



HIDESS

ELECTRONIC WARFARE SIMULATOR

High Density Simulation System



Cubic's standard High Density Simulation System (HIDESS) is the most technologically advanced simulation system available for the complete electronic warfare (EW) facility. The HIDESS product line accurately tests advanced radar warning receivers and other EW equipment by providing realistic threat signals and scenarios.

The simulators can emulate standard radar, pulse Doppler (including ICW) or continuous waveform signals. The actual characteristics of both the radar signal and operational environment are preserved to provide the highest level of fidelity and realism possible.

The system's unique design provides a clear replication of the signals with minimal RF noise output. Individual time clocks for each signal preserves the asynchronous nature of the threat environment – in real time – to ensure the highest level of realism possible.

The standard HIDESS produces up to 64 independent signals and has four RF channels — two covering the 0.5 to 18.0 GHz frequency range and two covering the 2.0 to 18.0 GHz frequency range. This frequency coverage may be lowered to as low as 50 MHz and raised to above the 40 GHz range.

The system can be operated as a single 64 signal simulator or as two 32 signal simulators. It provides a zero pulse drop out capability for one signal in each RF channel.

The complete equipment, including the RF sources, is housed within two 6.5 feet (38U rack space) high floor standing racks. It is controlled by a Pentium based personal computer system controller running Escape2000simulation control software.

HIDESS Standard Features include: _____

- Signal synchronization
- Complex PRI modulation
- Complex PW modulation
- Complex electronic scan
- High accuracy generation of Doppler effects on PW and PRI
- Frequency agility
- Industry standard VME & VXI 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
- Frequency and power calibration facilities and software

HIDESS Primary System Unique Features include: _____

- 4 RF channels (one 0.5 — 18.0 GHz and three 2.0 — 18.0 GHz)
- 64 multiplexed signals
- 4 zero pulse drop out signals — one per RF channel — available in multiplex mode
- May be utilized as single 64 signal, or two fully independent 32 signal simulators (Optional)
- Low long and short term frequency drift
- FMOP
- PMOP, Quad-Phase & Bi-Phase, up to 16K phase changes in a single sequence (Barker Code, User Defined)

Pulse Doppler Signal Simulation (PDSS) Option Special Features _____

- Each PDSS unit may be used as a stand alone generator for one-on-one testing
- Dual Complex Signal Generator (CSG2X) is ProClock II equipped
- Power threshold set at scenario level, reduces signal drop out
- Ultra low broad band RF noise floor
- Variety of RF sources available
- FMOP and PMOP available with appropriate source

Other System Options _____

- Phase Angle of Arrival
- High Accuracy ProClock II available on all or part of installed signal generators in primary system
- Digital Data Word Outputs