

EB-3 PLUS™ Transceiver

LONG-RANGE IP/ETHERNET DATALINK



Intuicom's EB-3 PLUS is a long-range, high-speed industrial wireless transceiver enabling both IP and serial connectivity. The EB-3 PLUS provides remote serial and IP data connectivity to IP based networks, enabling high performance data transport, positioning and access for fixed or mobile applications.

FUNCTIONALITY AND FLEXIBILITY

The EB-3 PLUS offers a broad range of capabilities and end-user configurations to satisfy a variety of requirements. This transceiver supports dual serial and Ethernet simultaneously, providing access to older serial devices as well as IP devices on the same network. Designed for flexibility, the rugged EB-3 PLUS can be operated in point-to-point or point-to-multipoint mode and can be configured as a access point, end-point or repeater. The GPS option offers accurate positioning and timing for asset management and tracking applications.

"BEST-IN-CLASS" RF PERFORMANCE

Employing Intuicom's robust and secure frequency hopping spread spectrum technology, the EB-3 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-3 PLUS provides real-time, robust data transport. Security features included are 128-bit AES encryption and RADIUS compliant authentication, as well as the inherent security of our FHSS technology. Capable of delivering the maximum output power allowable by the FCC for unlicensed operation—the EB-3 PLUS offers exceptional performance, with up to 60 miles range (LOS).

EASE OF USE

Intuicom's embedded web-based set-up makes getting up and running a straight-forward and simple process. Not only is the EB-3 PLUS easy to set-up, but Intuicom makes it simple to optimize the performance of each transceiver on the network after it has been installed in the field. An IP addressable embedded server hosts a dynamic web page that provides diagnostics, performance criteria and access to key parameters for on-demand remote configuration.

With proven performance in difficult RF environments, Intuicom's wireless networks power through the congestion to provide reliable data transport where other technologies fall short.

To learn more about enabling wireless networking for your applications, please contact us at: info@intuicom.com or call (303) 449-4330

KEY FEATURES

- Ethernet and dual serial port interfaces
- 60+ mile range
- Secure, license-free 902-928 MHz FHSS technology
- "Single Unit Operation"™, any one unit may serve as a master, remote, repeater or remote/repeater
- 154 Kbps over the air data rates
- 128-bit AES Encryption
- RADIUS compliant authentication
- Low power consumption
- Extended temperature range
- Auto-crossover switching
- Optional embedded GPS



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GENERAL SPECIFICATIONS

Enclosure	Ruggedized extruded aluminum
Size	H: 56.6 mm x W: 74.4 mm x L: 165.1 mm
Weight	429 g
Operating Temperature	-40° C to +75° C
Connectors	
External Antenna	TNC-F
Data Interface	Ethernet: 10/100 BaseT, RJ45 (auto crossover) COM1: RS232/422/485, DB9-F COM2: RS232/422/485, DB9-F
Power (@ 12 VDC)	140 mA Receive; 550 mA Transmit; 71 mA Idle
Input Voltage	6-30 VDC
Operating Modes	
Network Configurations	Point-to-Point, Point-to-Multipoint
Unit Operating Modes	Access Point, Repeater, End Point, Repeater/End Point
Unit Configurations	Access Point (Ethernet and/or serial), End Point (Ethernet and/or serial)

WIRELESS TRANSCEIVER

Frequency Range	902 - 928 MHz
Transmitter	
Output Power	100 mW to 1 W (+30 dBm); Programmable
Range, Line of Sight	60 Miles
Modulation	2 level GFSK
Occupied Bandwidth	230 KHz
Hopping Patterns	15 per band, 105 total, user selectable
Hopping Channels	112, user selectable
Hopping Bands	7, user selectable
Frequency Zones	16 Zones, 7-8 channels per zone
Receiver	@ 12 VDC
Sensitivity	-102 dBm at 10 ⁻⁴ BER at 115 Kbps; -106 dBm at 10 ⁻⁴ BER at 154 Kbps
Selectivity	20 dB at fc ± 230 KHz
System Gain	140 dB
Data Transmission	
Error Detection	32 Bit CRC, retransmit on error
Data Encryption	128-bit AES, Proprietary Spread Spectrum Technology
Authentication	Central Authentication and RADIUS compliant
Protocol	Ethernet 802.3, ARP, DHCP, IP, Multicast, ICMP, TCP, UDP, TFTP, FTP
Data Rate*	115 Kbps

OPTIONAL EMBEDDED GPS Contact Intuicom for configurations and specifications

* Assumes 75% frequency availability, no repeater
Note: Specifications subject to change without notice.

INTUICOM RADIOS REQUIRE PROFESSIONAL INSTALLATION

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