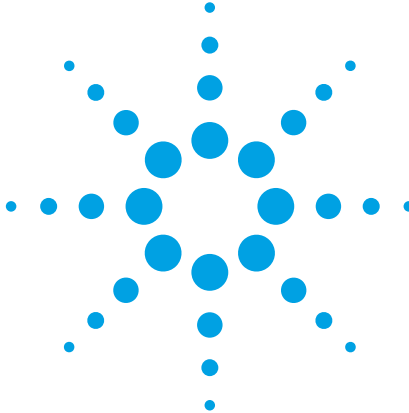


# Agilent GS-8800 RF Design Verification System

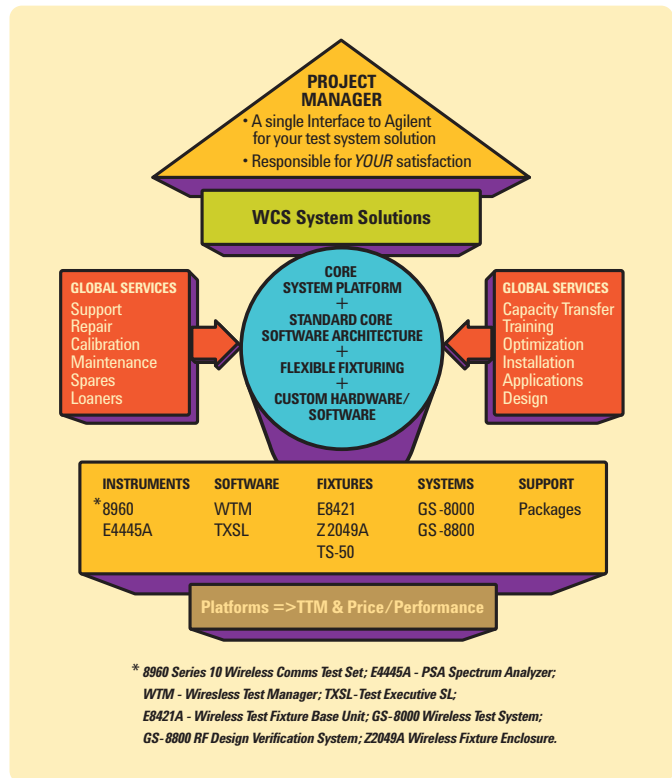


- Reduce costs and accelerate time to market.
- Test multiple formats: GSM, GPRS, W-CDMA, ...
- Leverage to GS-8000 manufacturing system

## Agilent Worldwide Communication Solutions

Agilent Worldwide Communication Solutions (WCS) are comprised of a core functional test platform, such as the GS-8800, built from industry-leading instrumentation. Your solution is designed to fulfill a specified set of requirements to meet your goals. To do that, Agilent offers a complete array of services such

as installation and training, writing specific test routines, or global support packages. These services and tailored system comprise a solution that is delivered through a Project Manager, who provides a single interface to Agilent capabilities, as shown in the figure below.



A WCS System Solution



## Design Verification Challenges

- Wider deployment of pre-conformance systems to accelerate the design process
- Leverage between Design and Manufacturing systems for cost and time savings
- Balance between test coverage and cost
- Ease of use for faster learning and test development
- Capability to extend functionality with minimum time and expense for testing new appliances
- Combinations of formats: GSM/GPRS/W-CDMA, for example.



## System Overview

The system is a 2M rack with integrated test equipment and software.

### Base System:

- E5515C Wireless Test Set
- E4445A Spectrum Analyzer
- E4438C ESG Digital Signal Generator
- E8247C Microwave Generator
- 66319D DUT Power Supply
- RF Switching and Signal Routing
- E4418B Power Meter
- Industrial PC
- Wireless Test Manager

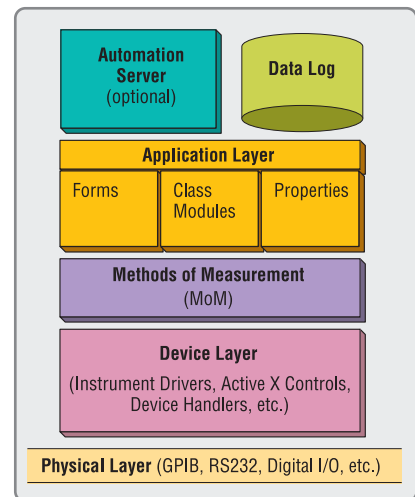
### Optional:

- 8664A RF Signal Generator
- TAS4500 Spirent RF Fading Simulator

## Software Architecture

### Overview

Wireless Test Manager (WTM) supports multiple technologies. Each WTM Application correlates to an E5515C Wireless Test Set Test Application (firmware). For example, the E6561A GSM/GPRS WTM Application correlates directly to the E5515C's E1992A GSM/GPRS Test Application. E6561A includes GSM850, 900, 1800 and 1900 support. Other phone formats follow the same correlation.



### System Control

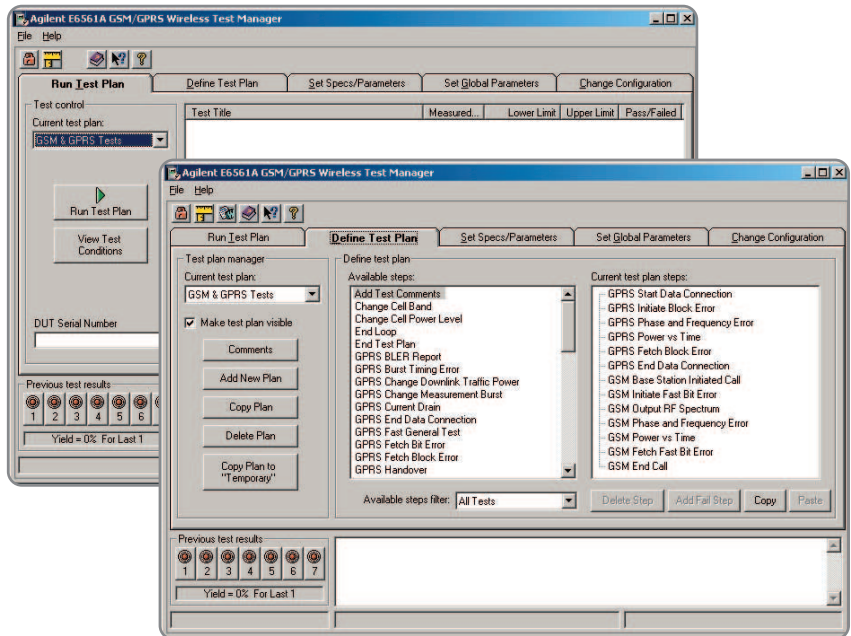
The software platform is designed to be easy to use with low complexity. An Automation Server is available for Operator Interface development. Datalogging is provided in XML or text formats. The output to the data log can be customized to meet the needs of the receiving database. The standard WTM User Interface is simply a form within the VB6.0 project. All of the class modules, code modules, and properties reside at the same architectural level, thus following object-oriented development design philosophies. This brings

the control layer and the application layer together. The flatter structure gives simplicity and ease of use to the platform. Underlying the Application Layer is the heart of the software's functionality. Agilent provides superior measurement technology in the form of pre-defined code modules called Methods of Measurement (MoM). The MoM is a collection of pre-defined processes, which control a group of instruments thereby automating complex test scenarios. Each process contains all of the instrument control, DUT communication, and measurement evaluation required to produce reliable, accurate results.

### The Interface

WTM provides a simple User Interface that makes it very easy to use. The operator has complete program and configuration control from the various tabs on the UI.

Two features provide good examples of WTM's fast development capabilities. You can create new tests by simply dragging and dropping pre-defined test steps into the Test Plan window. Additionally, you can easily configure the parameters and specifications for these tests simply by selecting the test step, and then entering the appropriate values.



Example WTM User Interface Screens

## Key Features and Benefits

### Reduce costs and accelerate time to market.

Pre-Conformance test reduces capital cost, and you can validate your design before full conformance testing. The lower system price permits wider deployment.

### Flexibility

The GS-8800 supports:

- GSM
- GPRS
- W-CDMA
- cdmaOne
- cdma2000 1X

In the near future:

- 1xEVDO
- EGPRS

### Extensibility and Scalability

It is easy to add support for new formats. The GS-8800 scales to the GS-8000 for leverage and re-use in manufacturing.

### Local Delivery and Global Support

Agilent can deploy a system solution globally, which is verified to conform to your exact specifications. We then tailor a system support package for your local sites to achieve the best in responsiveness and communication.

### Agilent Technologies' Test and Measurement Support, Services, and Assistance

Agilent Technologies aims to maximize the value you receive, while minimizing your risk and problems. We strive to ensure that you get the test and measurement capabilities you paid for and obtain the support you need. Our extensive support resources and services can help you choose the right Agilent products for your applications and apply them successfully. Every instrument and system we sell has a global warranty. Support is available for at least five years beyond the production life of the product. Two concepts underlie Agilent's overall support policy: "Our Promise" and "Your Advantage."

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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 engineering 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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