

RADAR Target & ECM Emulator

The UTS's RADAR Target & ECM Emulator (RTE) is an ideal choice for testing RADAR systems in injection mode both for conventional RADAR signal types and LPI signals. The Emulator also has provisions for enabling ECM at target side, so that testing ECCM features of RADAR (DUT) is possible. The unit is highly portable and controlled through Ethernet from user friendly GUI running on PC.

The RTE takes the RADAR generated signal as input and produces output, which consists the effect of modeled targets with different characteristics, propagation losses, whether conditions, clutter and Doppler shifts. This output can be used as input to RADAR receiver to test the performance under different conditions. The product consists of control unit running on PC with GUI connected to embedded unit over Ethernet. The Embedded unit provides connections for RADAR signal (in) and target emulated signal (out).

Key Features

Following are the key features of product, which can be upgraded as per requirements.

- Frequency range : Different models supporting up to 9 GHz
- Maximum Instantaneous Bandwidth: 50/100/200/500 MHz
- Maximum number of targets / reflectors : 10(Extendable)
- Range: 10 m - 100 Km (Extendable up to 1000 Km)
- Range resolution - 3 meters
- User friendly GUI (with optional maps feature)
- Can model RF parameters of RADAR systems
- Configurable RCS for targets
- Programmable clutter models
- User can make the RADAR system to be static or moving type
- Programmable Target speeds (Doppler shift based on relative motion)
- User can create, save and load profiles consisting typical target scenarios
- Power supply AC 240 V , 50 Hz, +/-10% (Also available for 28V DC power – Optional feature)

Applications

- Injection mode testing of surveillance/tracking RADARs
- Seeker development and testing
- LPI RADAR signal processing algorithm development and testing.
- Developing ECCM techniques for RADARs
- Performance analysis of Bi-static RADARs
- BITE module for RADAR

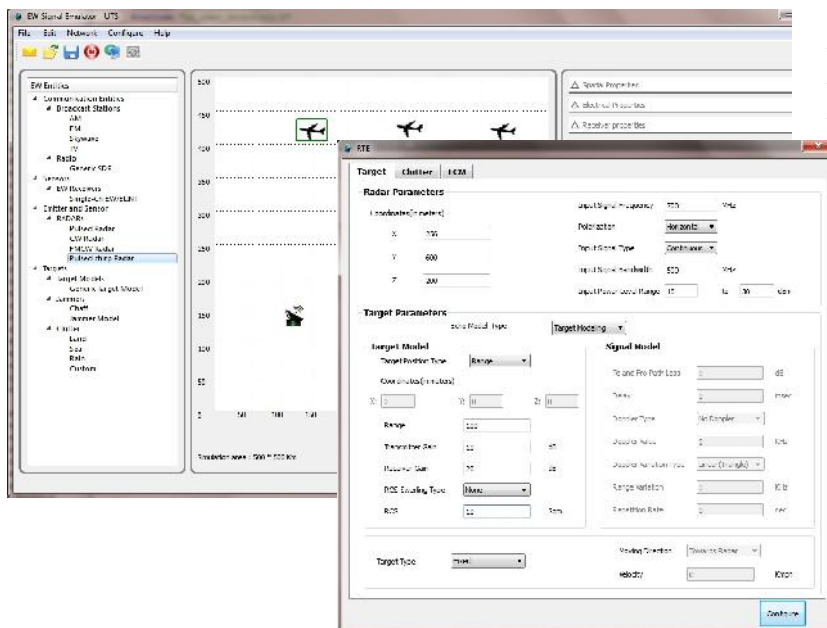
Ordering Information

P/N: UTS-RTE-R7.1

Please Contact us with your specifications for obtaining quote specific to your requirements.

Other Related Products

- RADAR signal emulator
- Carrier to Noise generator
- RADAR and Communication IPs



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