**CHAMELEON II Radar Target and ECM Simulator**

*Enhanced ECM and Radar Target Signal Generation*

- 500 MHz to 40 GHz coverage
- 10-bit amplitude DRFM technology
- 800 MHz bandwidth
- IFM/LOG video receiver
- READ/WRITE control to DRFM memory
- Complex radar target modelling, chaff and clutter
- Advanced ECM techniques

**CHAMELEON II** provides a complete solution for radar target generation and ECM signal generation in one package. Using a multiple channel, multi-DRFM architecture, Chameleon II is able to simultaneously generate complex radar targets together with jamming signals.

The simulator features 3D radar target modelling, clutter, and ECM signal generation using a full software GUI running under Windows. With its PowerPC technology, CHAMELEON II provides real-time, high performance signal generation with the ability to create your own synthesised RF outputs using a unique DRFM READ/WRITE interface facility.

CHAMELEON II is ideally suited for hardware-in-the-loop and radiating applications for radar and ECM test, evaluation and training.

www.ewst.co.uk
Specifications

RF Characteristics
- Standard 2-18 GHz continuous operation with expansion to 0.5 - 40 GHz
- 800 MHz instantaneous bandwidth
- IFM/LOG video threshold receiver
- -60 dBm sensitivity
- >100 dB dynamic range
- 0 dBm output power (typical)
- < -45 dBc harmonics/spurious

DRFM Features
- 8 msec memory depth
- 0.5 ns delay resolution
- Up to 8 memory files
- User read/write to memory
- +/- 60 MHz Doppler at 0.5 Hz resolution
- Programmable system threshold
- CW operation
- Pipeline mode
- Doppler Correction

Target Generation Features
- Full GUI Implementation
- 4 coherent Doppler targets per DRFM
- Range extent target models
- 3-D targets with 6 DOF movements
- JEM line models using user definable I/Q data pairs
- Realistic Chaff model
- Clutter (main beam, ALR)
- Multiple range targets
- Swerling Fluctuations

ECM Features
- Full GUI Implementation
- 19 Programmable ECM techniques including:
  - RGPO/I
  - VGPO/I
  - Coordinated RGPO/I–VGPO/I
  - Noise: spot (burst/swept/blinking/Doppler), barrage
  - Inverse gain
  - Range/frequency false targets
  - Amplitude modulation
  - Range and velocity bin masking
  - Synthetic CW and stretch pulse
  - Masking techniques
  - Pulse capture and synthesis
  - User-defined ECM libraries

Other Features
- Optional PRI Predictor
- Optional DF Interfaces (Amp/Phase/Monopulse/Mechanical)
- Remote control interface
- VxWorks™ real-time processing
- Built-in test
- 110–240 VAC operation
- 19” rack mountable
- In-production availability

Information Subject to Change Without Notice.