Intuicom’s EB-X is a long-range, high-speed industrial wireless radio enabling both IP and serial connectivity. The EB-X provides remote serial and IP data connectivity to IP based networks, enabling high performance data transport and mobile wireless access for vehicle based operations.

**FUNCTIONALITY & FLEXIBILITY**

Providing Ethernet and dual serial port connectivity simultaneously, the EB-X offers a single solution to a broad range of applications. With up to 4 Mbps of available bandwidth, the EB-X is flexible enough to support legacy serials as well as the most current IP devices. The EB-X is multi-functional and may be operated as the access point or end-point in point-to-point, point to multipoint, and peer to peer communications.

Employing Intuicom’s robust and secure frequency hopping spread spectrum technology, the EB-X PLUS is inherently resistant to interference from other RF equipment including other spread spectrum radios. Empowered with an ultra-sensitive and highly-selective RF receiver, the EB-X provides real-time, robust data transport. With top performance and security that includes 128-bit or 256 AES encryption; the EB-X provides superior “real world” throughput and performance over other wireless products.

**KEY FEATURES**

- Best-in-Class 900 MHz Performance
- Ethernet and Dual Serial Port interfaces
- High-Speed Performance up to 4 Mbps
- 60 mile range (LOS)
- Secure: 128-bit & 256-bit AES Encryption

**EASE OF USE**

EB-X’s embedded web-based set-up makes getting up and running a straight-forward and simple process. Our robust design and ruggedized enclosure makes certain your applications keep running in the most difficult environments.

Like all our radios, the EB-X is designed and built in Colorado, USA.
**GENERAL SPECIFICATIONS**

- **Enclosure**: cast aluminum
- **Size**: 165mm x 107mm x 53mm
- **Weight**: 680g
- **Operating Temperature**: -40°C to +75°C
- **Humidity**: 0 to 95%, non-condensing
- **Reliability**: 62,000 hours MTBF
- **RoHS**: Directive 2011/65/EU

**INTERFACES**

- **Ethernet**: RJ45
- **Serial**: DB-9 (two)
- **USB**: Micro USB
- **RF Connector**: TNC (f)

**POWER REQUIREMENTS**

- **Operating Voltage**: 9-36 VDC
- **Transmit Current**: 350 mA @12 VDC
- **Receive/Idle Current**: 100 mA @ 12VDC

**DATA TRANSMISSION**

- **Error Detection**: CRC, FEC, and ARQ
- **Link Throughput**: Up to 1.6 Mbps; 4 Mbps with Compression
- **User Interface Rates**: Ethernet Rate: 10/100 Mbps
  Serial: up to 115 kbps
- **Data Encryption**: 128-bit and 256-bit AES CCM
- **Advanced Features**: Packet Compression and Packet Aggregation

**TRANSMITTER**

- **Frequency Range**: 902-928 MHz
- **Output Power**: Up to 1 Watt, user selectable
- **Range**: 60+ Miles (LOS)
- **Data Rates**: 115.2 kbps to 4 Mbps
- **Channel Size**: 230.4 to 32225.6 kHz
- **Modulation**: .
- **Hopping Rates**: 25ms to 400ms
- **Hopping Channels**: Up to 112

**RECEIVER**

- **System Gain**: 136 dB
- **IF Selectivity**: >40 dB
- **Sensitivity**
  - **RF Data Rate**
    - 115 kbps: -105 dBm (Without FEC), -108 dBm (With FEC)
    - 250 kbps: -102 dBm (Without FEC), -105 dBm (With FEC)
    - 500 kbps: -99 dBm (Without FEC), -102 dBm (With FEC)
    - 1 Mbps: -95 dBm (Without FEC), -98 dBm (With FEC)
    - 4 Mbps: -83 dBm (Without FEC), -86 dBm (With FEC)

*Note: Specifications subject to change without notice.*