Ultra-Wideband Network Sierra Nevada Corporation's (SNC) Ultra-Wideband Network (UWB-NET) provides a secure local area wireless network capable of streaming full motion video, moving map data and VoIP communication for enhanced situational awareness. • Self-organizing, multi-node network supports IP based data transmissions. • Provides communication for up to 15 nodes within a 10-meter range with multi-path propagation effects negated by channel equalization. Unique waveform provides a LPI/LPD signal while interference avoidance & channel estimation provides frequency agility & efficient data rate selection for operation in RF congested tactical environments. Distribution Statement A: Approved for Public Release Photo By: Cpl. Gloria Lepko. The appearance of U.S. Department of Defense (DoD) visual information does not imply or constitute DoD endorsement. WARNING – Exports, sales, and offerings of the products and technologies discussed herein are subject to U.S. Government approval.

UWB-NET

Ultra-Wideband Network

Technology Benefits

- Wide Channel bandwidth 528 MHz, provides high data throughput
- Burst data rates: 53 Mbps to 480 Mbps
- Provides wireless connectivity for up to 15 devices
- Low RF transmit power
- Local area network range: 10 m / 33 ft
- AES-256 encryption for Data in Transit security
- Self-healing & merging network technology for robust network forming

Features

Platform Module

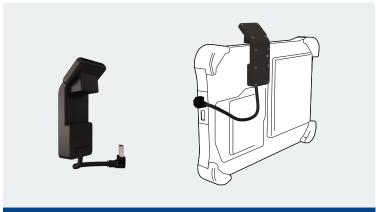
- Integrated with ARM based processor provides routing capability
- Accepts 28V IAW MIL-STD 704F
- Data input: USB Console & 802.3 Ethernet
- RF output: SMA connector
- Black Hawk proof of concept Platform Module: 5.7" L x 4.0" W x 1.3 H", 0.9 lbs

Mobile Device Module

- All-inclusive module
- Single data/power connection
- Embedded RF antenna
- Power/Data input: USB 2.0
- · Status Indicator

Applications

- Compatible with COTS Samsung Mobile & Nett Warrior end user devices
- Compatible with Linux, Windows, Android & CentOS operating systems
- Development path for integrated sleeve design for mobile devices
- Suitable for airborne (rotary & fixed), ground (armored & wheeled vehicles) & sea (Riverine patrol vessels) platforms
- VoIP capable for wireless voice communications between crew members & passengers



UWB-NET Mobile Device Module on Panasonic Toughpad

