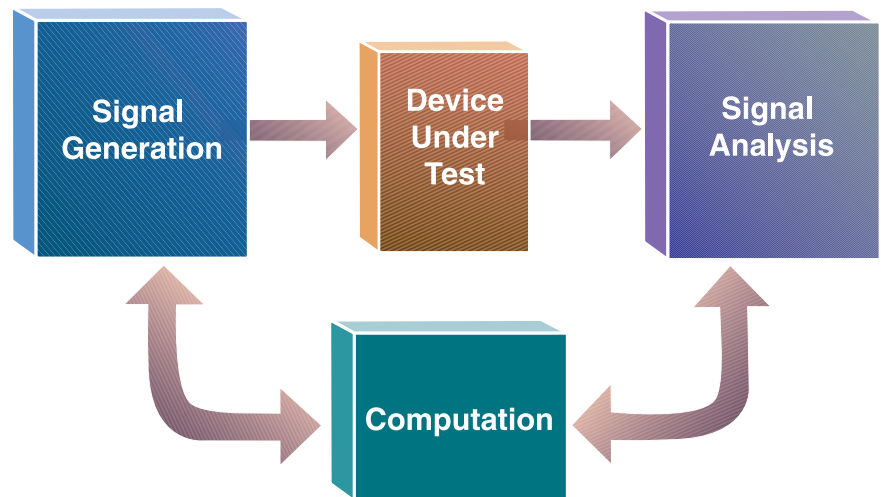


## Agilent's Wideband CDMA Test Solutions

If you're going to build it, you're going to have to test it.



Agilent Technologies has W-CDMA solutions available today that test your products through the entire system development process:

- Analyze your designs prior to prototyping with Agilent's simulation solutions.
- Stimulate your prototype systems with Agilent's signal generation solutions.
- Measure your system performance with Agilent's signal analysis solutions.



# Agilent Provides W-CDMA Solutions Now and in the Future

## W-CDMA Simulation Solutions

The **Communication Systems Designer** and **DSP Designer** simulate and test your system designs prior to building prototypes. You will optimize your W-CDMA designs, shorten your product development time, and speed products to market ahead of your competition.

**Communication Systems Designer (E8851A)** and **DSP Designer (E8821A)** link to Agilent test equipment to tie system simulation together with characterization and troubleshooting of prototype designs.

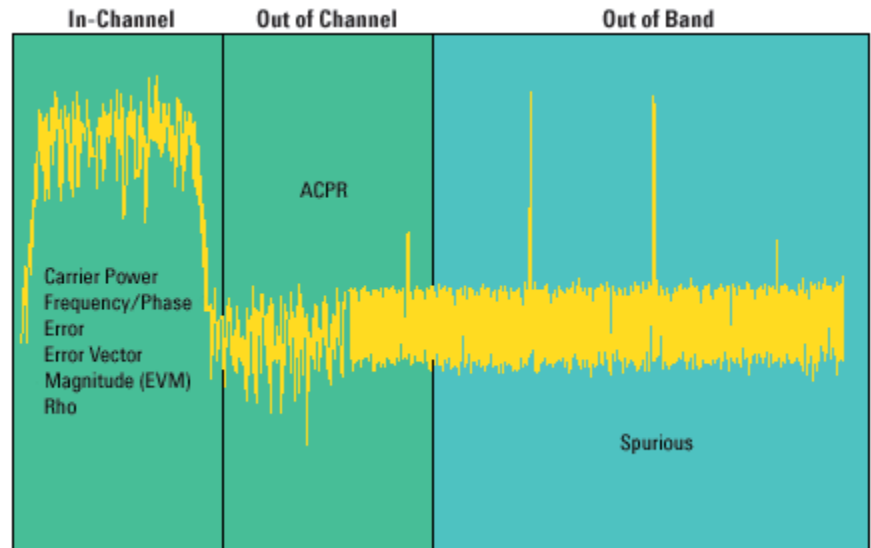
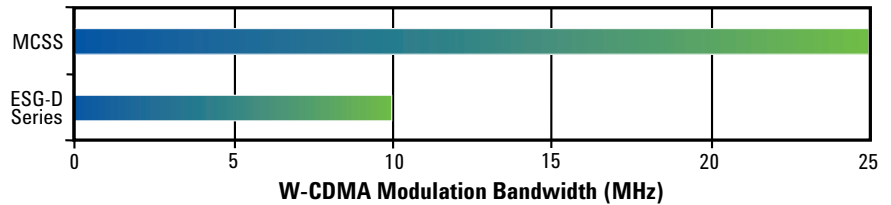
- Transfer simulations to **Agilent arbitrary waveform generators and signal generators**, such as the **ESG-D Series**, to stimulate your prototype designs with signals from the simulation.
- Capture data from your prototypes with the **Agilent 89441A Vector Signal Analyzer**, and send measured signals through the rest of your simulation.
- These “*virtual prototypes*” uncover potential design problems and reduce development bottlenecks.

## W-CDMA Signal Generation Solutions

**ESG-D Series signal generators** provide accurate and stable broadband signals to test your W-CDMA system designs. The new internal dual arbitrary waveform generator and other options give you the capability to test your systems with W-CDMA signals up to 10 MHz wide with the ACP performance you need.

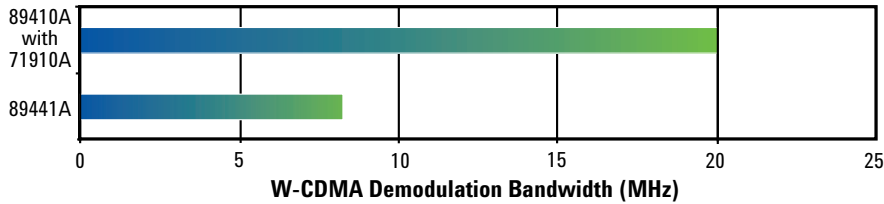
## Multi-format Communications Signal

**Simulators (MCSS)** give you the ability to generate signals greater than 20 MHz wide to test your system. You can also simultaneously generate multiple RF channels with a total bandwidth of up to 25 MHz to test ACP and spectral regrowth interference of your system.



Key W-CDMA measurements supported by Agilent W-CDMA solutions

## W-CDMA Signal Analysis Solutions



<b>Out-of-Channel</b>	<p><b>8563E Option K35 W-CDMA Adjacent Channel Power Ratio (ACPR) test sets</b> increase the dynamic range of the <b>8560 E-Series spectrum analyzers</b> to at least 70 dB while testing W-CDMA ACPR. This dynamic range meets the needs of the emerging W-CDMA standards. Use the <b>8560 E-Series spectrum analyzers</b> for spurious and other out-of-channel measurements and add the test set to perform ACPR measurements.</p>
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<b>In-Channel</b>	<p><b>89441A Vector Signal Analyzers, (VSA)</b> can evaluate and troubleshoot W-CDMA digitally modulated signals with both qualitative displays such as constellation diagrams, and quantitative measurements such as Error Vector Magnitude (EVM).</p> <p>Configure the <b>VSA with Option AY7</b> and the <b>71910A wideband surveillance receiver</b>. This adds the capability of analyzing signals up to 26.5 GHz and provides a second 10 MHz input channel that gives the VSA an effective information bandwidth of up to 20 MHz.</p>
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### W-CDMA Consulting Solutions

**Agilent Solution Services** teams can provide customer education, consulting services, productivity assistance, and complete W-CDMA integrated solutions, designed and integrated to your specifications.

Agilent Technologies has technical experts worldwide who are trained in the latest test needs for wireless design, manufacturing, and service.

Today, Agilent supports virtually all major international standards for wireless communications. Already, engineers are providing integrated solutions to key W-CDMA customers. As the need for W-CDMA measurement solutions grows, the need for application services and W-CDMA integrated solutions will also grow. SSV can provide services specifically targeted at the unique needs of W-CDMA equipment manufacturers and solution providers.

## Related W-CDMA Product Literature

### Simulation

#### *DSP Designer*

Simulate your W-CDMA DSP hardware and RF designs

**Pub. number**

5966-2869E

#### *A Flexible Waveform Generator Using OmniSys and Instrumentation*

Connect your simulation software to Agilent signal generators to help characterize partial prototypes of your W-CDMA designs (DSP Designer replaces OmniSys).

5965-8120E

### Signal Generation

#### *Agilent ESG Series RF Digital and Analog Signal Generators Brochure*

Agilent's latest family of signal generators is now capable of generating W-CDMA signals.

5965-9088E

#### *Agilent ESG-D Series RF Signal Generators with Option H97*

Latest versions of ESG to generate W-CDMA signals.

5966-3656E

#### *Multi-format Communications Signal Simulator Model 60 and Model 100*

Agilent's flexible, wideband MCSS system is capable of multi-RF carrier simulation.

5964-1604E

### Signal Analysis

#### *Agilent 89400 Series Vector Signal Analyzer Brochure*

Demodulate and characterize digital W-CDMA RF systems.

5965-8554E

#### *W-CDMA Signal Analysis with the Agilent 71910A/P Wideband Receiver and the 89410A Vector Signal Analyzer*

Analyze signals up to 26.5 GHz with an effective bandwidth of up to 20 MHz.

5966-3698E

#### *Product Note 89400-13: Extending Vector Signal Analysis to 26.5 GHz with 20 MHz Information Bandwidth*

Extend demodulation bandwidths up to W-CDMA levels of 20 MHz.

5964-3586E

#### *Agilent 8563E Option K35: ACPR Test Set*

Extend ACPR dynamic range to W-CDMA specifications.

5966-2913E

### 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."

#### 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 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.

**By internet, phone, or fax, get assistance with all your test and measurement needs.**

#### Online assistance:

**[www.agilent.com/find/assist](http://www.agilent.com/find/assist)**

#### Phone or Fax

United States:  
(tel) 1 800 452 4844

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