

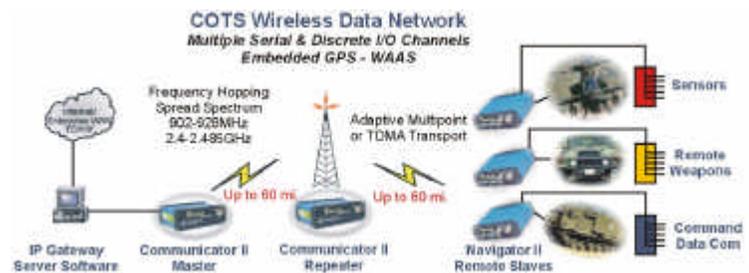
Intuicom Navigator II



Date Revised: 16 MAY 03

VENDOR DESCRIPTION

Intuicom's Navigator II™ multifunctional wireless Frequency Hopping Spread Spectrum (FHSS) data transceiver offers advanced command, control, and communications capabilities for secure, long-range wireless networking where optimized data flow and a multiple device interface are required. Simultaneous wireless connectivity of up to three serial devices, discrete I/O for remote sensing and control of switch closures, and optional embedded GPS are provided at each remote node. The included network server software makes each RS-232 port, discrete data lines, and GPS data stream available as IP sockets for simplified access, manageability, and integration with third-party software. Enclosed in a ruggedized, splash-resistant aluminum enclosure, the Navigator II is available in several COTS configurations to support a variety of commercial, government, and defense wireless device networking applications.



Product Manager
Robotic & Unmanned Sensors
 Telephone: (732) 427-5827 / DSN 987
 Fax: (732) 427-5072 / DSN 987
 e-mail: SFAE-IEWS-NV-RUS@IEWS.monmouth.army.mil

CDR

Hardware		
Power: 3.5 Watts typ., 12VDC	Cooling: Ambient air	Serial & Discrete Interface: 3 -DB9 connectors
Weight: 851g (incl. processor)	Operating Altitude: 0 to 60,000 ft	MTBF: TBD (Report available in July 2003)
Size: 53mm H x 167mm W x 143mm L	Operating Temp.: -30°C to +75°C	MTTR: <1 hour
Antenna Weight: Application-specific	Storage Temp.: -40°C to +85°C	Enclosure: Extruded aluminum; rubber bumpers

Performance			
Frequency	902-928MHz FHSS	2.4-2.485GHz FHSS	Modes: TDMA, Adaptive Multipoint, point-to-multipoint, point-to-point, store-and-forward repeater
Range (LOS)	60 miles LOS	20 miles LOS	Link Throughput: 115.2 Kbaud
RF Output	1 W	500mW	Encryption: Dynamic key substitution
Sensitivity	-108 dBm at 10 ⁻⁶ BER	-108 dBm at 10 ⁻⁶ BER	Error Detection: 32-bit CRC
Selectivity	60 dB at fc ± 145 kHz	60 dB at fc ± 460 kHz	Interface: RS-232; 1200 to 115.2kbps
Modulation	GFSK		Ports: Dual RS-232 and one discrete with 4 inputs & 3 outputs (available with three RS-232 & no discretess)
Occupied Bandwidth	230KHz		Data Flow: Full duplex
Optional GPS <ul style="list-style-type: none"> ■ Parallel Tracking Channels: 12 ■ L1 Freq: 1.575 MHz ■ Code: C/A std. ■ Differential Corrections: WAAS optional ■ DGPS Horiz. Position Accuracy: 1m CEP; <1m CEP w/WAAS enabled ■ Acquisition Time: 15 sec. (hot); 2 min. (cold) ■ Position Update Rate: Selectable to 1Hz (10Hz optional) ■ Re-acquisition Time: 1 sec 			