



Order Code - 10211D - Single User

Order Code - 10211E - 05 User

Specifications

The Pulse Radar Simulation Software consist of

- Antenna section : (cut parabolic, parabolic) with facility to calculate the Gain and Beam Factor.
- Transmitter section : with facility to change the Radar Frequency, Pulse width, PRF and Peak Power. Calculation of the Range resolution and Pulse energy.
- Receiver section : with facility to change the Rx Noise Figure, BW , SNR and the Scan Rate. Calculation of Hits per Scan, Gain and Max. Range.
- Radar environment: with facility to simulate various Radar Environment like Jammer, Clutters

like Surface , Volume and Rain, Losses like RF Link Loss, Matched Filter Loss and CFAR Loss, RCS- should have libraries of various objects like Aeroplane, Ship, man, bicycle etc.

- The Software has animation windows for target detection, slant range, stealth aircraft, and effect of clutters.
- Frequency : 50MHz ~ 30GHz
- Pulse width : 0.1us ~ 100us
- PRF : 1KHz ~ 1MHz
- Display formats : PPI
- Number of ranges : Four variable
- Receiver noise factor : 1 ~ 50
- Receiver temperature : 150 ~ 400 Kelvin
- Peak power : 1mW ~ 1MW (-30 ~ +60dBW)
- Antenna type : Parabola, Cut Parabolic
- Antenna dimensions : 0.5m ~ 60m
- Scan width : 1 ~ 120 degrees in azimuth
- Scan type : Electronic
- Scan speed : 100 rpm
- RCS (m²) : 0.0001 ~ 100
- Noise jammer / repeater : CW noise

Experiments

- Antenna, Transmitter, Receiver characteristic simulation
- Jammer, surface clutter, rain characteristic simulation
- Target data and display characteristic simulation
- Study of antenna gain vs range
- Study of target RCS vs range
- Study of pulse width vs pulse energy
- Study of raindrop diameter vs signal to clutter ratio
- Study of SNR vs range

Note: Specifications are subject to change.