

# USB ENTR UNIVERSAL SERIAL BUS EMBEDDED NATIONAL TACTICAL RECEIVER



L3's USB ENTR, in its small form factor, simultaneously receives and processes four channels of Integrated Broadcast Service (IBS) UHF SATCOM signals.



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L3 Telemetry & RF Products' (L3 T&RF) USB ENTR receives the Integrated Broadcast simultaneously receives and processes four channels of IBS. These can be configured between IBS-Simplex and Common Interactive Broadcast (CIB).



The channel scheme can be reconfigured dynamically without interfering with operations. USB ENTR provides isolation between channels to preclude mutual interference. It is designed to interface to any host platform that has a USB port. With its small form factor the USB ENTR is ideal for use with a desktop or laptop computer.

USB ENTR interface software is compatible with all the mainstream message processing and control software. It is software-programmable allowing changes or improvements to be made by upgrading the firmware or software. These upgrades and new releases can be distributed via electronic media.

USB ENTR can be integrated in a variety of operational and tactical weapons systems cutting across service lines. USB ENTR can be used in intelligence and operation centers, in aircraft from tactical to support, mobile and maritime environments, as well as dismantled and special operations applications.

## **FEATURES**

- Receipt of near real-time intelligence
- Battlefield and situational awareness
- Threat assessment data
- Targeting and retargeting information
- Up to 4-channel reception, dynamically configurable between CIB and IBS-Simplex
- Software-controlled
- Embedded decryption
- USB interface
- User-installable
- Embedded firmware/software upgradable via electronic media
- Crypto-programmable

# USB ENTR UNIVERSAL SERIAL BUS EMBEDDED NATIONAL TACTICAL RECEIVER



## SPECIFICATIONS

### PARAMETERS

|                           |                                                                  |
|---------------------------|------------------------------------------------------------------|
| RF Frequency              | UHF                                                              |
| Dynamic Range             | 65 dB                                                            |
| Tuning Step Size          | 1.0 kHz                                                          |
| Tuning Time               | 10 mSec. max.                                                    |
| Phase Noise               | 3 degrees max. 100 Hz to 25 kHz                                  |
| 3rd-Order Intercept Point | 0 dB                                                             |
| Noise Figure              | < 5 dB                                                           |
| Frequency Stability       | < ±2 ppm                                                         |
| Group Delay Variation     | 20 mSec. max                                                     |
| Size                      | 9.4" x 4.7" x 2.8"                                               |
| Weight                    | 4.25 lbs.                                                        |
| Temperature               | -20 °C to +48 °C with batter<br>-40 °C to +55 °C without battery |

### SYSTEM ARCHITECTURE

|                                                                                                                                                                                                                                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host Requirement: 500 MHz PC / 256 MB RAM (min), USB (1.1 min)                                                                                                                                                                           |
| Drivers available for Windows (32-64 bit), Windows 7, Windows XP, Vista and Solaris 2.10                                                                                                                                                 |
| Compatible with Tactical Receive Segment (TRS) and TNT data processing software                                                                                                                                                          |
| Dynamic Channel Reconfiguration: <ul style="list-style-type: none"><li>- Up to 4 IBS-Simplex channels simultaneously</li><li>- 1 CIB channel and up to 2 IBS-S channels simultaneously</li><li>- 2 CIB channels simultaneously</li></ul> |
| Provides KGV-11, KGR-96, KG-84, AES and Medley decryption.                                                                                                                                                                               |
| Fully reprogrammable crypto                                                                                                                                                                                                              |
| Standard DS-101 Crypto port supports standard fill devices such as CYZ-10, SKL                                                                                                                                                           |
| CIB Upgradable via SW/FW load at factory or depot                                                                                                                                                                                        |
| Operates up to 2 hours on internal rechargeable battery                                                                                                                                                                                  |
| Operates via DC input or provided AC convertor                                                                                                                                                                                           |
| Certified to MIL-STD-810F Cat 12 Vibration                                                                                                                                                                                               |
| Operation to 60,000 ft. with no external cooling requirement                                                                                                                                                                             |
| 20 g Shock                                                                                                                                                                                                                               |
| Available in two versions: with/without battery                                                                                                                                                                                          |

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