XP, and Vista
Features	AT Command Terminal Emulation RSSI Signal Range Test Modem Emulation
<b>Ordering Information</b>	
ZP8D-24RM-LR	868 MHz Long Range Radio Modem
RM-LR824-KIT	868 MHz Radio Modem Kit Includes two radio modems, two 30W, 24V, DIN Rail Power Supplies, and one 6 foot serial cable for programming.
Power Supply	An external power supply is required but not included. Model DR-30-24 (30W, 24V, DIN Mount) should work in most applications.
DRPM25	Panel Mount Adapter
High Gain Antennas	B&B Electronics has a full line of optional high gain antennas
<b>Replacement Items</b>	
ZP9D-ANT1	Replacement antenna
ZP9D-DIN1	Replacement DIN clip and spring
ZP9D-TB1	Replacement terminal block and DIP Switch cover

PRODUCT INFORMATION



B&B ELECTRONICS