

RS232/RS485 RADIO MODEM – 2.4 GHz Stand-Alone Radio Modems



Technical Overview

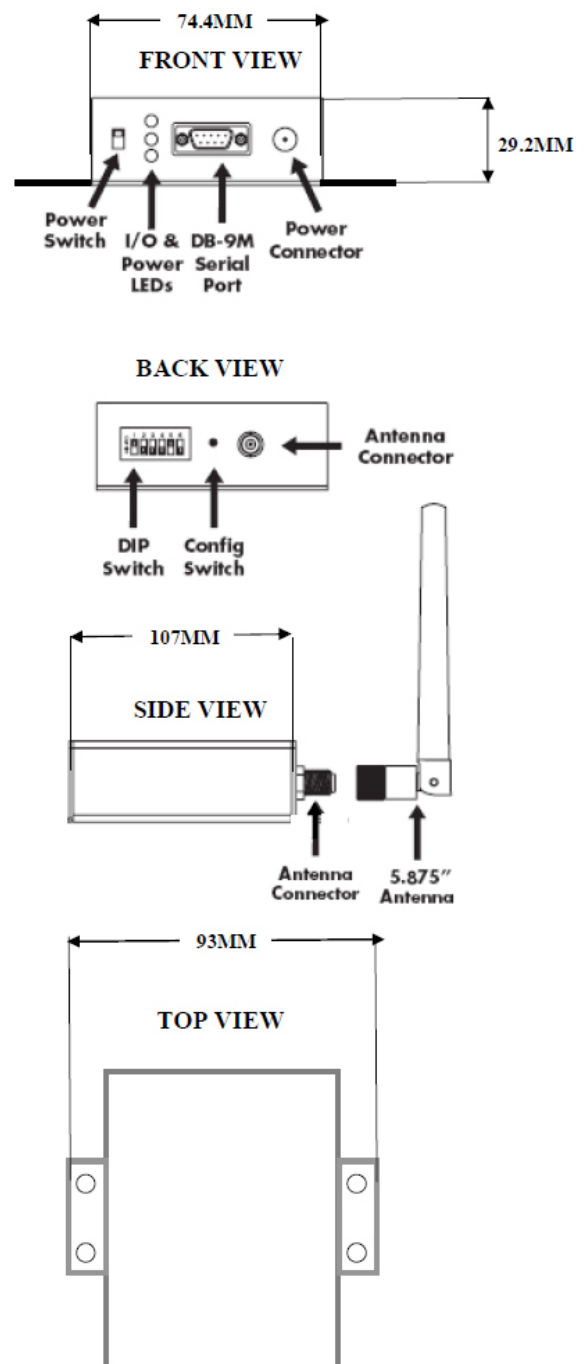
General Description

BZ-TECH LTD RF modems can be configured in minutes to provide low-cost serial cable replacement between all types of electronic devices. Available in 2.4 GHz models, the modems provide transmission ranges of up to 20 miles in a low-cost wireless solution. The modems are coupled with a DIP switchable RS-232/422/485 interface board and regularly outperform more expensive RF modems. Additionally, the modems are easy to use, thereby reducing the complexity of data system development. Available in RS-232/422/485 interface the modems can wirelessly connect a variety of devices across many applications including remote monitoring, building automation/security, industrial automation/SCADA, fleet management/asset tracking and sensor data capture in embedded systems.

Features

- Indoor/urban range up to 180 meter
- Outdoor line-of-sight range up to 5 km (with high gain antenna)
- 7 frequency hopping channels, each with 65K available addresses
- Outstanding receiver sensitivity (-105 dBm @9600 bps)
- Low power consumption for power-sensitive applications
- Pin, serial port and cyclic sleep modes available
- Performs retries and acknowledgments for reliable packet delivery
- Easy out-of-the-box operation — no configuration necessary
- Durable industrial grade enclosure

Main Specifications





Performance

- **Indoor/Urban range (w/ 2.1 dB dipole antenna):** Up to 180 m@ 2.4 GHz
- **Outdoor RF line-of-sight range (w/ 2.1 dB dipole antenna):** Up to 5 km@ 2.4 GHz
- **Outdoor RF line-of-sight range (w/ high gain antenna):** Up to 16 km@ 2.4 GHz
- **Transmit power output:** 50 Mw (17 dBm) @ 2.4 GHz
- **Receiver sensitivity:** 2.4 GHz: -105 dBm (@9,600 bps throughput data rate), -102 dBm (@19,200 bps)
- **Interface data rate (software selectable):** 10 - 57600 bps (including non-standard baud rates)
- **Throughput data rate:** 9,600 or 19,200 bps
RF data rate: 10,000 bps (@9,600 bps throughput data rate) or 20,000 bps (@19,200 bps)

Power requirements

- Power supply voltage: 7 - 18V
 - Receive current: 90 mA @ 2.4 GHz
 - Transmit current: 180 mA @ 2.4 GHz
- Power Down Current: < 1 mA

Certification

FCC ID (U.S. Certification Part 15.247)
OUR24XSTREAM (2.4 GHz)

Antenna

Connector options: RPSMA (Reverse Polarity SMA)

For more information about our products or to place an order, please contact our sales department at +972-77-7756001, +972-88523548

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