Telephonics breaks through the foliage barrier and brings real-time field reconnaissance to new frontiers with the Foliage Penetration Surveillance and Track Radar System (FoPEN). Its versatile design allows for man-portable, tower and vehicle operations with encrypted wireless links.

Technical Capabilities

The FoPEN is a wideband, ground-surveillance radar which operates at the Ultra High Frequency (UHF) band, minimizing foliage attenuation. The system features Track-While-Scan (TWS) and provides Wide Area Surveillance (WAS) capability to search, detect, acquire and track targets through mixed foliage.

By operating on UHF, FoPEN's radio waves are able to permeate clusters of foliage and dense woods which are otherwise obscured by conventional X-band radar systems. The tested system complies with the Measurement of Electromagnetic Interference Characteristics requirements defined in MIL-STD-461 and MIL-STD-462.
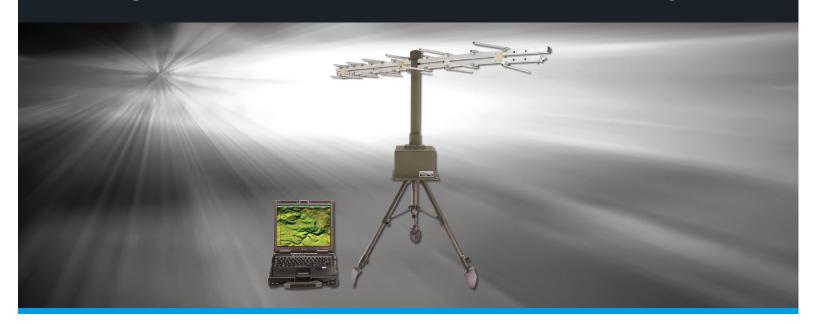
FoPEN's radar capabilities include target detection and tracking during day, night and zero visibility conditions. The system can be chained along borders or perimeters to provide continuous networked coverage to a remote fusion center via UHF communication links.

The distinct advantages of Telephonics' FoPEN are:

- Solid-state transmitter and receiver with direct and digital-to-radar frequencies
- UHF band for optimal foliage penetration
- Tactical and collapsible antenna
- Flexible and modular design which can be altered to meet customers' needs
- Full life-cycle maintenance support
- Standard XML interface
- Unattended operation via optional solar power or generator
- Extensive Built-in-Test (BIT)
- Enhanced display, PPI and B-scope, digital map, clutter map and graphics-on-color display

Foliage Penetration Surveillance and Track Radar System

Additional Features

- User-definable alarm and no-interest zones
- Linux-based operational software
- Rugged laptop for local control and display
- Remote operation over encrypted Wi-Fi connection or via standard Ethernet
- XML remote interface
- Continuous 24-hour operation
- Environmentally qualified
- Power supply via 24-48 VDC (MIL-STD-1275D)
- Continuous radar operation recording
- Mean-Time-Between-Failures (MTBF) (fixed installation): 20,000 hours
- Mean-Time-to-Repair (MTTR) (O level): <20 minutes
- Weight: 17 kg total weight (antenna: 3 kg, pedestal: 3 kg, signal processor: 3 kg, receiver: 2 kg, and tripod mast: 6 kg)
- Solar charger or generator

For additional information, contact Telephonics at 631.755.7000 or visit www.telephonics.com.

TELEPHONICS®