



The high precision jammer locator utilizes a novel hemispherical dome structure consisting of 52 antenna elements. Composite beams using 7 antenna elements are formed and the beams scan through the entire 360° in azimuth and up to 90° in elevation. This provides the maximum resolution achievable within the footprint of the structure and simplifies the electronics. Jammer or other interferers in the GPS band are detected with angular accuracy of better than 1°.

The entire architecture is software based and can be easily configured for various applications and situations. It can point the beam to GPS satellites, enhancing SNR. It can track GPS with one beam and track the interferer

with others, enabling detection and identification of spoofers. It can also characterize multipath signals for GPS.

Although configured for GPS, the system can be easily adapted for out-of-band or non GPS frequencies.

The unit is based on our Multipath Characterization System using Software Receiver, which was developed for Wright Patterson AFB..

- Size: 2 feet cube
- Weight: 20 kg
- Interface and Monitoring: PC
- Bandwidth (Instantaneous): 2 to 20 MHz
- Bandwidth (Search Zone): 20 to 100 MHz
- Dynamic Range: 30 to 80 dB
- Sensitivity: -130 dBm
- Software Configuration
 - ▶ Interference
 - ▶ Jammer
 - ▶ Spoofer
 - ▶ In-band/ Out-of-band
 - ▶ Multipath
 - ▶ Maximize SNR by maximizing signal and minimizing interference, multipath
- Typical Outputs:
 - ▶ Logged Data
 - ▶ Visual display
 - ▶ DOA for detected interferer/multipath
 - ▶ Amplitude
 - ▶ Phase for multipath
 - ▶ Up to 50 Hz output rate including all satellite channels