Portable Spectrum Analyzer SA1501P

Overview

The «SA1501P» Portable Spectrum Analyzer allows quickly scan the RF environment and locate the unknown signals.

Evolving digital RF communication standards pose an unprecedented challenge to the surveillance and security community. Some equipment are not suitable for field use as they are not portable, can be easily damaged or require AC power.

Featuring RF spectrum waterfall display, SA1501P offers practical solutions for discovering transient events that slip past conventional spectrum analyzers. The SA1501P is intended for general spectrum monitoring, recording and analysis.

Features

- Portable RF Spectrum Analyzer
- RF signal recording and analysis*
- IP67 rugged case for extremal conditions
- Cabin carry on size 55.9 x 35.1 x 22.9 cm
- Intuitive user interface
- Battery operated
- External power operated
- Battery charging via car cigarette plug

System benefits

- RF spectrum waterfall display provides intuitive understanding of live RF signals using colors based on amplitude of occurrence
- Benchtop spectrum analyzer performance in a ruggedized portable battery-operated field unit offers better than 80dB (ADC) Spurious Free Dynamic Range (SFDR) from 50 MHz to 6 GHz (depends on customer requirements)
- Record/playback feature allows to record RF signal with GPS timestamp and coordinates for offline analysis of the recorded signal.
- Digital gain for detecting low-level signals such as RF leakages and unauthorized transmitters
- Rugged design

Applications

- Signal detection
- Spectrum management
- Spectrum monitoring
- Interference detection and troubleshooting
- Signal identification
- Signal intelligence (SIGINT)

* Record/playback capability will be added upon customer request

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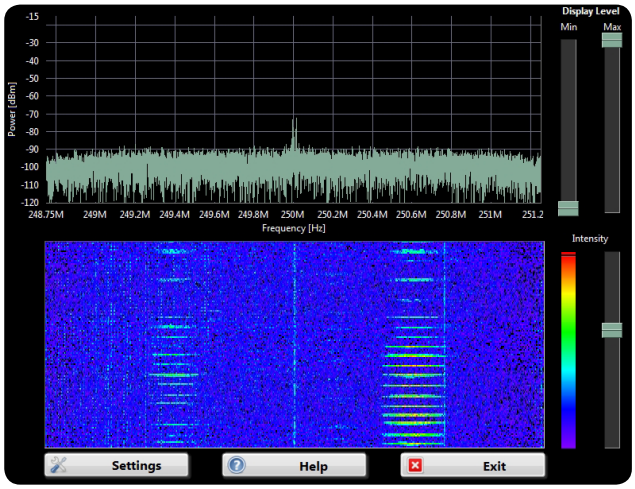
Specifications

- Frequency range:
  - 50MHz to 2.2GHz (SA1503P/1)
  - 400MHz to 4.4GHz (SA1503P/2)
  - 1.2GHz to 6GHz (SA1503P/3)
- Frequency step: <1kHz
- Maximum instantaneous bandwidth: 40MHz
- Maximum input power: -15dBm
- Frequency accuracy: 25ppb
- ADC resolution: 14bit
- ADC SFDR: 88dB
- ADC sample rate: 120MS/s

Required hardware and software

- NI USRP-295xR
- NI TPC-2212 Touch Panel Computer
- "Hermes" family software



Software Front Panel