

Anritsu envision:ensure

Power Master™ MA24507A and MA24510A

Millimeter-Wave (mmWave) Power Analyzer



Remarkable Form Factor

Power Master (MA24507A and MA24510A) is the world's first frequency selectable mmWave power analyzer. It is an ultraportable, USB-powered instrument that measures the RF power of signals up to 110 GHz and as low as -90 dBm. Unlike spectrum analyzers that are bulky, expensive, and complex or power meters that are not frequency-dependent and have limited dynamic range, the Power Master enables simple, numeric, frequency-based amplitude measurements of up to six signals from 9 kHz up to 110 GHz in a package slightly larger than a cell phone and at an extremely affordable price.

State-of-the-art Technology

By utilizing Anritsu's state-of-the-art shockline technology, these smartphone-sized instruments can accurately measure the average RF power of almost any signal within a user-defined frequency band, enabling measurements of low-power, mmWave signals like 802.11ad, wireless HD, or E-band wireless communications.



Features and Benefits

- Able to measure very low power signals, as low as -90 dBm
- Excellent for over-the-air testing, especially with mmWave signals that have high propagation loss
- User settings to control measurement speeds and noise floor
- New Channel Monitor mode in PowerXpert for monitoring up to six frequency channels at once
- New Power Hunter mode in PowerXpert for searching up to six signals within a frequency range
- Mounting holes for direct mounting to probes for on-wafer testing



Power Master™ MA24510A Power Analyzer running Power Hunter software.

Power Master™ MA24507A and MA24510A Power Analyzer are approximately 6" x 3" x 1" in size and < 1 lb

Power Master™ MA24507A and MA24510A Millimeter-Wave (mmWave) Power Analyzer

9 kHz up to 110 GHz

Fast. Reliable. Compact.

The Power Master™ MA24507A and MA24510A are ultraportable, frequency-selectable, USB-powered mmWave power analyzers.

New PowerXpert Features

To utilize the powerful new capabilities of Power Master solutions, we have added several new features to PowerXpert.

- Support for Power Master solutions general settings, like:
 - Measurement mode
 - Center frequency
 - Span
 - Resolution
- Power Hunter mode: user defines a frequency range within which the Power Master Solutions will identify the six highest CW amplitudes and their corresponding frequency
- Channel Monitor mode: allows users to select up to six frequency channels (up to 20 MHz wide) and monitor their CW amplitude or channel power simultaneously

Applications

R&D

- Use of frequency selectivity to isolate signals for measurement in design verification or troubleshooting
- In the EMI chamber to characterize transmission capabilities through the air or obstacles
- Capitalize on the small size to connect directly to certain on-wafer probes, improving measurement accuracy and repeatability by reducing cable loss

Manufacturing

- Post-production over-the-air (OTA) verification testing of transmitters (Bluetooth, WiFi, 802.11ad, or LTE in a tablet, for example)

Field

- Troubleshooting wireless backhaul antennas without direct access to transmitters OTA

