



PORTABLE HF DIRECTION FINDING (DF)
AND MONITORING SYSTEM

#ElectronicWarfare



aselsan

PORTABLE HF DIRECTION FINDING (DF) AND MONITORING SYSTEM

PUHU 4-LCT provides high accuracy target direction information (line of bearing) with its signal processing capabilities and special direction finding (DF) algorithm. PUHU 4-LCT meets the needs of ground troops in different regions with 10 meters radius 5 element circular monopole antenna array, 40 meters radius 8 element circular monopole antenna array and antenna array alternatives with suitable radius between these two radius. PUHU 4-LCT can be installed and assembled by two staff in a short time.

The system can be operated in the area where it is installed or via wireless communication terminals located on it, from a portable computer at a distance in the line of sight. It can also be operated from Remote Command Center if communication structure is available. As a result of combining the direction information obtained by the joint operation of more than one system, the location of the target can be determined and displayed on the digital map.

PUHU 4-LCT has wideband scanning and narrowband precise direction finding capabilities. The system includes Correlative Interferometer and MUSIC and ADBF algorithms for co-channel signals.



General Features

- National DF Algorithms
- Ease of Use
- Different Antenna Array Alternatives
- Ability to Work over Wired/Wireless Communication Networks
- Location Fixing on Digital Map Display (With more than one system)
- Channel Scan, Threat List, Frequency Lock-Out Features
- Demodulation of AM, FM, LSB, USB, ISB, CW Signals
- Extensive Built-in-Test
- DF Capability Against Frequency Hopping Signals
- CCDF, MUSIC DF Algorithms
- Parsing/DF Capability with MUSIC Algorithm Against Co-Channel Signals
- Monitoring Capability with ADBF Algorithm Against Co-Channel Signals
- Air-Conditioned Cabinet
- Tracking and Monitoring Receivers (Optional, requires additional cabinet)
- Narrowband Signal Analysis Software (Optional)
- Wideband Signal Analysis Software/Hardware (Optional, requires additional cabinet)

Technical Specifications

- Frequency Coverage : HF
- DF Accuracy (Clear Site)
 - 5 Element Circular Monopole Antenna Array, 10 m Radius
 - HF Frequency Band : <5° RMS
 - 8 Element Circular Monopole Antenna Array, 40 m Radius
 - HF Frequency Band : <2° RMS
- Weight : ≤ 70 kg (*)
- Shock, Vibration : MIL-STD-810G
- EMI/EMC : MIL-STD-461E
- Operating Temperature : -10/+50°C
- Storage Temperature : -40/+70°C

(*) Without Air Conditioning Unit, Antenna, Antenna RF Cabling and Generator