

THE KOR ELECTRONICS BASIC ELECTRONIC ENVIRONMENT SIMULATOR

(BEES) sets the standard for the simulation of high fidelity signals for basic receiver testing and automated signal library programming/validation. The modular, flexible and expandable architecture employs the latest in proven COTS technologies – making the BEES the easiest simulator to maintain throughout its product life.

The KOR Electronics BEES solution provides the ability to produce superior radar signals with an easy to use Windows style GUI resulting in precise, yet highly cost effective signal environments to meet your testing, training and library validation needs.

KEY FEATURES

- Frequency Range: 0.5 – 18 GHz
- 1 Mpps per channel
- 1 emitter beam per channel
- >500 emitters per scenario
- Frequency Resolution: 8 Hz
- Frequency Accuracy: < 20 kHz
- Spurs/Harmonics: < -60 dBc

PULSE WIDTH CHARACTERISTICS

- Range: 100 ns - 1 sec
- Resolution: 10 ns
- Accuracy: 10 ns
- PW Modulation: Pulse lists support formulas to define pulse width (duration): jitter and wobble modulation including cusp (parabolic), ramp(up and down/ triangle, trapezoid), sinusoidal, Gaussian, Uniform, exponential, cubic, quadratic, inverted Cusp, discrete, User defined

PRI Characteristics

- Range: 1 μ sec – 1 sec
- Resolution: 10 - 40 ns
- 2048 Stagger levels with 64K repeat counts
- PRI Modulation: cusp(parabolic), ramp(up and down/ triangle, trapezoid), sinusoidal, Gaussian, Uniform, exponential, cubic, quadratic, inverted Cusp, discrete and user defined

Synchronization Clocks

- Unique clock per emitter, or
- Common clocks for synchronization

BEES Beam Characteristics

- Beam Width: 0.0° to 360°
- Resolution: 0.02°
- Beam Height: +90° to -90°
- Pattern Modulation range: 0 to 60 dB
- Sidelobe levels: 0 to 60 dB
- Supported Lobe Shapes: SinX/X, CscSquared, Omni, Gaussian, Uniform(Parabolic), Cosine

BEES Scan Motion Types

- Circular, Conical, Helical, Steady (LORO, COSRO, Omni, lock-on), Orthogonal, Random, Raster (multi-level interleaved), Spiral, Sector (unidirectional or bi-directional), TWS
- Electronic, Palmer Variations (Sector/Circular/Raster)
- Multi-beam – beams can be synchronized in PRI and scan patterns