

EB-X

900MHz HIGH-SPEED SERIAL/ETHERNET TRANSCEIVER



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	Without FEC	With FEC
115 kbps	-105 dBm	-108dBm
250 kbps	-102 dBm	-105 dBm
500 kbps	-99 dBm	-102 dBm
1 Mbps	-95 dBm	-98 dBm
4 Mbps	-83 dBm	-86 dBm

