Agilent RF Parametric and Functional Test for Wireless Designs

Multiple R&D Uses

Virtually every aspect of wireless device development depends on access to network functionality.

Instead of waiting for available network time, using expensive conformance test systems, or settling for PC-based simulators that fall short of live networks, use the Agilent 8960 (E5515C) test set and technology-specific lab applications.

The test set and lab applications create a powerful network in a box that can be tailored for finalizing wireless device designs – whether it’s integration and verification, application development, protocol stack development, or RF hardware development.

Just one box – that’s affordable and fits on your desk – delivers the freedom to easily add new wireless technologies and reliably perform RF and functional testing to industry standards.

- Real-time environment
- More measurements and features for functional test
- Support for 3GPP and 3GPP2 technologies
RF Hardware Development

To accurately test the RF performance of new devices, you need access to a real-time network to stress the circuits under real-world scenarios, and accurate measurements to meet the technology standards.

Using the Agilent 8960 test set and technology-specific lab applications, you get a one-box development and validation network that provides that capability and more.

Affordable to own and operate, the 8960 test set provides a standards-based measurement integrity for all major 3GPP and 3GPP2 technologies.

Whether you purchase individual lab applications, or save money by purchasing suites with multiple technologies, you can depend on Agilent innovation to deliver the automation you need to thoroughly test your devices and streamline development.

Working with W-CDMA/HSDPA devices? Agilent offers the most measurements, complete with fading, to assure the device’s integrity is compliant to GCF Mandatory 34.121 conformance standards.

Lab applications for cdma2000 and 1xEV-DO technologies offer features such as accurate fading and dynamic power measurements to help provide more complete network simulation.

Agilent lab applications make it simple to test interoperability between GSM/GPRS/EGPRS, data, SMS, and voice services – enabling you to get real life data in real time.

Maximizing your confidence in device’s design is easy – use the Agilent 8960 and technology-specific lab applications.
Integration & Verification
When it comes to integrating the protocol stack with the RF hardware and testing the wireless devices’ commercial capabilities, the 8960 network in a box is an essential tool.

The test set and lab applications provide a one-box solution that enables automated performance validation – including measurements, call processing protocols, data connectivity, and regression testing.

Unlike expensive, hard-to-use script-based conformance test equipment, the 8960 test set provides an affordable solution for troubleshooting problems found in manufacturing test. Diagnostic information and the ability to look at data transmission and reception, makes it faster to pin-point and resolve problems.

Data channel connectivity and data throughput measurements test high-speed packet data and their connections to the network.

Protocol Stack Development
Gain early access to new features in the protocol standards, and speed the testing and troubleshooting of protocol stack designs with the 8960 test set and technology-specific lab applications.

This affordable, one-box solution provides flexible, real-time network functionality for all major 3GPP and 3GPP2 technologies and is based on an independent (FPGA-based) set of protocols stacks rather than a commercial chipset.

Comprehensive protocol logging and analysis tools make it easy to ensure the stack is working and that messages between the wireless device and the network are transmitting correctly. It also helps isolate missed communications so that they can be quickly resolved.

New product releases help ensure you have the tools you need to keep pace with industry innovation – providing features like two-box video calls for testing interoperability issues between W-CDMA/HSDPA devices, dual transfer mode for GSM units, and hybrid mode to test voice and data cdma2000/1xEV-DO networks.

The wireless protocol analyzer software tool provides comprehensive logging for analysis of protocol messages going back and forth across the layers.

Application Development
For engineers developing applications for mobile handsets, the 8960 test set and Agilent lab applications provide real network emulation to support off-line development testing of applications, with full network parameter control.

Ideal for testing applications with a client/server architecture, the 8960 test set with technology-specific lab applications accurately emulates real wireless networks and provides repeatable test conditions to expedite application performance verification.

The one box test set with lab applications is also a convenient, affordable method for demonstrating applications to potential customers, or for testing applications on a network type that isn’t available locally.

One product. Multiple solutions.
Whether you’re developing applications, performing integration and verification, creating protocol stacks or developing new RF hardware, you need just one solution: the 8960 product family. Choose the functionality you need to deliver the performance and reliability manufacturing and end-consumers demand.

Accelerate wireless hardware and application design

• Emulate a live network – on any R&D desk
• Control the simulated two-way RF base station link
• Monitor the messages flowing between the mobile device, network, and Internet
• Validate wireless device Internet connectivity and Web features

For more information visit www.agilent.com/find/8960devicedesign
More information
To obtain the latest information about product enhancements and Agilent support of emerging technologies, visit one of the Web sites listed below or contact your Agilent Sales Representative.

Hardware Platform
www.agilent.com/find/e5515c
Wireless communications test set
• Second RF source
• Flexible base station emulator
• Digital bus (for fading applications)

Lab Applications
www.agilent.com/find/8960devicedesign
GSM/GPRS
EGPRS
cdma2000
W-CDMA/HSDPA
Fast switching

Wireless Test Managers
www.agilent.com/find/wtm
cdma2000, IS-95, AMPS
W-CDMA/HSDPA
IS-36 (TDMA), AMPS
1xEV-DO
GSM, GPRS, EGPRS
GSM, GPRS, W-CDMA

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