

Wideband HF/VHF/UHF COMINT System WBM-630

- COTS-Based System, Using Standard PCs for All Processing Functions
- Automatic Detection, and Direction Finding of Modern HF/VHF/UHF Signals
- Prosecutes Long Duration Signals (LDS), Short Duration Signals (SDS), and Frequency Hopped Signals
- Configurable Scanning or Staring Operation
- 10 MHz Instantaneous Bandwidth
- Scalable Design for Size, Power, and Functional Capabilities



The WBM-630 is a complete wideband detection and DF system, designed to prosecute a wide variety of modern HF/VHF/UHF signals, including LPI signals such as frequency hoppers, SDS and burst. The system is designed for operation on a variety of mobile platforms including shipboard, ground mobile (vehicle), and airborne. The system design is modular, so the customer can scale the system in size, power, and functionality to meet unique operational and platform needs. The system supports a wide variety of operational modes including manual and automatic operations. For automatic processing, the operator defines the system's frequency coverage, signals of interest, and then the system runs unattended. The scanning, DF functionality provides the user with a survey of signal bearings over the full frequency range, which is updated with each scan. When configured to operate in a staring mode, the probability of intercept for SDS and frequency hopped signals increases.



SOUTHWEST RESEARCH INSTITUTE®
Signal Exploitation and Geolocation Division
P. O. Drawer 28510
San Antonio, Texas 78228-0510



PERFORMANCE DATA

WBM-630

SYSTEM SPECIFICATIONS

- Overall Frequency Range 2 – 3000 MHz
- DF Antenna Provided by customer or SwRI
- Wideband Instantaneous Bandwidth 100 MHz
- Spectral Scanning Rate (Display and Detection) 1 GHz/sec
- Wideband Spectrum Display 2 – 3000 MHz
- Detection Bandwidth 1.5 kHz (variable)
- Hop Rates Configurable
- DF Accuracy 2° RMS typical for clean site
- Signal Data and Mission Report Storage 3 days (expandable)
- Minimum Signal Duration 2 ms
- Communications Command, control and reporting via Ethernet
- Target Types FSK, PSK, QAM, AM, FM, SSB, Morse, Multi-tone modems, OFDM and SPECIALS.
Commercial examples: GSM, INMARSAT, trunked radio, high-power cordless phones, CCITT V.21, V.22, V.22bis, V.23, V.26, V.32, V.32bis

For information only. Specifications subject to change.

for more information contact:

Amanda Burmeister, Manager

Tactical Systems Department

Ph: 210/522-6242

Fax: 210/522-2709

Email: amanda.burmeister@swri.org



07P007B/M