

# Agilent E8290A

## CDMA Point-of-Service Test (PoST) Software for Agilent 8924C/E Mobile Station Test Sets

Product Overview

- Automates the testing of CDMA and AMPS mobile phones
- Verifies phone performance with just a few mouse clicks
- Provides point-and-click operation for nontechnical users—and access to comprehensive measurement capabilities for test developers
- Reduces the number of “no trouble found” phones
- Analyzes and stores data for trend-analysis and customer-care applications

**An easy-to-use, PC-based solution for testing CDMA dual-mode mobile phones at the point of sale or anywhere within your service chain**

### Satisfy Your Customers and Reduce Costs

If you sell or service CDMA mobile phones, you know the high cost of returns. When a customer brings a mobile phone back to your retail store or service center, you need a quick and easy way to verify that phone's performance.

The Agilent Technologies E8290A CDMA Point of Service Test (PoST) Software provides the solution. The software automates the 8924C/E mobile station test sets for very easy testing of CDMA PCS and dual-mode cellular phones.

Using the PoST software and a PC, your sales clerks or other test operators can determine instantly whether or not a customer's CDMA phone is faulty.



By testing on the spot, your organization will be able to respond quickly to customer problems. You'll cut costs by handing out fewer replacement phones and by reducing the number of “no trouble found” phones that get sent back into the system for repair.

In addition, the combination of the E8290A CDMA PoST software and 8924C/E mobile-station test set provides a practical test solution for your quality and repair groups or your verification lab.



**Agilent Technologies**

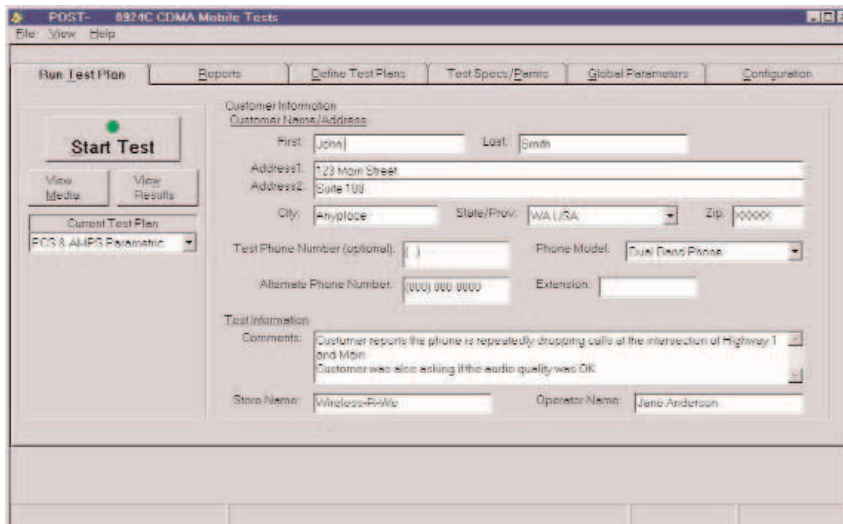
Innovating the HP Way

## Simple Operation and Flexible Capabilities

The Agilent E8290A CDMA PoST software features two modes of operation: one that ensures ease of use for nontechnical users, and another that provides access to a rich development environment—including the full set of measurement capabilities standard in the 8924C or 8924E test sets—for test developers, technicians, and engineers.

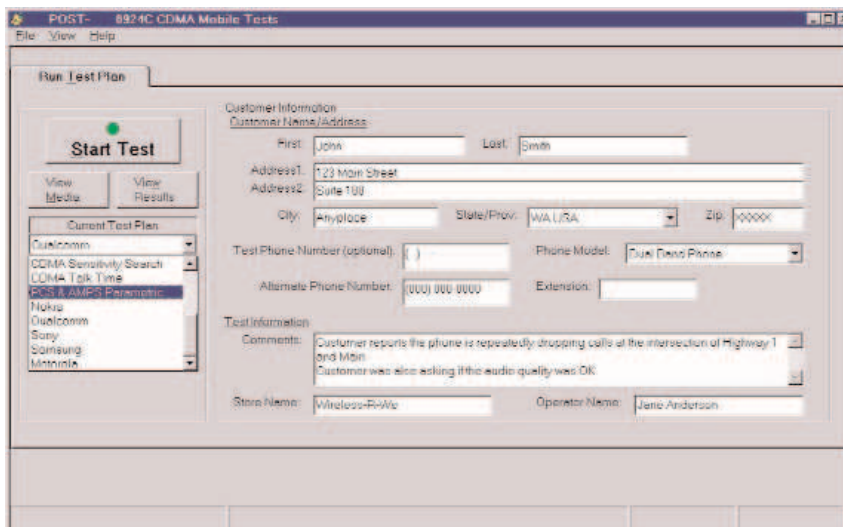
## Automatic Testing That Anyone Can Perform

In *operator* mode, the E8290A makes fast, accurate measurements of CDMA phones with minimal operator training. A test operator simply enters customer information on the PC screen, selects a pre-configured test procedure from the test plan menu, and clicks an on-screen button to run the test.



“Run Test Plan” screen

Six tabs provide easy access to information screens for defining and running test plans, setting up test parameters and specifications, analyzing results, and viewing and printing reports.



“Run Test Plan” screen with “Current Test Plan” menu open

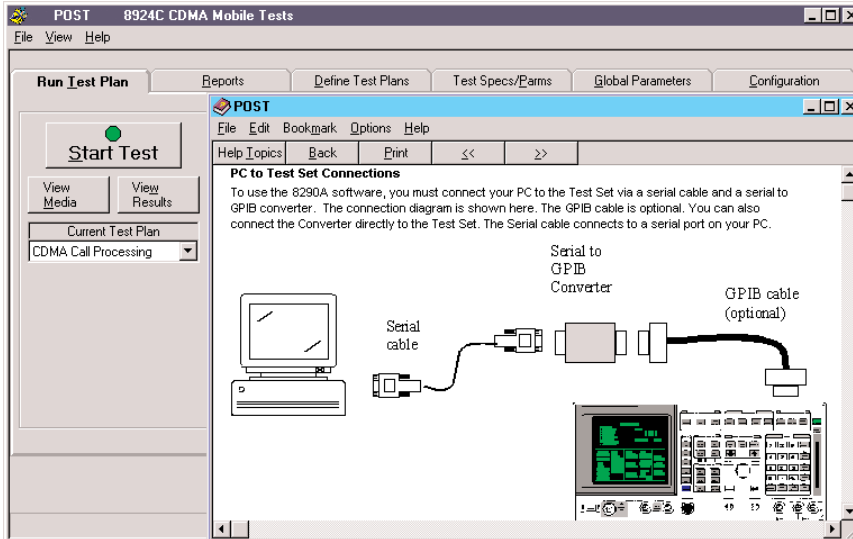
The mouse-driven graphical user interface enables any operator to make fast, accurate measurements.

## Help Menu Topics Such As: “PC to Test Set Connections”

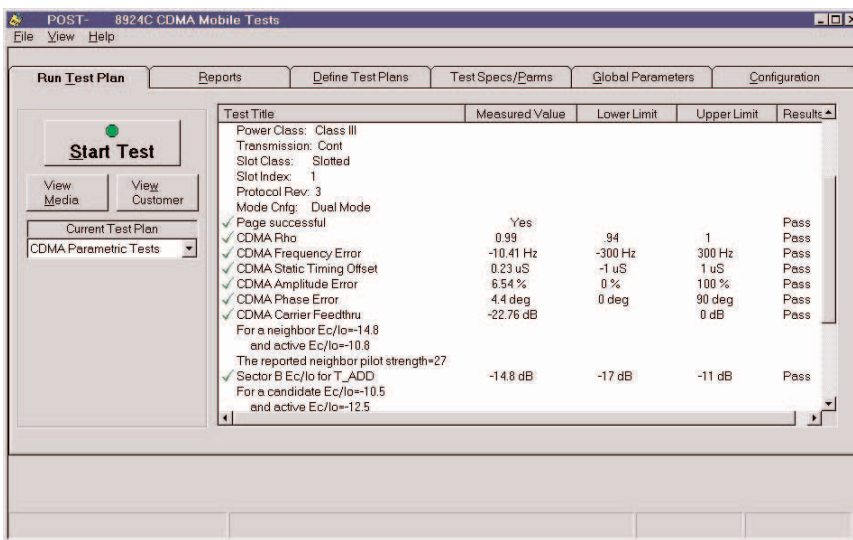
A help menu with diagrams provides all the information the operator needs to run the tests. For example, simple instructions for connecting the mobile phone and PC to the test set, what to do if the phone doesn't connect, and a checklist of items that the operator needs to know before testing.

## Sample Test Results from “View Results” Button of “Run Test Plan” Tab

When a test has been completed, the PoST software displays a pass or fail message, and offers options for viewing the test results, printing a summary or detailed report, and saving the test data to a file.



Help Menu: “Connections Overview” and “PC to Test Set Connections” Simple instructions and diagrams—such as these for connecting the test set, phone, and computer—are available online.

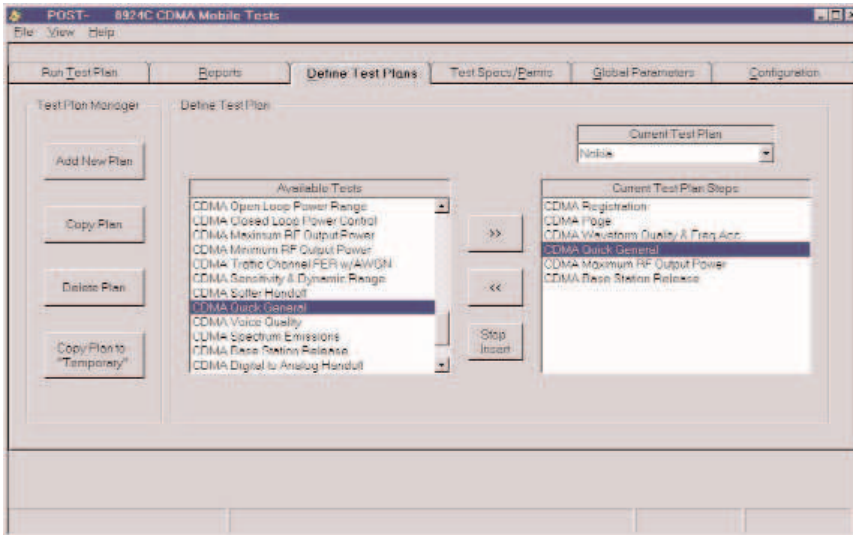


Sample test results from “View Results” button of “Run Test Plan” tab Test results and summary information can be printed and saved to a file.

## Access to a Powerful Development Environment

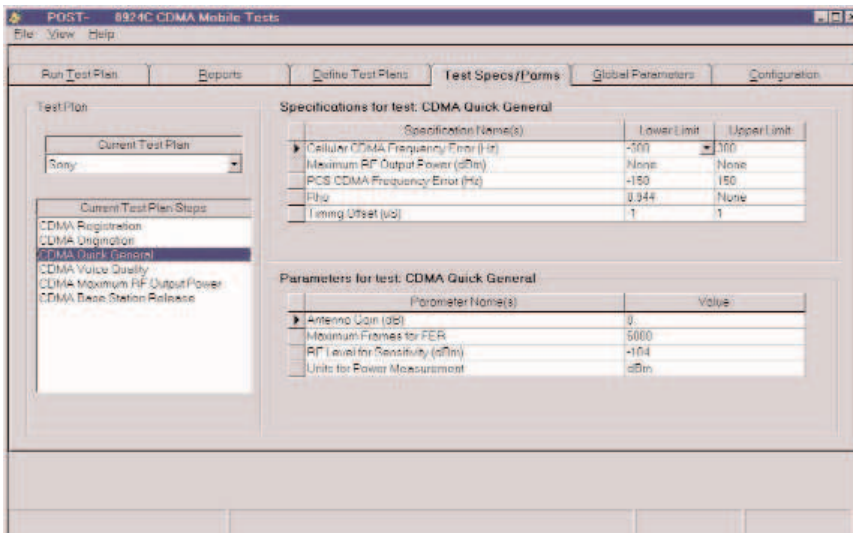
In the software's *development* mode, technical users can access the software's full set of capabilities to create tests for different models of CDMA phones. Test configurations, test plans, test specifications, and measurement parameters can all be set up and customized with ease.

The development mode is password-protected, so that you can limit who has access to the test programming and instrument control.



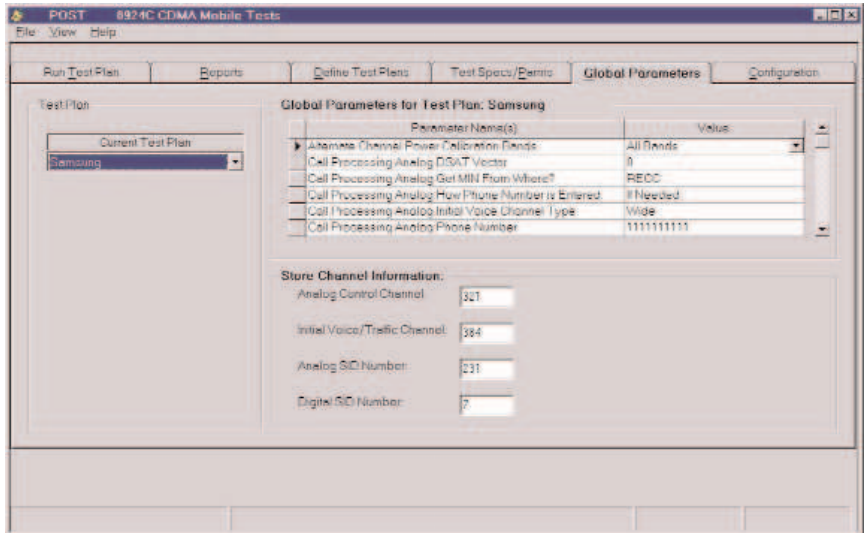
“Define Test Plans” screen

Point-and-click operation makes it easy to create new test plans or modify existing ones.

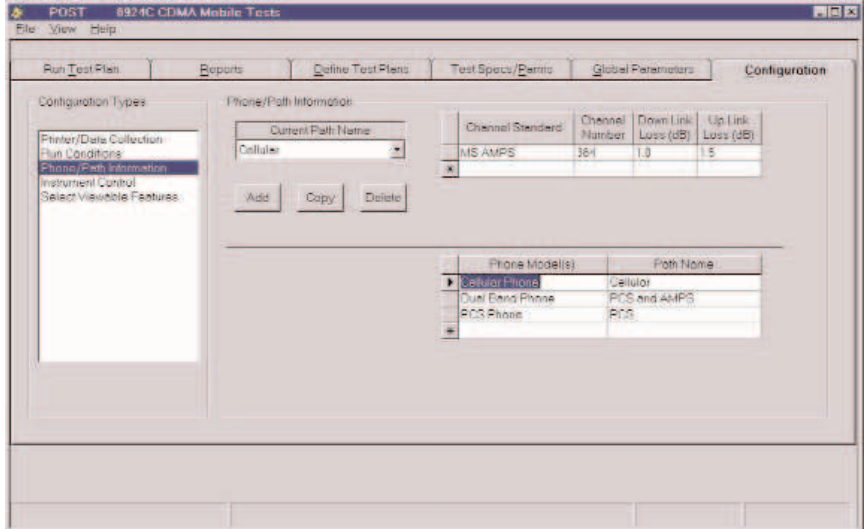


“Test Specs/Parms” screen,  
“CDMA Quick General” selected

The PoST software lets you define the test specifications and parameters for each step of a selected test plan. With this flexibility you can, for example, run an RF output power test at a PCS frequency, and then again at an analog frequency. In each case with the appropriate specifications and parameters.



“Global Parameters” screen selected  
 You can easily modify global parameters to customize a test plan for your phones.



“Configuration” screen with  
 “Phone/Path Information” selected  
 Through the configuration screen, you can direct the operation of the PoST software, choosing the printer and data collection settings, the run conditions, phone and path information, instrument control settings, and which features can be viewed by all operators.

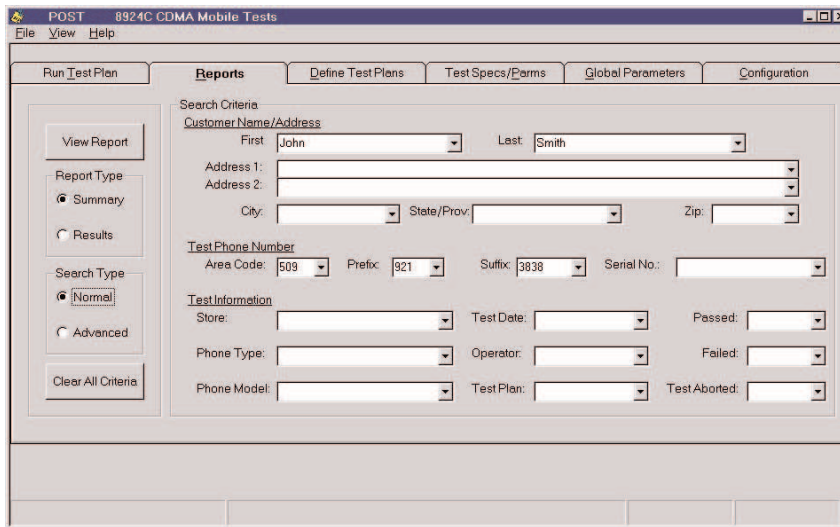
## Data Analysis and Reporting

The detailed and accurate performance data collected by the PoST software, along with customer information, can be saved in popular PC database and spreadsheet formats for use in trend-analysis and customer-care applications.

For example, you can store test results at each of your retail stores; then periodically collect, merge, and analyze the data files from each location to

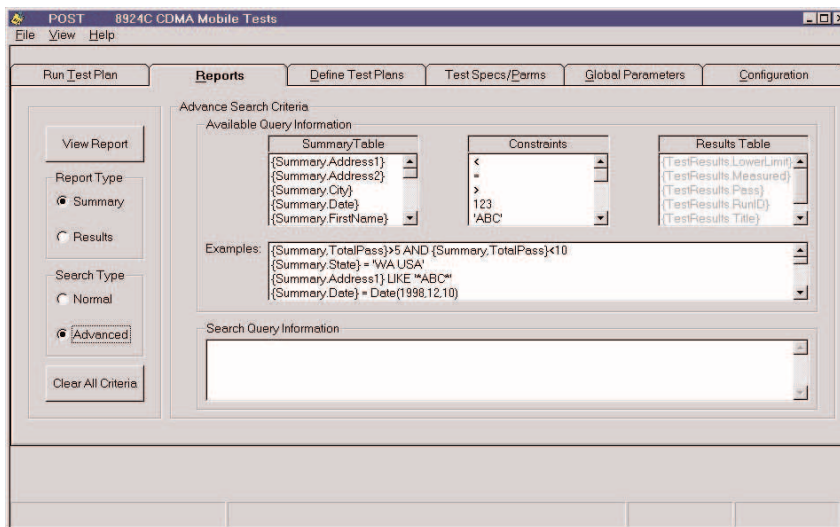
identify any recurring problems with a particular model of CDMA phone.

The PoST software includes a powerful, flexible search engine that allows you to search the databases by multiple fields (such as phone type, failure mode, customer name, or location), and to export the search results to spreadsheets for further analysis.



“Reports” tab; with “Normal” search query screen

In addition to searching on the standard database fields, you can use the software’s advanced search capability to build your own query strings.



“Reports” tab; with “Advanced” search query screen

## Works with Popular PC Operating Systems

The Agilent E8290A PoST software runs on PCs with Microsoft® Windows® 95 or Windows® NT 4.0 operating systems.

## Easy Connection to the Test Set

For easy connection between the 8924C/E test set and your PC, the PoST software comes standard with a serial-to-GPIB adapter. The adapter plugs into the test set's GPIB connector and allows hookup to the PC using a standard serial cable (which is also included with the software).

So—there's no need to install and configure any internal adapter cards in the test set or in your PC!

## System Requirements

### An IBM (or compatible) PC with at least:

- 166 MHz Pentium processor
- Microsoft® Windows® NT 4.0 or Windows® 95
- 16 MB of RAM
- 20 MB of available hard disk space

### Minimum test set firmware revision

- 8924C: A.06.15
- 8924E: A.02.02

## Ordering Information

**Agilent E8290A PoST Software** for dual-mode mobile phones on a CD-ROM; runs on a PC with Microsoft® Windows® 95 or Windows® NT 4.0, to control an 8924C/E mobile station test set.

### Agilent 8924C Mobile Station Test Set

**Option 001** Adds E8290A PoST Software

### Agilent 8924E Mobile Station Service Test Set

**Option 001** Adds E8290A PoST Software

## Tests that the Software Performs

### CDMA Tests

CDMA Registration  
CDMA Origination  
CDMA Page  
CDMA Base Station Release  
CDMA Quick General  
CDMA Waveform Quality and Frequency Accuracy  
CDMA Open Loop Power Range  
CDMA Closed Loop Power Control  
CDMA Maximum RF Output Power  
CDMA Minimum RF Output Power  
CDMA Traffic Channel FER with AWGN  
CDMA Sensitivity and Dynamic Range  
CDMA Softer Handoff  
CDMA Voice Quality  
CDMA Spectrum Emissions  
CDMA Talk Time  
CDMA Sensitivity Level Search  
CDMA Digital to Analog Handoff

### Analog Tests

Analog Registration  
Analog Page  
Analog Origination  
Analog Base Station Release  
Analog TX Quick General  
Analog RX Quick General  
Analog No Audio Functional  
Analog TX Frequency Error  
Analog TX RF Power Output  
Analog TX Modulation Deviation Limiting  
Analog TX Audio Frequency Response  
Analog TX Audio Distortion  
Analog Signaling Tone/DST  
Analog TX FM Hum and Noise  
Analog SAT/DSAT  
Analog RVC Data Deviation  
Analog Compressor Response  
Analog Current Drain  
Analog Expander Response  
Analog RX Audio Frequency Response  
Analog RX Audio Distortion  
Analog RX Hum and Noise  
Analog SINAD  
Analog FVC Order Message Error Rate  
Analog No Audio Functional  
Analog Switch Channels  
Analog Hook Flash  
Analog DTMF Frequency Error  
Analog NAMPS MRI

### Other Tests

Change Global Parameters  
Change Channel For  
Change Channel List  
Access to a User DLL

A demo version of the E8290A PoST Software can be downloaded from:

**[www.tm.agilent.com/tmo/software/English/E8290\\_Demo\\_Software.html](http://www.tm.agilent.com/tmo/software/English/E8290_Demo_Software.html)**  
(this URL is case sensitive)

For related product information visit our web site at:

**[www.agilent.com/8924support](http://www.agilent.com/8924support)**

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#### **Our Promise**

"Our Promise" means your Agilent test and measurement equipment will meet its advertised performance and functionality. When you are choosing new equipment, we will help you with product information, including realistic performance specifications and practical recommendations from experienced test engineers. When you use Agilent equipment, we can verify that it works properly, help with product operation, and provide basic measurement assistance for the use of specified capabilities, at no extra cost upon request. Many self-help tools are available.

#### **Your Advantage**

"Your Advantage" means that Agilent offers a wide range of additional expert test and measurement services, which you can purchase according to your unique technical and business needs. Solve problems efficiently and gain a competitive edge by contracting with us for calibration, extra-cost upgrades, out-of-warranty repairs, and on-site education and training, as well as design, system integration, project management, and other professional services. Experienced Agilent engineers and technicians worldwide can help you maximize your productivity, optimize the return on investment of your Agilent instruments and systems, and obtain dependable measurement accuracy for the life of those products.

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