



AN/PLM-4 Radar Signal Simulator (RSS)

A user programmable test set which generates pulse and scan modulated Radio Frequency (RF) signals.



Photos courtesy of www.af.mil

Engineered for life

AN/PLM-4 Radar Signal Simulator (RSS)

Applications: Airborne (Fixed Wing and Helicopter), Naval Surface, and Naval Submarine

ITT's Radar Signal Simulator (RSS) AN/PLM-4 is a user programmable, lightweight, highly mobile test set that generates pulse and scan modulated Radio Frequency (RF) signals. Using internal antennas, the RSS radiates toward the System Under Test (SUT), allowing the user to evaluate the SUT operation or perform diagnostics. The RSS is self-contained and operates from internal batteries or external AC power. The RSS can be hand carried and operated by a single person.

The RSS can be used for testing Pods, On-Board Self-Protection Electronic Countermeasures Systems, Radar Warning Receiver (RWR) Systems and Electronic Warfare Support Measures (ESM) Systems. With the RSS Remote Terminal, the user can be seated in the aircraft under test and visually determine the operability of the RWR by observing the SUT displays. The Remote Terminal allows the user to control the functions of the RSS. The RSS can also be connected directly to the SUT for testing and troubleshooting, bypassing the antennas. The RSS can be used as an end-of-runway or dock side pre-mission tester, with scenario capability allowing for rapid testing.

Features

- Programmable Emitter Parameters
- Emitters Programmed via Front Panel or Remote Terminal
- Lightweight/One Man Portable
- Internal Battery Power
- Built-In or External Battery Charger
- Remote Operation for Crew Station Testing up to 1,000 Feet from the Unit
- Threat Library Stored on Removable Media
- Extensive Built-In-Test for Easy Repair
- Small Unit Footprint (1 cubic foot) Conducive to Rapid Deployment



System Specification

- Frequency Range
 - Fully tunable 500 MHz to 18 GHz, options to 40 GHz
- Pulse Repetition Interval Types
 - Jitter, Stagger, and Guidance Triplets
- Fully Programmable Scan
 - Standard scan patterns and advanced waveforms
- Programming
 - Menu driven from the keyboard or PC software (supplied)
- Power
 - Universal AC, auto-switching AC input or battery
- Power Saving Feature
 - Operator selected energy saver mode
- Batteries
 - Two (2) removable, extended life Lithium Ion batteries
- Emitter Memory
 - Rugged all-weather removable emitter memory module
- Carrying Harness
 - OSHA compliant design
- Remote Operation
 - Remote handheld keyboard for operation up to 1000 Ft (300m)
 - Optional RF remote for end-of-runway crew trigger
- Scenario Operation
 - Up to 100 emitters for end-of-runway testing
- External Synchronization:
 - Allows for true multi-beam generation with multiple RSS units
- Environmental
 - Designed to MIL-T-28800; Class C; Type II
- Operating Temperature Range:
 - (-40° C to +55° C)
- Weight:
 - Twenty (20) lbs. (12 kg)

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