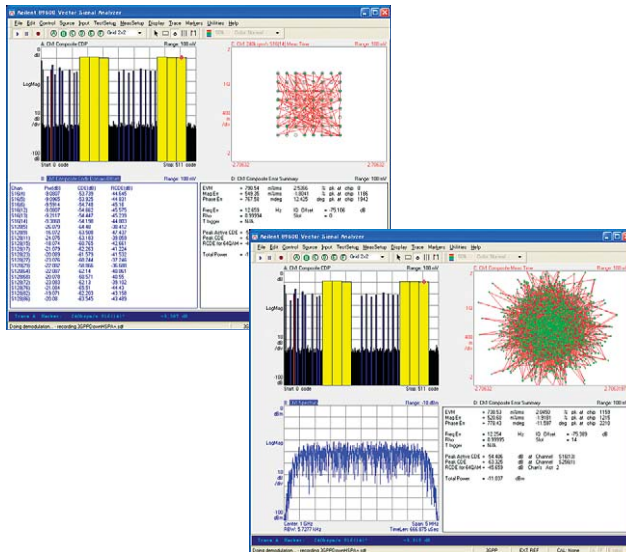# Agilent
89600 Series Vector Signal Analysis Software

Option B7U W-CDMA/HSPA+ Modulation Analysis

- ## Reach deeper into signals
- ## Gather more data on signal problems
- ## Gain greater insight

Whether designing to a mainstream standard, a secondary standard, an emerging standard, or a proprietary specification, the 89600 Series vector signal analysis (VSA) software flexible modulation analysis capability has the tools needed to evaluate and characterize signal performance and dig down to the root of modulation problems.

Gain greater insight into your W-CDMA, HSPA, HSPA+, and HSPA+ MIMO signals with the advanced signal analysis capabilities of Option B7U.

HSPA+ modulation analysis
- 64QAM analysis for downlink HS-PDSCH with automatic active channel identification
- Relative code domain error (CDE)
- Convenient preset for Test Model 6
- 4-state pulse amplitude modulation (4PAM) analysis in uplink

HSPA (HSDPA and HSUPA) modulation analysis
- 16QAM/QPSK channel auto identification for HS-PDSCH
- Relative CDE
- HS-DPCCH and E-DCH analysis
- Full- and half-slot analysis in uplink EVM and slot PvT
- Slot-by-slot adaptive modulation auto-detection

HSPA+ 2x2 DL MIMO analysis [1]
- Composite, code domain, despread, and MIMO-HS-PDSCH measurements for Antenna-1, Antenna-2

More powerful analysis capabilities and tools
- Automatically identify all active channels
- Easily view conformance test items in slot summary table
- View one layer at a time with single layer code domain power (CDP) and CDE displays
- View all code layers at once and determine overall signal performance with composite CDP and CDE displays
- Search out specific errors with composite and single channel constellation, demodulated bits, trellis and eye diagrams, IQ magnitude/phase error displays, and error vector traces
- Evaluate the overall performance of your W-CDMA/HSPA+ signal with composite and single channel time domain displays and measurements of CDP, CDE, and overall error summary

The 89600 VSA software is powerful, PC-based software offering the industry's most sophisticated signal evaluation and troubleshooting tools for high-performance systems with hard-to-measure general-purpose and standards-specific signals.

- Over 30 general-purpose analog and digital demodulators
- Over 10 wireless-standards-based analysis options
- Up to 400K bin FFT, providing the highest resolution spectrum analysis
- A full suite of time domain analysis tools
- Six simultaneous trace displays and the industry's most complete set of marker functions
- Click-on-it easy-to-use Microsoft® Windows® graphical user interface (GUI)
- Multiple measurement platform compatibility — signal analyzers, oscilloscopes, logic analyzers, simulators, and more
- Flexible licensing with subscription service

Try it for free!
www.agilent.com/find/89600

1. Beta.

Agilent Technologies

Try it Now!
www.agilent.com/find/89600

See how to use the 89600 VSA software to measure signals right away. Download the software directly on your PC or supported Agilent PC-based front ends — such as signal analyzers, oscilloscopes, or logic analyzers — and use it free for two weeks.

To Measure W-CDMA/HSPA+ Signals

| Instructions	Toolbar menus
1. Download the 89600 software	Go to **www.agilent.com/find/89600** and click on **"TRY THE 89600 VSA SOFTWARE--FREE 14 DAY DEMO TRIAL !"** and follow the instructions.
2. Start the software using the desktop icon	On the desktop, click on
3. Preset the software	**File** > **Preset** > **Preset all**
4. Recall HSPA+ demo. This is a 3GPP HSPA downlink signal consisting of 14 DPCH channels and 6 HS-PDSCH channels (2 each of QPSK, 16QAM and 64QAM).	**File** > **Recall** > **Recall Demo** > **WCDMA-HSPA** > **3GPPD ownHSPA+.htm** [default file directory is: **C:\ Program Files\Agilent\89600\ Help\Signals**]
5. Start the measurement	Click ▶ *(toolbar, left side)*
6. To view more measurements	Double click on the title of any trace *(upper left hand corner)*

For information on W-CDMA/HSPA, click **Help** > **Optional Measurement Software > 3G Cellular Communication Optional Measurement Software > W-CDMA (3GPP)/HSPA Mod Analysis (Option B7U)**
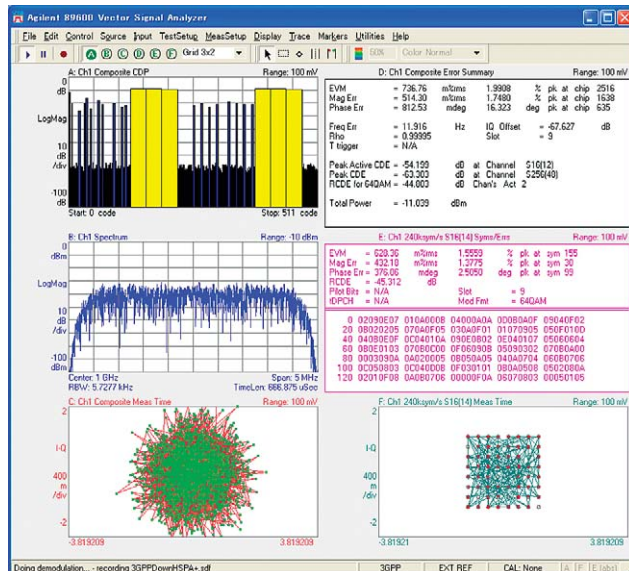
Ordering Information

89601A-B7U	W-CDMA/HSPA modulation analysis* — node-locked license
89601AN-B7U	W-CDMA/HSPA modulation analysis* — network license
89601N12	12-month network license all options

* Requires Option 200 basic VSA software and Option 300 hardware connectivity

Related Literature

89600 Series Vector Signal Analysis Software 89601A/89601AN/ 89601N12, Technical Overview, literature number 5989-1679EN

89600 Series Vector Signal Analysis Software 89601A/89601AN/ 89601N12, Data Sheet, literature number 5989-1786EN

Hardware Measurement Platforms for the Agilent 89600 Series Vector Signal Analysis Software, Data Sheet, literature number 5989-1753EN

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www.agilent.com/find/contactus

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