The Portable Range Threat Simulator (PRTS) is a modular package that is designed to be an affordable, transportable long range training tool. PRTS is capable of generating complex, multispectral signals for search, launch, track and other scenarios. It offers multispectral capability including UV, RF and EO/IR. The PRTS system is designed to be transported to field sites and set up quickly. It can be loaded into a full-size pickup truck, and requires only a small area for setup.
Using the advanced RF, UV and IR capabilities of the Textron Systems Model 527, UV Malina and IR Phoenix range simulators, respectively, PRTS is designed to be a confident and reliable test and training solution.

### PORTABLE RANGE THREAT SIMULATOR (PRTS)

**SPECIFICATIONS**

**FREQUENCY**
- PRTS: 2-18 GHz amplified out
- Model 527 Radar Signal Simulator: 500 MHz to 18 GHz; 28-40 GHz; 10-500 MHz (optional)

**RF SOURCE**
- One RF source
- 2-18 GHz amplified frequency range

**FREQUENCY SWITCHING SPEED**
- < 200 μsec single frequency (closed loop)
- < 1 μsec multiple frequency (open loop)

**AVAILABLE OPTIONS**
- Low-power man-portable
- High-power trailer-mounted

**SUPPORTING SYSTEMS**
- Ruggedized tripod
- High-gain antenna assembly
- Portable power source

**PULSE TRIGGERS**
- Synchronized TTL logic pulse triggers

**EFFECTIVE RADIATED POWER**
- 90 dBm typical

**NUMBER OF TIME-MULTIPLEXED EMITTERS**
- Up to eight

**FREQUENCY RESOLUTION**
- Less than 500 kilohertz (kHz)

**ANTENNA POLARIZATION**
- Vertical linear

**PROFILE SELECTION**
- Via software, utilizing programmable scenarios

**UV/IR SOURCE/SENSOR (OPTIONAL)**
- Testing out to 5 kilometers (km)
- Flight test of missile warning receivers, directional IR countermeasures, and chaff/flare
- UV Mallina with Nemesis IR beacons and laser range finder
- Independent or triggered in RF sequence

**MODES OF OPERATION**
- Continuous wave
- Pulsed

**INTEGRATED PRODUCTS**

**MODEL 527™ RADAR SIGNAL SIMULATOR**
The PRTS module enables Textron Systems’ handheld Model 527 Radar Signal Simulator to operate at extended ranges.

**UV LED MALLINA™**
The PRTS can incorporate preprogrammed Mallina profiles, which can be triggered to operate with the RF signals or used independently.

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