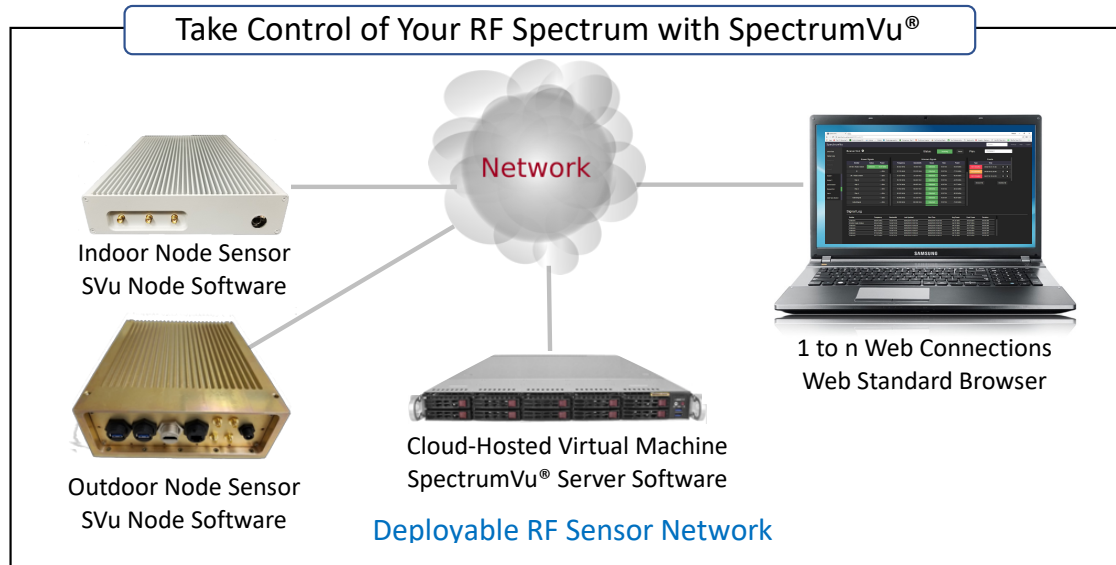


## SpectrumVu®

### *Deployable RF Sensor Network*



The ability to sense important signals of interest (SOIs) in a crowded spectrum has become more and more difficult for military and government personnel. As spectrum density grows, understanding what is in your environment at any given time has become increasingly complex. Background characterization and threat response requirements have driven the need for complete and precise coverage of the spectrum in the mission space and accomplishing this with traditional RF acquisition systems has become prohibitively expensive and inefficient.

Whether deployed on the battlefield or used for research and analysis in a lab, RF sensors must provide the technical capabilities required by the RF environment and mission. parameters.

#### **A complete spectrum monitoring solution**

SpectrumVu® Software, by Erisys, brings into existence a complete RF Spectrum monitoring solution by networking many small high-performance RF sensors operating synchronously and constantly monitoring the RF spectrum. All spectral incidents are continuously logged in an SQL database for analysis and report generation. It is both powerful and simple to operate without the need of an operations specialist.

#### **Spectrum monitoring & RF Sensor Applications:**

- Military ranges and perimeters
- Public safety communication integrity
- Public utilities and power grid monitoring
- Stadiums and large sports venues
- RF emissions on vehicles and ships
- Interference and jamming detection

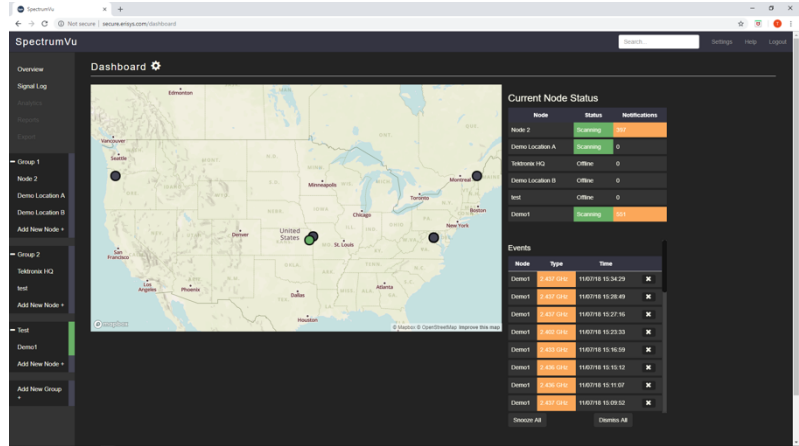
#### **An advanced RF sensor and embedded computer, at an affordable price**

The combination of SpectrumVu® software with the rugged RSN-300 Spectrum Node allows you to deploy Tektronix USB real-time spectrum analyzers as a network of high-performance RF sensors, functioning in both small and large perimeter operations of even the toughest environments.

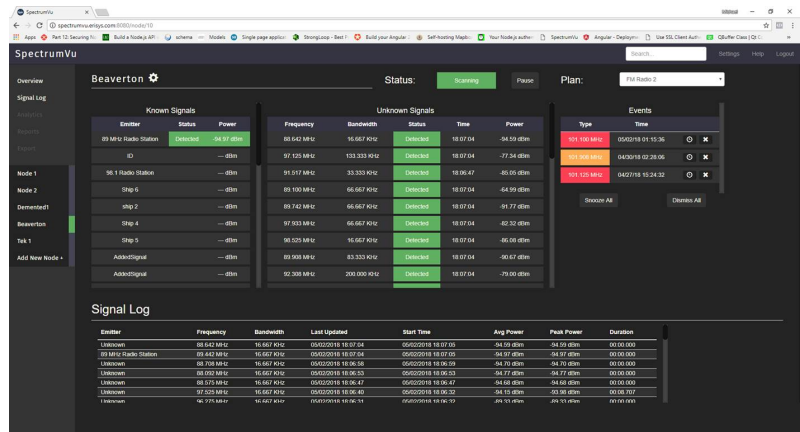
For very low cost, you can own a spectrum monitoring system capable of recording spectral events for archival and analysis. Spectral events can be captured as real-time I/Q data for comprehensive signal forensics using vector signal analysis tools. A powerful Intel multi-core embedded processor allows for sophisticated processing to be performed at the RF sensor node, dramatically reducing the amount of traffic transmitted over the network.

## Key Features

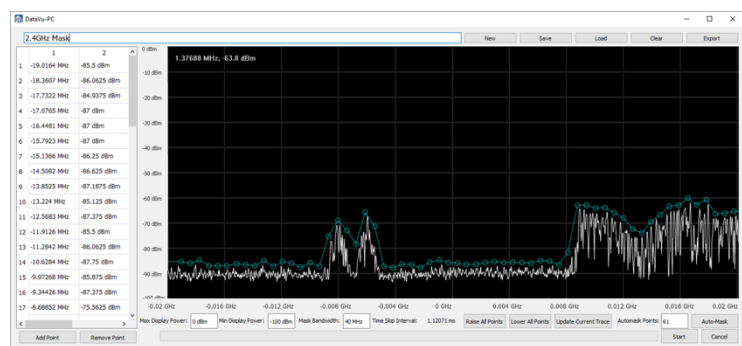
- Easy-to-use graphical user interface with go/no-go display
- User-customizable spectral event settings
- Known signals can be monitored or ignored by operator selection
- Unknown signals are logged with audible alerts automatically generated
- Critical signal parameters are created and logged for every spectral event
- Each RF node can record spectral events in real-time I/Q data or traces
- Command center can quickly load in new spectral parameters for each RF node or subgroup of nodes
- GPS timing and position data logging
- Advanced network security features for protection from outside intrusion



Real-time mapping and monitoring using GPS with user-customizable event settings, alarms, and notifications.

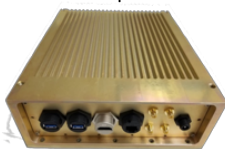


Known and unknown signals detected and logged, with advanced signal details, timelines, and data stored for key events.



The RF Spectrum is searched at a range determined by the spectrum analyzer selected. Shown above is a "mask" that represents allowable signals once they have been investigated.

**Erisys Sensor Nodes:** Spectrum Analyzer and Nuc Computer with SpectrumVu® Node Software.



**RSN-300R**  
Ruggedized and fanless outdoor unit designed to meet IP67



**RSN-300i**  
Indoor unit operates silently providing autonomous spectrum monitoring