



Agilent E7495B Base Station Test Set

E7495B Option 205 - 1xEV-DO analyzer
E7495XU Option 205 - 1xEV-DO analyzer upgrade
E7495B Firmware upgrade 4.0

One tool performs all critical base station tests

New Features

- 1xEV-DO transmitter analysis
- 1xEV-DO source
- Additional spectrum analyzer functionality and improved antenna measurements



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



Agilent Technologies

New Product Features

1xEV-DO analyzer (Option 205)

The latest 3G evolution of CDMA technology, 1xEV-DO, provides high performance data throughput for CDMA mobile users. While spectrally compatible with the existing cdma2000 networks, 1xEV-DO is very different in its overall system implementation. Specifically, 1xEV-DO continuously transmits at full output power; it utilizes time division (TDMA) techniques to parse data to various users, and employs multiple modulation schemes to transmit data up to 2.4 Mbps/sec.

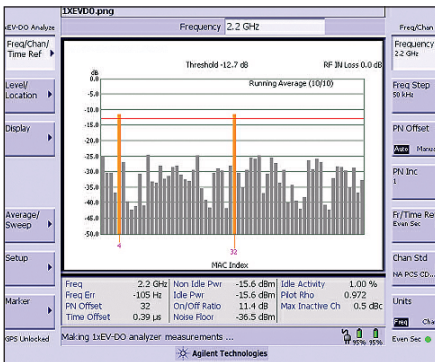


Figure 1. New 1xEV-DO display illustrates both MAC CDP and relevant 1xEV-DO metrics.

In order to verify conformance and proper network operation with this new technology, Agilent now offers a 1xEV-DO analyzer for its E7495A/B base station test set. Not only is this solution a TX analyzer, but it also includes a 1xEV-DO source to conduct Rx sensitivity measurements (assumes access to packet error rate [PER] from BTS). This comprehensive test capability allows you to ensure your network's readiness to deliver high Quality of Service for your 1xEV-DO data customers.

Key 1xEV-DO measurements

- Frequency tolerance (absolute frequency and frequency error)
- Pilot time tolerance (PN and time offset)
- Idle slot measurements (idle power, noise floor, idle on/off ratio)
- Pilot Rho (waveform quality)
- Active slot measurements (non-idle power, modulation type detection [QPSK, 8PSK, 16QAM])
- Code domain analysis MAC
- MAC Rho (estimated)
- 1xEV-DO source (requires Option 510)

Spectrum analyzer and antenna/cable test enhancements (firmware 4.0 – free upgrade)

As a leader in the BTS test tool market, Agilent continues to evolve the E7495A/B base station test set to meet the ever-changing needs of our customers. Recent significant refinements to our spectrum analyzer and antenna/cable suite of measurements include:

Increased distance-to-fault (DTF) resolution

Now users have access to 512 (2x improvement in display resolution) or 1024 (4x) data points. Ultimately, users can locate and isolate faults within a few centimeters (inches) of one another or resolve short jumper cables at the end of a long antenna feed line.

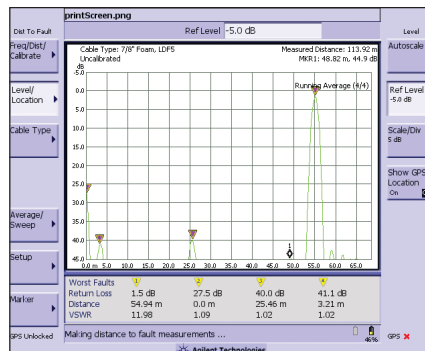


Figure 2. Enhanced DTF resolution allows nearby faults to easily be located and identified.

DTF zoom

New display functionality allows users to zoom the display to the selected portion of a feed line, permitting close "zoomed-in" inspection of cable and connector trouble spots.

DTF/return loss smart calibration

This new feature allows users to make a single calibration for all single port measurements, no longer requiring calibrations for each sector or uplink vs. downlink (different frequencies) while maintaining measurement integrity.

Spurious emissions mask

This new mask conforms to the 3GPP specification for out-of-band emissions for CDMA operators.

For more information about the Agilent Base Station Test Set, go to www.agilent.com/find/basestations

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