

# 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)<br>COM1: RS232/422/485, DB9-F<br>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<br>-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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