Pseudo Monostatic Research Radar (PMRR)
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RX Antenna 2

2.4 to 2.5 GHz GSM Band
1 to 10 Watts
CW Doppler
Pulsed Doppler
FM Chirp Mode

RX Antenna 3

50’ low loss cable

50’ low loss cable

TX and RX antenna 1

Pseudo Monostatic Research Radar (PMRR)

- Supports radar research,
- TX and RX antenna 1 6 ft above ground level,
- RX antenna 2 on 10 to 25 ft telescopic pole,
- RX antenna 3 on 10 to 40 ft telescopic pole,
- TX antenna supports either linear or left-hand circular polarization,
- RX antenna 1 supports single element and a 3X4 phased array with RHCP,
- Processing supported by 4 Xilinx Kintex Ultrascale KCU116 development boards,
- 4 channel data acquisition at 50 Msps and 12-bit resolution each,
- Phase 1 design will record combined data bandwidth of 2400 Mbps to a SATA-3 SSD for download and analysis,
- Phase 2 design will process data in real-time and display on a laptop via gigabit ethernet connection,
- CW doppler and Pulsed Doppler with/without Chirp modes supported.