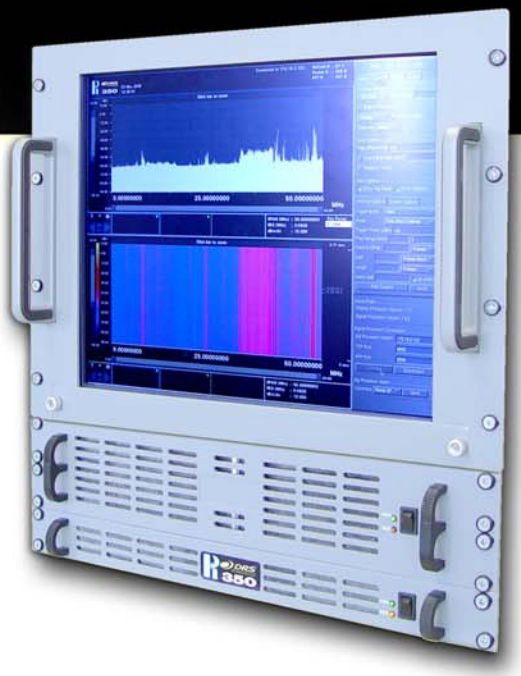
DRS's PISTOL 350 SPECTRUM ANALYZER / SPECTRUM DISPLAY SYSTEM



The Pistol 350 meets the real time demands of both wideband signal search and high resolution narrowband analysis.

The Pistol 350 is an all-digital spectrum analysis instrument targeted for Low-Probability-of-Intercept (LPI) signal detection and high-resolution spectral analysis. It was developed to bridge the gap between traditional continuous swept-tuned analyzers and wideband snapshot analyzers. Typical applications include ELINT pulse analysis, short-duration signal detection, general SIGINT signal search and survey, as well as high-resolution multi-bandwidth signal analysis.

With the demanding signal environment of modern waveforms, SIGINT collectors require high performance search and survey systems to monitor new signals of interest. In the past, this would require operators to tune receivers, deploy demodulators, adjust spectrum analyzers, and snapshot data segments of interest for further analysis. In typical operational scenarios demanding rapid search of large amounts of bandwidth, an operator can be overwhelmed by a requirement to search quickly while also conducting detailed analysis of low-SNR and burst signals. This requires wideband spectral analysis on the order of 10's of MHz, yet operators demand high-resolution displays to aid in signal recognition. The Pistol 350 meets these requirements with 2 Hz - 2 KHz resolution while continuously analyzing a 50 MHz bandwidth and by providing dual displays for falling rasters or zooming in.

DRS INTELLIGENCE & AVIONIC SOLUTIONS, INC.

DRS TECHNOLOGIES

DRS's PISTOL 350 SPECTRUM ANALYZER / SPECTRUM DISPLAY SYSTEM
Technical Specifications

Features

- High-Performance Spectrum Analysis Server
- Dedicated high-Speed Spectral Display Client
- 50 MHz Real-Time Bandwidth
- Store and recall complete instrument state for fast mission-specific configurations
- The Pistol 350 Spectral Display client is based on a 1U chassis, and includes: High-resolution flat screen monitor and various interface options: Touch Screen, Trackball, Keyboard / Mouse
- Applications Features
  - Signal Intelligence, COMINT, ELINT
  - Electronic Warfare Testing
  - Signal Detection, Hop Detection
  - Signal Logging /Database, Receiver Control
  - Wideband Telecom, SATCOM, Spread-Spectrum
  - Cellular, Trunk Mobile, Voice Channels
- Software Features
  - Amplitude vs. frequency plots
  - Spectrogram plots
  - Synthetic phosphor plots
  - Capture spectral data or time data
  - Event logging
  - Dual frequency resolution displays
  - Dual time/frequency/ amplitude markers

A/D Converter

Resolution	12 Bit
Input range	2.0 v p-p
SFDR	75 dB
External digital input	16 Bits
External reference clock	1-5 Volt p-p, up to 120 MHz
Impedence	50 Ohms
Internal CLK	Programmable 10-120 MHz

Tuning, Filtering, Decimation, Overlap

Tune frequency	0 to 50 MHz
Tuning resolution	Fs / 2^32
Signal bandwidth	Up to 50 MHz
Gain	+/-48 dB, .1 dB increments
Decimation	Binary increments, 1 to 1024
Overlap	The overlap increases by 50% for each binary increment of the programmable decimator. With no decimation and maximum sample rate, the overlap will be 0%. Reducing the input sample rate or increasing the decimation will increase the overlap accordingly.

FFT Engine

FFT engine	2K-32K complex
Windowing	4N Polyphase, user selectable coefficients
Magnitude squared	32 bit IEEE floating point
Average	Block, exponential, max hold

System Features

Store averaged or raw spectral data
Max hold, energy detection with masking
Peak find
Amplitude vs. frequency plots
Spectrogram plots
Synthetic phosphor plots
Control frequency, span and amplitude
Markers
Log events
Zoom in / out
Dual resolution displays

Chassis

Industry standard 3U high (w/o display)
Server - 2U
Display Processor - 1U

Dimensions	3.46 in x 19 in x 24 in
Weight	15 lbs
Power	75 watts
Voltage	90 V - 250 V, 47-63 Hz
Compliance	UL, CE, FCC

Environment

Operating temperature	0 to 40 C

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