



TESTER EW SIMULATOR LABORATORY SINGLE CHANNEL SYSTEM

Threat Emitter Simulation Test Environment Replicator



The TESTER (Model L8802) simulator provides advanced technology solutions for Electronic Warfare (EW) laboratories worldwide. TESTER is a small, powerful, single RF channel system that is compatible with the standard HIDESS system.

TESTER accurately tests advanced radar warning receivers and other EW equipment by providing realistic threat signals and scenarios. The simulator preserves the characteristics of both the radar signal and real-world operational environment.

The system emulates standard radar, pulse Doppler or continuous waveform signals, and also provide zero pulse dropout signals for advanced testing. It utilizes programmable clocks for signal generation, allowing the signal to be generated using the same basic frequency timing clock as the real-world radar threat.

TESTER features four independent signal capability. The signal generation is controlled by a Pentium based PC running Escape2000 simulation control software under Windows XP.

As an option, the system may be supplied with power/frequency calibration software and instrumentation. Digital and RF built-in-test (BIT) facilities are included as part of the system. RF BIT does require some optional external instrumentation.

While designed primarily as a standalone system, TESTER can be the basis for a much larger system. It may be used in conjunction with another simulation system to provide additional capabilities, such as pulse Doppler signal generation, using Escape2000 software. The complete system, including the RF source, is housed within a rack mountable 5.25" (3U) chassis.

TESTER Standard Features include: _____

- Signal synchronization
- Complex PRI modulation
- Complex PW modulation
- Complex electronic scan
- Frequency agility
- Industry standard VME modules
- Easy to use GUI software (Escape2000)
- 4 port plus omni Amplitude Angle of Arrival Modulation (AAOA)
- Commercial database threat library storage
- Pentium IV PC/Windows XP System controller
- Extensive Digital and RF Built-In-Test (BIT) capability
- Dual Complex Signal Generator (CSG) is ProClock equipped
- One zero pulse drop out signal — available in multiplex mode
- FMOP
- PMOP, Quad-Phase & Bi-Phase, up to 16K phase changes in a single sequence (Barker Code, User Defined)
- Power threshold set at scenario level, reduces signal drop out
- Ultra low broad band RF noise floor
- Variety of RF sources available — DTO, synthesizer, dual mode, FLO

Other System Options _____

- Phase Angle of Arrival
- Frequency extension to “K” band (20 — 40 GHz) (Requires larger or expansion chassis)
- Frequency extension to “C-D” band (0.5 — 2.0 GHz) (Requires larger-chassis)
- Frequency and power calibration facilities and software
- Deletion of 4 port DF with output supplied in full band or split band configuration
- High accuracy generation of Doppler effects on PW and PRI (Requires ProClock II)
- Multi-path modulation implementation
- ProClock II
- Expansion to 5 beams per generator where all use same clock