BAE SYSTEMS

C-Band Solid-State Threat Radar Simulator (TRS)

- **300 kW @ .001 Duty Cycle**
- **Quick Change Magnetrons**
- **Programmable Pulse Widths and Timing**
- **PRFs from 100 to 2500 PPS**
- **May be synchronized**
- **Modular Design**
- **High Reliability**
- **Frequency Band 6.8 - 7.3 GHz**

The TRS modular simulator is a durable, reliable, low maintenance system that is capable of full power emulation of a variety of threat radar signals. Operational applications include emulating the signals of land-based and ship-borne surveillance and tracking radars. The system is especially suited for installation on land ranges, remote controlled boats, or ship hulls for use as a target for live missile firings.

The simulator is designed to endure shock and vibration encountered during all common methods of transportation. The transmitter external housing is constructed of anodized aluminum to provide maximum protection from rain, high humidity, condensation, fog, and salt spray. The operational temperature range is between -20 degrees C and +55 degrees C ambient temperature.

The transmitter is mounted on a frame with removable external cover. Removing the cover provides ready access to all parts and subassemblies requiring repair or replacement. All operating controls and monitors are located on the front control panel accessible through a door in the transmitter cover. An optional RS 422 data link with remote control unit is available.

Pedestals are azimuth only with shaped antennas to simulate the constant rotation of search radars.

The simulators can transform a benign bombing range or training area into a multi-threat electronic combat environment at a fraction of the cost of full scale simulators.

Technical Services

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Fort Walton Beach, Florida 32548

Electronic Systems
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Contact Jim Atkinson

CONTROLS

Power On/Off	Applies or removes external power
Radiate On/Off	Places transmitter in radiate or standby modes
PRI	Adjusts PRI/PRF
PW	Pulse Width adjustment

GENERAL SPECIFICATIONS

Frequency	6.8 - 7.3 GHz*
Peak Power	300 kW
PRF	200 - 2500 PPS
Pulse Width	0.25 - 1.0 us
Duty	.001 Maximum

SIZE (Typical 200 kW)**

Height	30 in/76 cm
Width	25 in/64 cm
Depth	26 in/66 cm

WEIGHT (Typical 200 kW)**
138 lbs/63 kg

PEDESTAL
Constant Speed Azimuth, CW or CCW

ANTENNA
Shaped elevation beam 0-15 degrees

INPUT POWER
120 VAC 60 Hz or
220 VAC 50 Hz

ENVIRONMENTAL
Ambient Temperature

Operating	-20C to +55C
Non Operating	-40C to +65C

RELATIVE HUMIDITY
Operating: Up to 95% and condensing
Non-Operating: Up to 100% and condensing

MAXIMUM OPERATING ALTITUDE
7000 feet above MSL

*Various frequency and power level configurations from 4.0 - 8.0 GHz are available as well as azimuth/elevation designated pedestals.

**Size and weight are dependent on power output.

For more information, please contact:
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