



WifiMETRIX – Wi-Fi networks analyzer

SKU 102990383



Description

WifiMETRIX is a new diagnostic tool used to analyze and test Wi-Fi networks. It is a new type of diagnostic tool that uses a dual-band 802.11 (i.e. Wi-Fi) chip to monitor and troubleshoot Wi-Fi networks.

WifiMETRIX is a handheld device that operates in stand-alone mode -- that is, it does not associate or connect with an AP. It implements two important features -- **AirHORN** and **WifiPROBE**. The built-in Wi-Fi chip can perform both signal generation / packet injection (AirHORN) and throughput diagnostics (WifiPROBE) on each channel.



AirHORN Feature

Simulate Co-channel congestion and adjacent-channel interference using packet injection

The AirHORN function is an RF signal / channel generator that transmits stable and accurate RF signals for each of the Wi-Fi channels, and aids in testing Wi-Fi antennas, RF shields and wireless networks.

The AirHORN feature aids in testing WiFi antennas, RF shields and wireless networks. It is an RF channel / signal generator that covers both the 2.4x and 5.x GHz ISM bands and was designed for microwave and RF applications. Using 802.11 packet injection, AirHORN transmits stable and accurate RF signals for each of the 802.11 (Wi-Fi) channels and is ideal for stress-testing existing wireless networks and for use in research and development of antenna design. A signal generation system is key to any test system – as such, AirHORN can also be used for rapid evaluation of receiver performance and detecting "dead spots".

The AirHORN feature can be used for

- Real-world testing of WiFi antennas and amplifiers
- Testing the effectiveness of RF shield designs
- Stress-testing 802.11 (Wi-Fi) wireless networks
- Aligning directional Wi-Fi antennas
- Rapid evaluation of receiver performance
- Locating Wi-Fi 'dead spots'

WifiPROBE Feature

Analyze the throughput performance of each channel, and determine the best channel for your Wi-Fi network

The **WifiPROBE** function traverses each channel and measures the available transmit time. When the goal is to choose the best channel -- the one with the highest available throughput -- then **WifiPROBE** is the tool of choice.

The WifiPROBE feature provides unprecedented visibility into the performance of a wireless network. The information collected and displayed helps to simplify troubleshooting of interference-related problems and predicts the throughput performance of each 802.11 channel. WifiPROBE employs **IMMI technology** with 802.11 hardware to perform data acquisition — hence, the results truly reflect how packet congestion and RF interference in the local environment affects your Wi-Fi network. This is not possible using an RF spectrum analyzer or other tools currently in the market.

The WifiPROBE feature can be used for

- Detect presence of RF interference that could affect network performance
- Determine whether performance can be improved by using a different channel
- Quantify expected change in performance that would result from using a different channel
- Optimally configure Wi-Fi network with the goal of improving throughput performance
- As an aid in properly locating Wi-Fi devices so as to maximize range and throughput and minimize interference from competing wireless devices

WifiMETRIX operates in stand-alone mode and does not need to associate with an access point in order to perform its functions. It is a truly unique device that is tailored for troubleshooting Wi-Fi problems and computing the best channel.

Why choose WifiMETRIX?

The most common tools for troubleshooting Wi-Fi networks are Wi-Fi scanners (i.e. 802.11 network discovery software) and RF spectrum analyzers. Both have their limitations -- e.g. a Wi-Fi scanner only reports the strength of a beacon signal and an RF spectrum analyzer only measures raw RF energy. Neither are capable of providing any clues about network performance or available channel throughput. Only a Wi-Fi chip is capable of ranking the quality of each Wi-Fi channel, so WifiMETRIX is a better diagnostic tool than spectrum analyzers.

Features

•Dual-band 802.11 Wi-Fi chip
•AirHORN channel / signal generator functionality (packet injection)
•WifiPROBE channel analyzer functionality
•Solid aluminum case plus silicon rubber boot protector
•Standard 50 ohm SMA antenna connector
•128x64 built-in LCD screen
•Includes dual-band antenna for 2.4x and 5.x GHz ISM bands
•Includes micro-USB cable for recharging
•Includes 50 ohm SMA terminator to protect antenna connection
•SMA terminator (dummy load) also used for calibrating the device
•Certified for CE and FCC compliance

Technical Details

Dimensions	210mm x 155mm x 39mm
Weight	G.W 425g
Battery	Exclude

Part List

WifiMETRIX	1
2.4/5Ghz dual band CloverLeaf antenna	1
Micro USB Cable	1
Protection boot (Black)	1
50 ohm SMA terminator	1