

**Intelligence**

Surveillance  
Reconnaissance

**COMINT**

Emitter  
Collection

**Integrated**

Transportable  
Signals Support

**Combined**

Communications  
Intercept



The C-EAGLE (Communications Electronic Acquisition Gathering Locating Equipment) is a family of integrated communications electronic support (C-ES) receiver systems for ISR (Intelligence, Surveillance and Reconnaissance) applications. The C-EAGLE can be used for communications, surveillance, intercept, analysis, communications intelligence (COMINT), communications electronic support (C-ES) and spectrum monitoring.

The C-EAGLE offers a highly capable receiver technology combination of modern VXI (VME bus Extension for Instrumentation) based tuners (receivers), advanced digitizers and software-based radio technology. With C-EAGLE systems being offered to cover HF to SHF, wide frequency coverage is possible. Special C-EAGLE systems can be supplied to cover 10 kHz to 18 GHz in a single VXI Chassis.

The use of both commercial off-the-shelf (COTS) VXI technology and custom VXI modules enables Telemus to supply the C-EAGLE to meet most frequency coverage requirements in a compact solution and within typical operational budgets.

A modern and very powerful C-ES system, C-EAGLE technology supports rapid signal search acquisition. Wideband instantaneous bandwidth operation allows the C-EAGLE to search many thousands of channels per second in any predetermined set of frequency bands over its entire frequency range. Wide instantaneous bandwidth digital operation, combined with modern software-based radio technology, ensure that the C-EAGLE is effective at intercepting modern short duration wideband signals, as well as conventional communication signals.

## C-EAGLE Characteristics

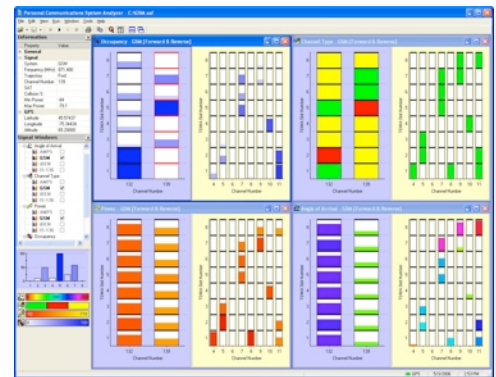
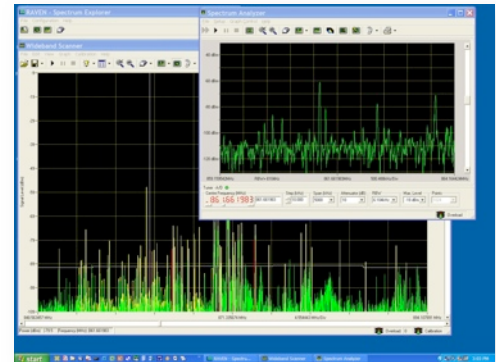
- 20 to 3000 MHz Standard with DF
- 10 kHz to 3000 MHz Standard Transportable
- 10 kHz to 18 GHz in a Single Chassis
- 3 to 500 MHz Instantaneous Bandwidth
- Frequency Sweep Rate >>500 MHz/s
- Channel Sweep Rate up to >>10 000 channels/s
- Frequency Bin Spacing <50 Hz to >150 kHz
- Constant False Alarm or S/N ratio thresholding
- Better than 100 dBmi Sensitivity
- Selectable Analysis Bandwidth to 50 MHz

## C-EAGLE Features

- Member of EAGLE Family of ES Systems
- Software Based Radio and DSP Technology
- Modular and Open VXI Architecture
- Digital Receiver Technology
- PC-based Signal Processing & Recognition
- Windows Human Machine Interface
- HF/VHF/UHF/SHF Band Operation
- Programmable Scan and Radio Parameters
- Automatic Detection, Alarm and Recording
- Automatic Modulation Recognition
- Programmable Modes and UDF
- Remote Ethernet Control
- Used in Airborne, Naval and Ground Environments

## RAVEN-SE Software

The C-EAGLE is powered by RAVEN-SE software. Raven software is a family of realtime computer applications designed to support the entire family of Ultra Electronics Telemus EAGLE ES systems. RAVEN-SE operates in a native MS Windows NT/2000/XP/Vista operating system environment. RAVEN-SE provides easy operation and mission programming of the C-EAGLE system, capitalizing on the benefits and capabilities of economical COTS and custom VXI modules.



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