

Sophisticated
spectrum
monitoring
capability

RFSENTRY

Huntington Ingalls Industries' (HII) RFsentry is perpetually adapted to customers' specific spectrum monitoring needs.

RFsentry grew out of HII's extensive experience designing and building prototypes to fulfill specific customer requirements. The fixed or portable setup satisfies the need for real-time automated monitoring of the EM environment. RFsentry's portable version does not require infrastructure and is easy to quickly set up and take down in a wide range of environments. Users can track spectrum use, recognize changes or anomalous signals, and identify potential sources of transmissions, unintentional interference, or jamming. RFsentry can alert users to threshold violations as they occur.

CAPABILITIES

RFsentry is a sophisticated spectrum monitoring capability that uses a combination of antennas, receivers, interfacing hardware, and customized software developed by HII. The system is able to conduct long-term continuous monitoring and reporting of the spectrum or conduct short-term characterizations of the RF environment.

Multiple configurations of hardware and software address the user's needs, with each configuration expandable to address changing requirements. The remote service allows for 24/7 unattended operations monitoring and evaluating the spectrum,

with remote access and control and notification. It can store data for retrieval and analysis using signal playback, spectrum plots, and signal correlation with frequency assignment databases. We continue adding new capabilities such as the implementation of ML algorithms to detect unusual EM activity and classify signals based on their characteristics.

FEATURES

- Intuitive user interface and controls for complete system control
- Identifies and classifies the nature and severity of intentional or unintentional electromagnetic interference or signals
- Allows traversing through historic trace records collected overtime
- Extracts key signal characteristics such as frequency, amplitude, and bandwidth
- Alerts an operator when signals meeting user-defined criteria are detected
- Determines the signal direction of arrival
- Stores signal externals for post analysis
- Assists the operator in locating and identifying signals of interest

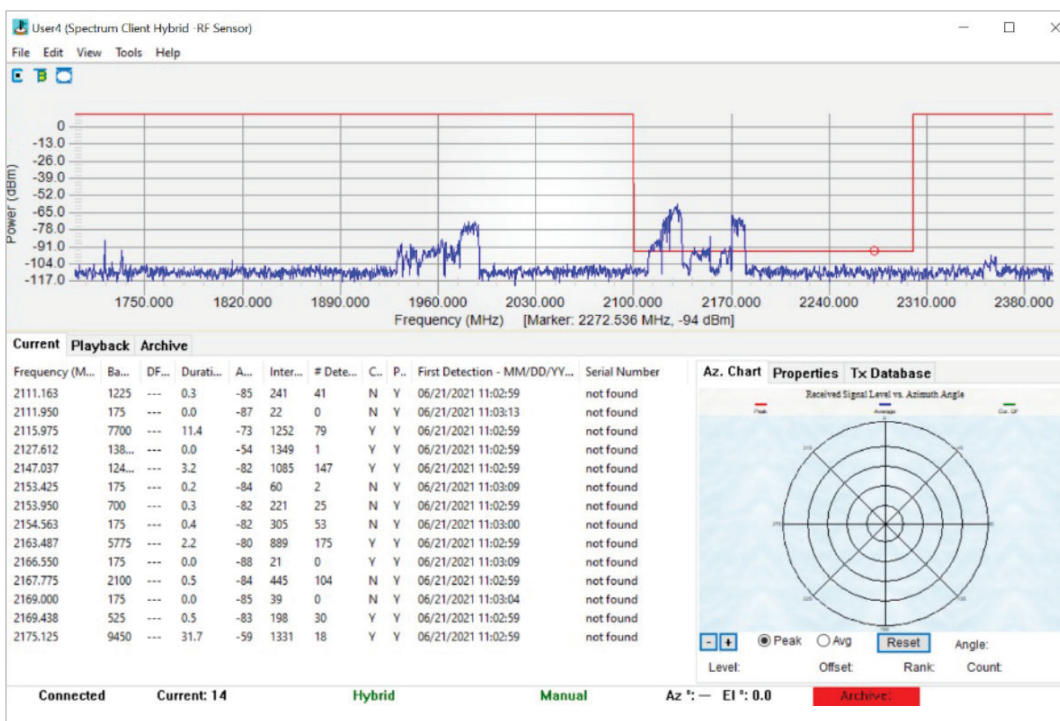
MONITORING SERVICE

- Adaptable to multiple Commercial Off-the-Shelf (COTS) sensors and custom-built software-defined radios
- Designed to support an endless combination of antennas, receivers, filters, amplifiers, and interfacing hardware
- Default, customizable, or pre-set configurations for ease of use and accurate measurements
- Features secure login with configurable user permissions for different levels of access



REMOTE SERVICE

- Permits control of the spectrum monitoring service and provides reporting and visualization of the RF signals detected
- Central dashboard application offers an at-a-glance summary of all sites and the status of the RF environment with color codes that indicate the level of severity
- Detailed view for each monitoring station shows individual interference event data for a specific site
- Visualization and archival backup of interference data
- Features secure login with configurable user permissions for different levels of access



Single terminal view

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About Huntington Ingalls Industries, Technical Solutions:

Building on a legacy of more than a century of naval shipbuilding, Huntington Ingalls Industries' Technical Solutions division provides mission-critical national security solutions to a wide variety of government and commercial customers worldwide. Comprising more than 7,000 professionals worldwide, our unique national security services portfolio includes unmanned systems, nuclear and environmental services, intelligence, surveillance and reconnaissance (ISR), cyber and electronic warfare, live, virtual and constructive (LVC) training solutions, and fleet sustainment and logistics. For more information, visit tsd.huntingtoningalls.com.