



Agilent E6381A

Option 003 CDPD MDBS Test Capability

Software for the 8935 Series E6381A TDMA Base Station Test Set

Product Overview

CDPD

The Agilent Technologies E6381A has optional cellular digital packet data (CDPD) capabilities for installing and maintaining CDPD mobile data base station (MDBS) RF infrastructure equipment. CDPD test capability can be ordered with the E6381A by selecting E6381A option 003.

CDPD Test

CDPD MDBS test capability is designed to quickly and accurately test many key RF parameters on both the forward channel transmitter and the reverse channel receiver. In addition, a sniffer receiver test verifies proper sniffer functionality. Measurement procedures and default pass/fail limits are taken directly from the CDPD system specification 1.1.

To perform tests on the MDBS, it is necessary to tap into both the forward channel TX path and the reverse channel RX path, directly or with couplers. All RX tests and sniffer tests require the RX antenna be disconnected.

Tests Performed with CDPD Software

Transmitter Tests

- Output power
- Carrier frequency accuracy
- 0.5 GMSK modulation index accuracy
- Adjacent and alternate channel power

Receiver Tests

- Block error rate sensitivity
- Busy set and busy clear flag performance
- Sniffer functionality

System Level Tests

- Decode and display the following packet data units:
 - Channel stream identifier
 - Channel configuration
 - Channel quality
 - Channel access
 - Switch channel

To assure high accuracy power and sensitivity measurements, the software allows you to enter cable loss and coupler loss associated with connecting the test set to your MDBS.

The E6381A option 003 software guides the operator to make the proper connections prior to each test. Calibration factors such as cable loss and coupler loss can be saved to a memory card and quickly retrieved when testing different sites.

Measured results and pass/fail information for each test can be saved to a card or to a portable computer file via RS-232.



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For more information about the E6381A Option 003 CDPD MDS Test Capability Software, visit our web site at www.agilent.com/find/assist

Available literature may include: brochures, data sheets, product notes, product overviews, case studies, configuration guides, application notes, and more.

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