Agilent
E7495B Base Station Test Set

Option 250 – W-CDMA (UMTS) Over-the-Air Test

Option 230 – GSM Transmitter Analysis

Option 270 – Interference Analysis

Comprehensive Base Station Test

- *Increases productivity*
- *Minimizes training costs*
- *Reduces the time and expense of commissioning and maintaining base stations*

Portable, easy-to-use instrument combines wireless and backhaul measurements into a single, rugged tool.

Agilent Technologies

New Product Highlights

W-CDMA (UMTS) over-the-air test (OTA)

More than just a scrambling code analyzer, the E7495B's W-CDMA OTA test functionality includes a full set of parametric measurements such as pilot, sync, and code domain power, scrambling code determination, error vector magnitude, carrier feed-through, and carrier frequency error. In addition, a dedicated visual display allows monitoring of pilot dominance and enables an understanding of how multi-path power impacts the validity of the OTA measurements.

Metrics

- Error vector magnitude (EVM)
- Channel utilization metrics
- Amplifier capacity metrics
- Scrambling code (automatic detection, top six)

Displays

- Code domain power displaying 512 code channels with zoom function for 32, 64 or 128 channel segments
- Top six scrambling codes
- Pilot dominance and multi-path power levels

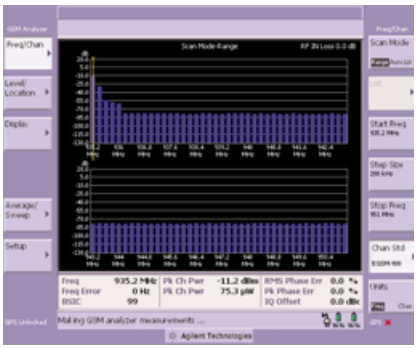
W-CDMA (UMTS) over-the-air test

GSM transmitter analysis

GSM transmitter analysis includes functionality to evaluate base station signal transmission (modulation quality), in an unobtrusive way. Specifically, the test set measures key GSM transmission parameters that validate base station transmitter health without requiring the base station to be taken "off the air". Measurements are made with our proprietary "channel scanning" display that visually illustrates power versus channel (or frequency) information in an easy to read bar chart.

Metrics

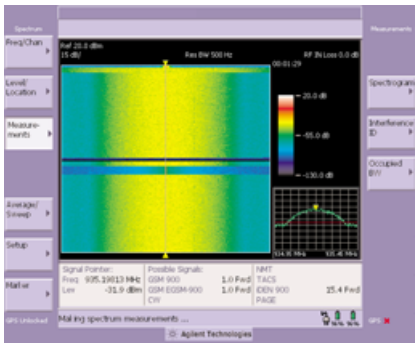
- Frequency and frequency error
- BSIC
- Peak channel power
- Phase error (peak and RMS)
- IQ offset



GSM transmitter analysis

Interference analysis

Agilent's interference analysis option allows engineers and technicians to locate and identify intermittent, interfering signals that cause dropped calls and negatively influence quality of service. Utilizing an extremely well shielded, highly sensitive receiver, the test set is capable of measuring down to –150 dBm. Included in this option is a spectrogram display that allows the user to capture historic spectrum activity, displaying frequency, power level, and time information. Additionally, the interference option includes a built-in modulation ID function that offers information on the likely modulation types, differentiating between W-CDMA, CDMA, GSM, TDMA, and analog signals. To round out this solution, a traditional spectrum analyzer view and level meter are also included.



Interference analysis

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Get the latest information on the products and applications you select. www.agilent.com/find/emailupdates

For more information about Agilentis solutions visit our web site at www.agilent.com

For more information about the Agilent base station test set, see the product overview, literature number 5988-7186EN or go to www.agilent.com/find/basestations

For more assistance with your test & measurement needs or to find your local Agilent office go to www.agilent.com/find/assist

Product specifications and descriptions in this document subject to change without notice.

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