

# Agilent 89400 Series W-CDMA

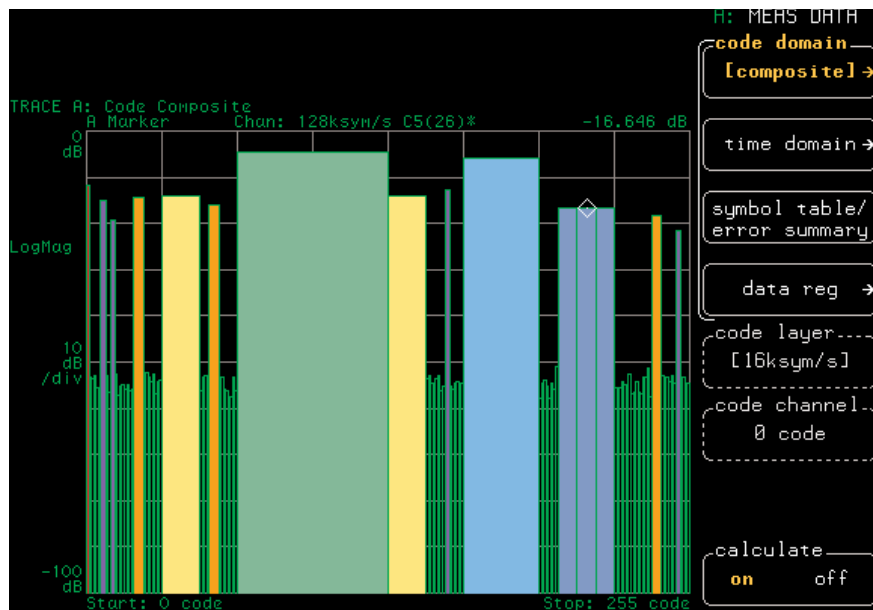
## Code-Domain Power Measurement Option for BTS Transmitter Test

Product Overview

### Option B73 for the Agilent Technologies 89400 Series Vector Signal Analyzers

- Designed for the experimental W-CDMA system in Japan
- View code power for all code layers and symbol rates on a single composite display
- Zoom screen views for more display resolution of code channel power
- Isolate a single code channel for modulation analysis
- View power versus time in a selected code channel
- Employ standard Agilent 89400 series modulation analysis and spectrum analysis tools

Use the W-CDMA code domain power (CDP) measurement system for BTS transmitter tests of W-CDMA experimental systems. The system automatically determines active channels of any code layer. It can display the code domain power information in a



Automatically determines and color codes active channels of any code layer.

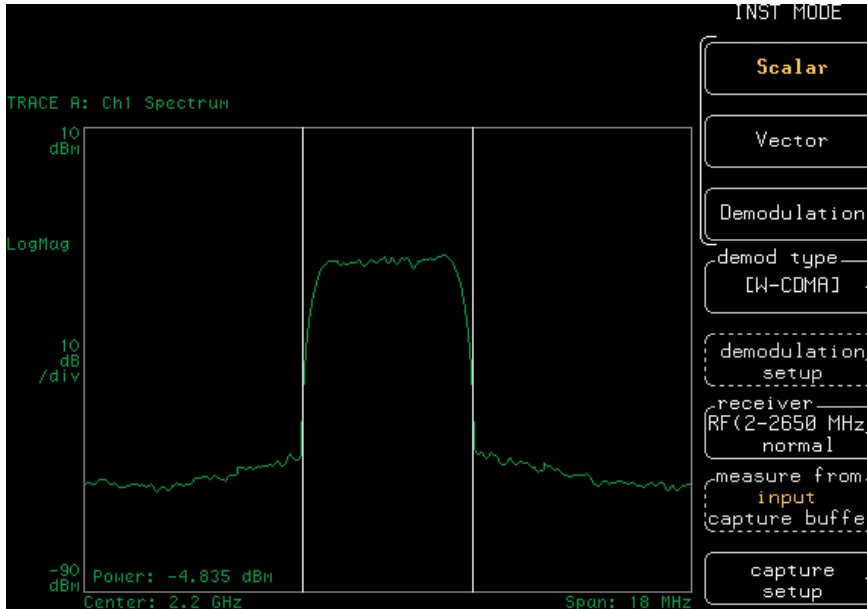
patent-pending composite multi-rate view or in single rate views of any code rate. The active channel identification allows engineers to examine and analyze unknown signals with ease. The Agilent 89441A can support up to 8 MHz of bandwidth in its base configuration. The robust decoding algorithm can decode heavily-loaded signals which means engineers can evaluate and stress test their transmitter designs.

The Agilent 89400 analyzers provide complete characterization of the W-CDMA signal in the time domain, frequency domain, and the modulation domain. Measure rho, channel power, frequency, error vector magnitude (EVM), average power, peak to average power statistics, and channel frequency response.



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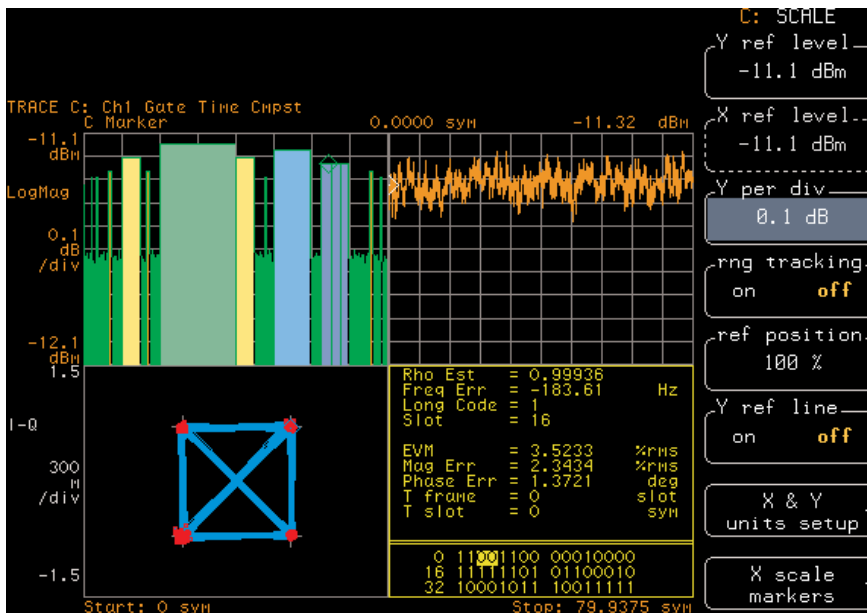
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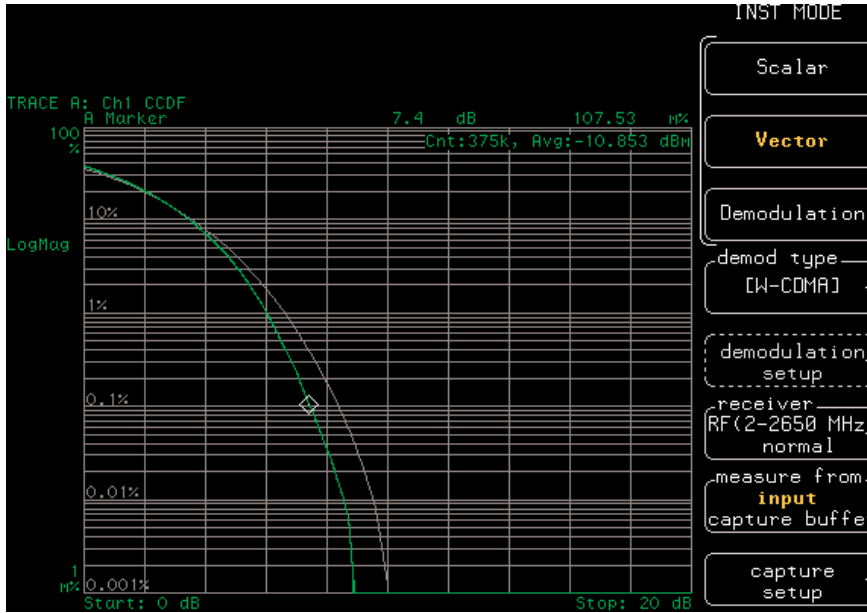
Examine the W-CDMA spectrum and make power measurements using band power markers.

### Key Features

- Measure at RF, IF, and Baseband
- Automatic channel identification of layered codes (16 ksym/sec to 1024 ksym/sec)
- Composite display of all code layers and symbol rates
- Isolate single code channels to examine constellation, power versus time, despread symbol stream, and modulation quality metrics
- Measure in relative or absolute power
- Manual or automatic long code selection
- Normal/Mirrored spectrums (for Inverted IF's)
- Display CDP for each of 20 contiguous time slots
- Measure T slot and T frame metrics
- Recover bits from any code channel
- Capture up to 15 frames of W-CDMA data for post processing analysis



Examine the composite code-domain power display (upper left) while simultaneously viewing composite power versus time (upper right), symbol constellation (lower left), and modulation metrics (lower right).



Complementary cumulative distribution function (CCDF) measurements characterize the peak to average time statistics of the W-CDMA signal.

**Key Specifications**

Refer to the *Agilent 89410A or Agilent 89441A Data Sheet* for complete information on the RF performance specifications.

Frequency Range	2 MHz to 2650 MHz
IF Bandwidth	Up to 8 MHz
Input Power Range (RF)	-50 dBm to +25 dBm (5 dB steps)

**Options Ordering Information**

B73–W-CDMA Code Domain Power Measurements  
 Upgrades for existing instruments available<sup>1</sup>

**Required Options**

- AYA–vector modulation analysis
- AY9–extend time capture
- UTH–extended RAM

**Recommended Options**

- AYJ–add adaptive equalization to AYA

1. Same required options to upgrade an existing unit. You can upgrade an existing Option UFG to Option UTH by ordering Special Option 89410A K02, or Special Option 89441A K02.

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