Powerful RF Analysis For Wi-Fi

Chanalyzer Pro is designed from the ground-up to be a hardcore software package for interference-busting professionals. Users enjoy the satisfaction of an optimized WLAN implementation thanks to Chanalyzer Pro’s Wi-Fi-specific troubleshooting and deployment features.

If having a solid WLAN is mission-critical to your organization, or if you install and maintain wireless networks for a living and your name and reputation hinges on how well wireless networks behave after you’re gone, then Chanalyzer Pro is for you.

Often imitated, Chanalyzer Pro includes industry-leading features designed for quick and easy Wi-Fi troubleshooting.

Technical Specifications

- **Maximum Zoom:** 1.0 MHz
- **Capture Limit:** Dependent on hard disk space
- **Frequency Range:**
  - Wi-Spy DBx: 2.400 to 2.495 GHz
  - Wi-Spy 2.4x: 5.150 to 5.850 GHz
  - 2.400 to 2.495 GHz
- **Amplitude Range:**
  - Wi-Spy DBx: -100 dBm to -6.5 dBm
  - Wi-Spy 2.4x: -110 dBm to -6.5 dBm
- **Amplitude Resolution:**
  - Wi-Spy DBx: 0.5 dBm
  - Wi-Spy 2.4x: 0.5 dBm
- **Resolution Bandwidth:**
  - Wi-Spy DBx (2.4 GHz): 203.125 KHz
  - Wi-Spy DBx (5 GHz): 67.708 KHz
  - Wi-Spy 2.4x: 187.5 KHz
- **Sweep Time:**
  - Wi-Spy DBx (2.4 GHz): 507 msec
  - Wi-Spy DBx (low 5 GHz): 1242 msec
  - Wi-Spy DBx (mid 5 GHz): 1587 msec
  - Wi-Spy DBx (high 5 GHz): 641 msec
  - Wi-Spy 2.4x: 531 msec

Requirements

- **OS:** Windows 7, Vista or XP (SP3)
- **Mac OSX Virtualization Framework:** VMware Fusion, Parallels
- **Resolution:** 1024 x 768 (or greater)
- **RAM:** 1 GB (Rec. minimum)
- **Processor:** 1 GHz (Rec. minimum)
- **Wi-Spy Hardware:** Wi-Spy DBx or 2.4x
- **Wireless Adapter:** 802.11 a,b,g or n (for Wi-Fi features)
**Density View**
The Density View displays raw spectrum data by frequency and amplitude point over a user-defined timeframe. The brighter the color, the more RF activity present. Density View is great for catching transmitters over time, and for finding interference trends.

**Waterfall View**
The Waterfall View displays RF activity over a defined timeframe in a rolling "waterfall." The brighter, or more red the color, the noisier the frequency. The Waterfall View shows when interference occurred and it’s duration.

**Planar View**
The Planar View graphically displays the maximum, average and current RF activity on a Density graph. The Planar View is a staple of traditional spectrum analyzers, and is included in Chanalyzer Pro with user-defined colors for complete customization.

**Duty Cycle View**
Duty Cycle View displays, in an easy to read graph, how “constant” RF activity is on any given frequency. Duty Cycle View is commonly used to decipher which channels are heavily used and which should be avoided.

**Frequency Zoom**
Click and drag on the spectrum graph to zoom-in for a high-resolution view of specific frequency ranges. Frequency Zoom views are highly granular, with a 1.0 MHz maximum zoom setting.
**Wi-Fi Channels Table**
The Wi-Fi Channels Table plots average, current and maximum values, as well as the Noise Floor reading and number of placed Access Points to calculate a “grade” for each Wi-Fi or ZigBee channel.

**Wi-Fi Overlays**
Using the wireless NIC in the computer, Chanalyzer Pro collects Wi-Fi data like SSID, RSSI, and channel of networks in the area. Data is overlaid on a Density View to provide correlations between known Wi-Fi sources and everything else (non-Wi-Fi) transmitting in the band.

**Network Strength Graph**
The Network Strength Graph plots RSSI values, provided by the network card, over a user-defined period of time. This view is ideal for linking network drop-outs and decreased performance to specific interference occurrences.

**Device Classifiers**
Chanalyzer Pro automatically classifies known devices transmitting in the area. This intelligent feature also calculates a confidence level of a “match,” displayed as a percentage alongside the classified device.

**Custom Classifiers**
An industry first, Custom Classifiers let users define custom signatures for known Wi-Fi-transmitting devices in their space. Easily capture the RF silhouette by selecting it in the Density View, then save the Custom Classifier to quickly identify the device in future scans.
Device Finder
Device Finder narrows-in on specific signals for easy analysis of how close, or far away, you are from offending devices—allowing users to quickly isolate and walk to the device. Device Finder functionality is greatly enhanced by MetaGeek’s optional Device Finder Directional Antenna.

Waterfall Timeframe Navigation
Waterfall Timeframe Navigation provides an instant preview of the RF environment as the mouse cursor hovers over the timeframe. Chanalyzer Pro views update to the current user-selected timeframe, to quickly single-out instances of interference in the capture session.

Unified Time Segment
Every graph in Chanalyzer Pro automatically adjusts itself to the user-selected timeframe to provide a Unified Time Segment for quick and easy spectrum analysis. This functionality lets the user quickly drill-down to specific problems without reinitializing views.

Report Builder
Report Builder lets users create detailed reports of spectrum analysis summaries for customers or IT management. Quickly add views, text, and custom content for future reports. Reports are highly customizable, easily branded with corporate logos, and available in PDF, HTML and RTF formats.

Multi-Device Support
Monitor the 2.4 and 5 GHz bands simultaneously with multiple Wi-Spy devices. All collected data is timestamped and stored in a single SQLite database.