

Agilent E6380A/E6551A 8935 Series LGIC CDMA PCS Base Station Test Software

Product Overview

Agilent Technologies test set and software reduce test times for installation and maintenance of LGIC CDMA base stations

Agilent Technologies introduces the latest addition to the 8935 base station test software for testing LGIC CDMA PCS base transceiver stations (BTS). This software improves an installation and maintenance technician's efficiency, by reducing the time

it takes to test CDMA BTSs. This new software combined with the 8935 Series, E6380A CDMA cellular/PCS base station test set is designed specifically to automate testing for CDMA PCS BTSs manufactured by LGIC. The software is available as E6388A 8935 LGIC CDMA PCS base station test software. The total solution, which includes software and connection kit, is available as E6551A 8935 LGIC CDMA PCS base station test solution.

Thorough testing in less time

The fast measurement speed of the E6380A test set coupled with the automated base station test software results in less out-of-service time for the BTS and faster troubleshooting.

All base stations are uniformly tested with the same procedure, which prevents virtually all errors due to test variability. Additionally, the software reduces human error, which also improves efficiency. Predefined tests allow technicians at all skill levels to obtain consistent and accurate results. Standardizing system maintenance increases systems integrity.

Measurement results can be captured by a laptop PC, memory card, or external printer for future reference. By analyzing measured data, trends can be identified and proactive steps taken to avoid costly BTS downtime.

Key features

- Predefined tests derived from LGIC's installation procedure
- PN offset search, cable loss, and other test utilities
- Test results storage
- Intuitive user interface
- Displayed BTS connection diagrams
- Laptop emulator for BTS configuration



The 8935 Series CDMA Cellular/PCS Base Station Test Set is optimized for testing today's outdoor PCS base stations.



Agilent Technologies

Innovating the HP Way

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TESTS (IBASIC Controller)

Common Parameter Menu:

Band Class ..... Korean PCS
REF IN Connected To ..... 19.6608 MHz
If a Test Fails ..... Continue
Output Result For ..... All
Compensate Cable Loss ..... Yes
Beeper ..... Quiet
Autostart on Power-Up ..... Yes

Channel & Cable Loss Table

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Easy setup

The software guides you through the configuration of both the BTS and test set. Once configured, settings can be saved to a memory card. This

allows the technician to customize procedures for each BTS location and repeat the exact same procedure at a later date for trend analysis.

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TESTS (IBASIC Controller)

Test Measurement Menu:

Test Sector ..... Alpha
Test Channel ..... 425

Selected Test Item:
Rx Lvl-RXFU           Rx IF Lvl-BSCA
Rx C/N-BSCA           Tx IF Lvl-BSCA
Tx Lvl-UDCA           Tx Lvl-HPA
Tx Lvl-TXHU           Tx Spurious-TXHU
Rx Spurious           Rho/Pilot Only
Rho/Traffic           Code Domain
Rx Noise Figure       Occupied BW

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Compensate Cable Loss: Yes
C1_TX: 1.20  C1_RX: 1.20  C2_RX: 1.20  [dB]
C1_IF: 0.05  C2_IF: 0.05

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Complete testing

The LGIC BTS test solution uses the E6380A test set's built-in IBASIC controller to automate base station test procedures. Derived from LGIC's installation procedure, the software ensures complete test and adjustment of the BTS as recommended by LGIC. A flexible user interface allows the technician to execute only the particular test(s) required.

BTS configuration

Utilizing the Laptop Emulator feature provides easy BTS configuration. This feature allows the technician to send individual commands to the BTS via a serial port. This integrated approach to BTS configuration minimizes the risk of invalid measurement results due to BTS setup.

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TESTS (IBASIC Controller)

Utility Menu:

RF Tools
Search PN Offset
Measure Coupling Factor
Measure Cable Loss
Check Even Second Clock
Check 19.6608MHz Clock
Check 10MHz Clock
Laptop Emulator

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BTS troubleshooting simplified

Specific test routines help the technicians quickly troubleshoot BTS problems. The optional Agilent 8935 RF Tools Hardware Accessory Kit (E6551A Option 001) provides the necessary hardware to perform

antenna return loss and cable fault measurements. Having this capability built into one product reduces the need to carry additional equipment.

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Site name... Site_1
Sector..... Alpha
Channel..... 425

Date [MM/DD/YY] 041798      Time [HH.MM] 12.09
=====
Test conditions           Measured value      Lower limit  Upper limit  P/F
=====
Rx Lvl-RXFU              -43.46 dBm          -46.00      -42.00
Rx IF Lvl-BSCA           -1.98 dBm           -4.00       0.00
Tx IF Lvl-BSCA           -12.05 dBm          -11.50      -9.50      FAIL
Tx Lvl-UDCA              -16.01 dBm          -19.50      -15.50
Tx Lvl-HPA-Direct        30.15 dBm           29.00       35.00
Tx Lvl-TXHU-Direct       28.82 dBm           27.20       33.20

Test is Completed.
Points passed= 5
Points failed= 1

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Measurement results

Test results can be saved to a laptop PC, memory card, or external printer. The easy-to-read format allows the technician to quickly determine how many tests failed and how many measurements are close to the test limit. Capturing the measurement

data electronically provides improved efficiency and flexibility for trend analysis.

LGIC model tested

STAREX 1800

E6380A Base Station Test Set standard features

- A rugged, full-featured one-box test set designed for the technician's environment
- Full signal generation and analysis capability
- Support for international PCS frequency bands
- Enhanced user interface and larger, bright, electroluminescent display for easy operation
- Technical support and services from Agilent's industry-recognized wireless experts
- Education and training for base station test technicians and engineers

Ordering information

E6380A	8935 CDMA Cellular/PCS Base Station Test Set	qty 1
E6551A	8935 LGIC CDMA PCS Base Station Test Solution (Includes E6388A LGIC CDMA PCS Base Station Test Software*, BTS Connection Kit)	qty 1

E6551A Option 001 8935 RF Tools Hardware Accessory Kit (Includes hardware for antenna return loss and cable fault measurements) qty 1

*The E6388A 8935 LGIC CDMA PCS Base Station Test software may be ordered separately; however, it is recommended to order the E6551A solution to receive the software and connection kit.

For additional information, refer to the following 8935 Series CDMA Base Station Test Set literature:

Brochure	pub. number 5966-0339E
Technical Specifications	pub. number 5966-0512E
Configuration Guide	pub. number 5966-0686E
U.S. Price List	pub. number 5966-0689EUS

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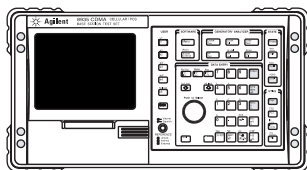
E6551A LGIC CDMA PCS Base Station Test Solution



CDMA PCS Base Station Test Software*



Connection Kit, optional RF tools hardware accessory kit



E6380A 8935 CDMA Cellular/PCS Base Station Test Set