

# EB-6 PLUS™ Transceiver

HIGH SPEED IP/ETHERNET DATALINK



Intuicom's EB-6 PLUS is a long-range, high-speed industrial wireless transceiver enabling both IP and serial connectivity. The EB-6 PLUS provides remote serial and IP data connectivity to IP based networks, enabling high performance data transport, positioning and access for fixed or mobile operations.

## FUNCTIONALITY AND FLEXIBILITY

Providing Ethernet and dual serial port connectivity simultaneously, the EB-6 PLUS offers a single solution to a broad range of applications. With up to 867 Kbps of available bandwidth, the EB-6 PLUS is flexible enough to support legacy serials as well as the most current IP devices. Consistent with Intuicom's other transceivers, the EB-6 PLUS is multi-functional and may be operated as the access point, end-point, repeater, or endpoint/repeater in point-to-point and point-to-multipoint communications.

## "BEST-IN-CLASS" RF PERFORMANCE

Employing Intuicom's robust and secure frequency hopping spread spectrum technology, the EB-6 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-6 PLUS provides real-time, robust data transport. With top performance and security that includes 128-bit AES encryption, the EB-6 PLUS provides superior "real world" throughput and performance over other wireless products.

## 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-6 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 dense 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](mailto:info@intuicom.com) or call (303) 449-4330*

## KEY FEATURES

- Ethernet and dual serial port interfaces
- 40+ mile range (LOS)
- Secure, license-free 902-928 MHz FHSS technology
- Single Unit Operation™: any unit may serve as an access point, end point or repeater
- 867 Kbps over the air data rates
- 128-bit AES Encryption
- RADIUS compliant authentication
- Low power consumption
- Auto-crossover switching
- Optional embedded GPS

## APPLICATIONS

- Traffic system controls
- Video surveillance
- Security systems
- High speed backbones
- Mobile data & remote access
- Remote asset management
- AVL/Vehicle tracking
- Remote sensor data collection



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## GENERAL SPECIFICATIONS

Enclosure	Ruggedized extruded aluminum
Size	H: 59 mm x W: 74 mm x L: 165 mm
Weight	427 g
Operating Temperature	-40° C to +60° 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)	< 150 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 (FHSS/FCC DTS)
Transmitter	
Output Power	5 mW to 1 W; Programmable
Range, Line of Sight	40 Miles / 15 Miles dependent on configuration
Modulation	2-level GFSK
Occupied Bandwidth	611.2 KHz
Spreading Method	Frequency Hopping/FCC DTS
Hopping Patterns	15 per band, 105 total, user selectable
Hopping Channels	41
Frequency Zones	16 Zones, 2-3 Channels per Zone
Receiver	
Sensitivity	-102 dBm at 10 <sup>-6</sup> BER at 614 Kbps -96 dBm at 10 <sup>-6</sup> BER at 867 Kbps
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
Ethernet Interface	802.3, IPv4, TCP, UDP, DHCP, ICMP, ARP, TFTP, DNP3 over TCP, VLAN (1) 802.3u, Fast Ethernet, RJ-45
Data Rate* (over the air)	867 Kbps/614 Kbps
Management	HTTP, HTTPS, Locale Console; IP Auto Discover

**OPTIONAL EMBEDDED GPS** Contact Intuicom for configurations and specifications

\* Measured assuming 75% frequency availability  
Note: Specifications subject to change without notice.

INTUICOM RADIOS REQUIRE PROFESSIONAL INSTALLATION

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