

PRODUCT INTRODUCTION

MX860801B/MX860901B

MX268101B/MX268301B/MX268701B

W-CDMA Measurement Software

ANRITSU CORPORATION

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MX860801B/MX860901B/ MX268101B/MX268301B/MX268701B W-CDMA Measurement Software

Product Introduction

The additional functions from MX860801A/MX860901A/
MX268101A/MX268301A/MX268701A version

ANRITSU CORPORATION
Measurement Business Center Wireless Measurement Div.
Ver. 2.0

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1. W-CDMA Software Measurement Functions

function			function	
Modulation analysis		2-1, 2-3	Power	
EVM:Error Vector Magnitude			Transmitter Power	
Carrier Frequency,			Tx power	
Carrier Frequency Error			Filtered Power	
Waveform Quality			TCP(Transmitter Power Control)	
Phase Error			RACH(Random Access Channel)	2-6
Magnitude Error			Occupied Bandwidth	
Origin Offset			Adjacent Channel Power	
TX Power	2-2		Spectrum Emission Mask	
Trace Format			CCDF(Complementary Cumulative Distribution Function)	2-7
Constellation	2-4		Spurious Emission	2-8
Eye Diagram			Demodulation Data	2-9
EVM vs.chip				
Phase Error vs.chip				
Magunitude Error vs.chip				
Code Domain Power				
Code vs.Time	2-5			

MX268x01A → MX268x01B
MX860x01A → MX860x01B

*Numbers on the right-hand side of the table show the item numbers of additional functions described in the following pages.

A part of functions was improved.
 The item was added newly.

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2. Additional functions for W-CDMA Software (A version to B version)

- 2-1. Averaging function for modulation analysis
- 2-2. SCH level measurement
- 2-3. Display function for automatically detected Scramble Code
- 2-4. Constellation scale changeover
- 2-5. Code vs Time
 - a) Code domain power and slot power
 - b) Continuous waveform import function
- 2-6. RACH amplitude measurement
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- 2-8. Waveform display for spurious measurement
- 2-9. Demodulation data display

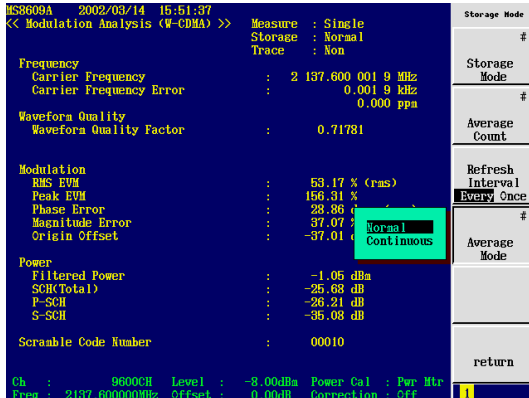
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2-1. Averaging Function for Modulation Analysis



Continuous Averaging function is added.

- Speedup of analysis time
- More stabilized measurement of instantaneous variation to the frequency error

Current method I---Waveform import---I Intermission I---Waveform import---I
 I<A>I II
 Continuous I-----Waveform import-----I
 I<A>I II I<C>I ...

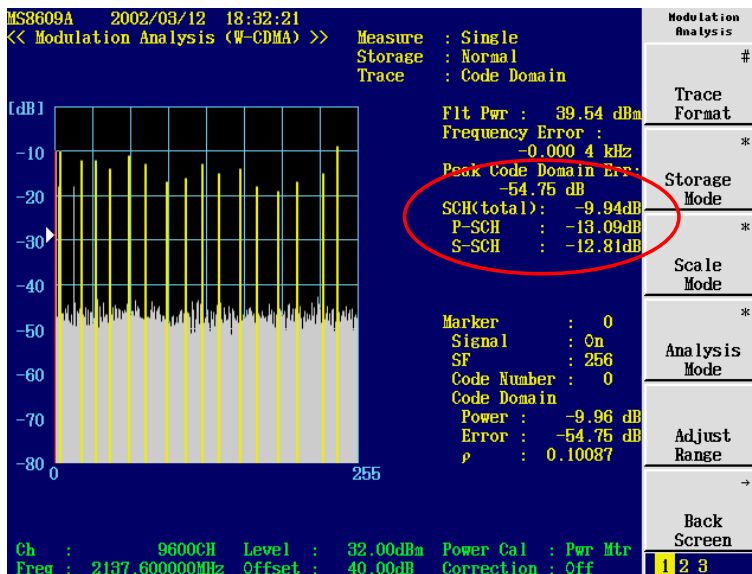
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2-2. SCH Level Measurement



P-SCH and S-SCH levels are displayed.

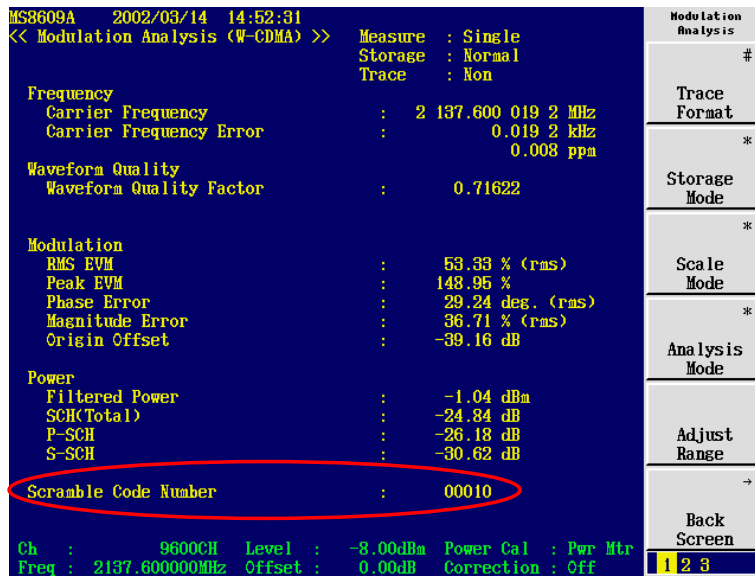
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2-3. Scramble Code Display Function



Displays the Scramble Code automatically detected by BTS

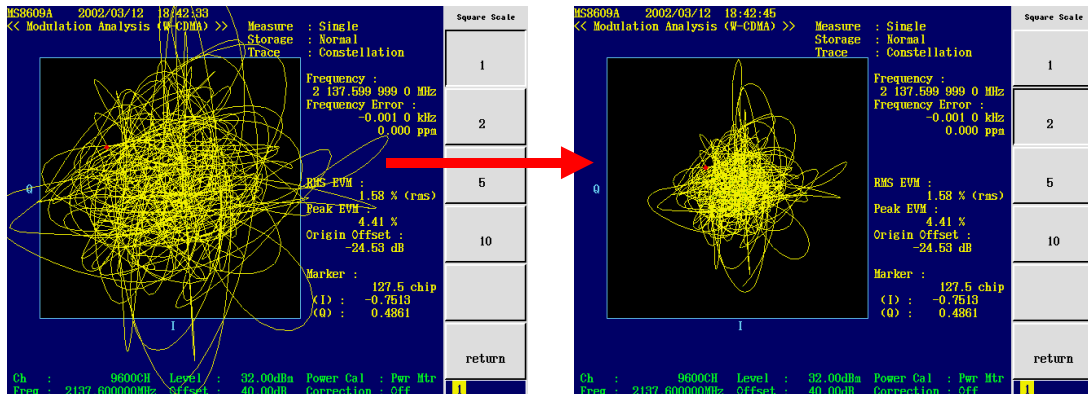
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2-4. Constellation Scale Changeover



Entire waveform can be observed by changing the scale in case the waveform sticks out of the screen due to signal multiplex.

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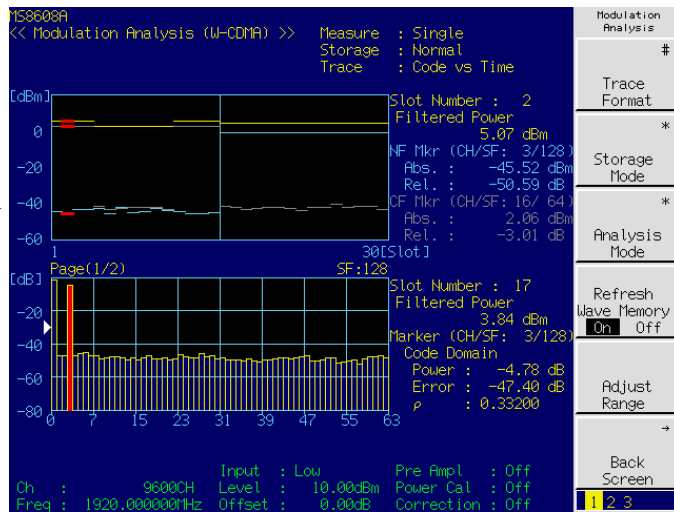
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2-5. Code vs Time 1/2

Slot power of the specific code channel

Code domain power



Effective for power measurements such as power control of the specific code channel and compressed mode of down-link signals

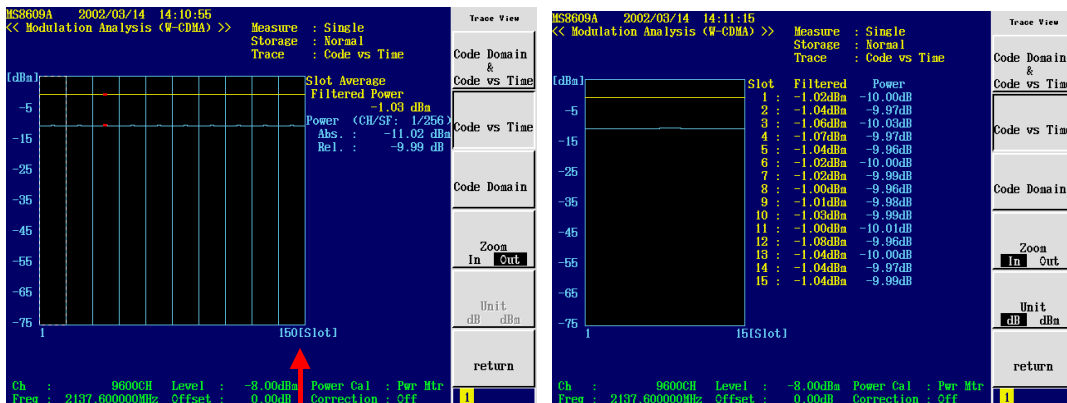
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2-5. Code vs Time 2/2



Continuous waveform import of max. 150 slots

Zoom-in screen

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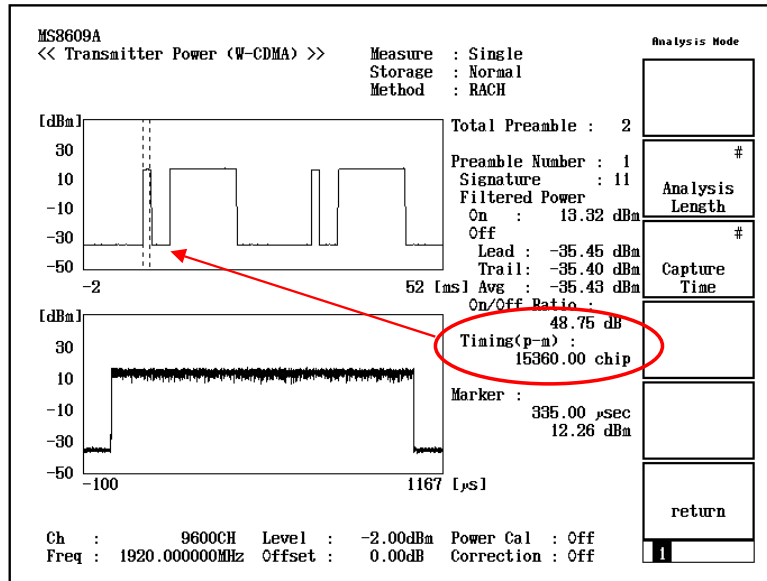
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2-6. RACH Amplitude Measurement

Preamble

Magnified waveform



Timing measurement of preamble and message

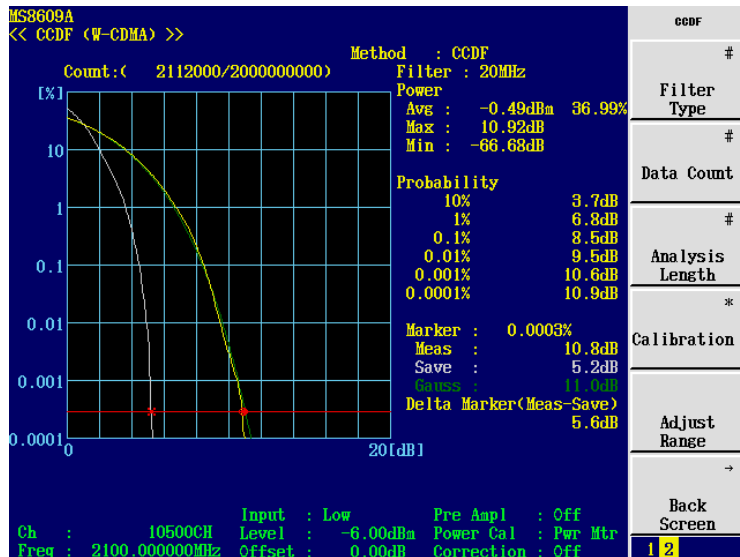
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2-7. CCDF/APD function



**Max. 20MHz band
(supporting 4 carriers)**

CCDF:Complementary Cumulative Distribution Function

APD:Amplitude Probability Density

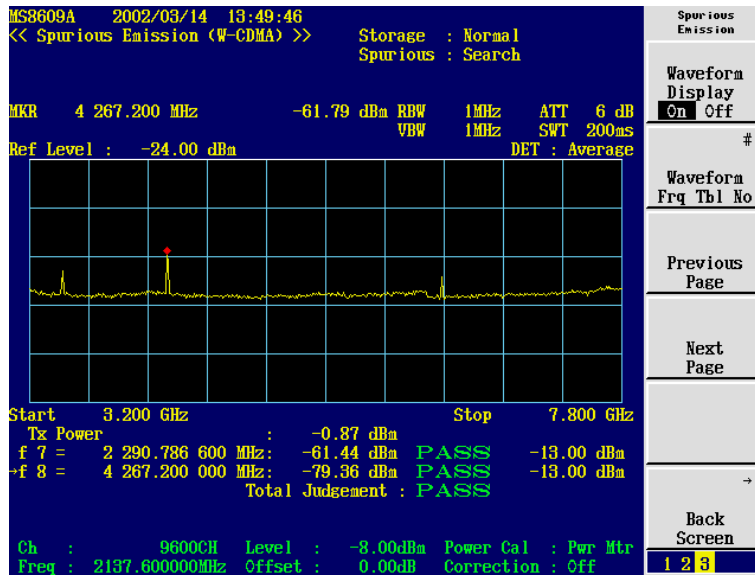
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2-8. Waveform Display for Spurious Emission Measurement



Waveform display and Averaging function are added.

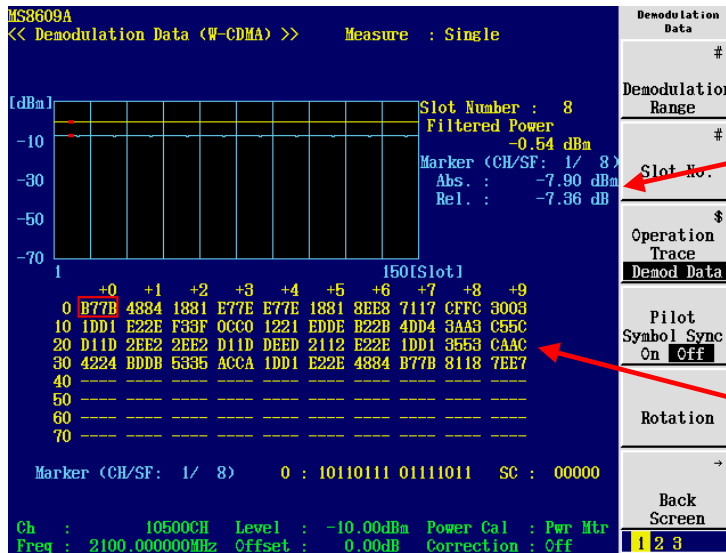
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2-9. Demodulation Data Display



Data demodulation display of the specific code channel and Compressed Mode

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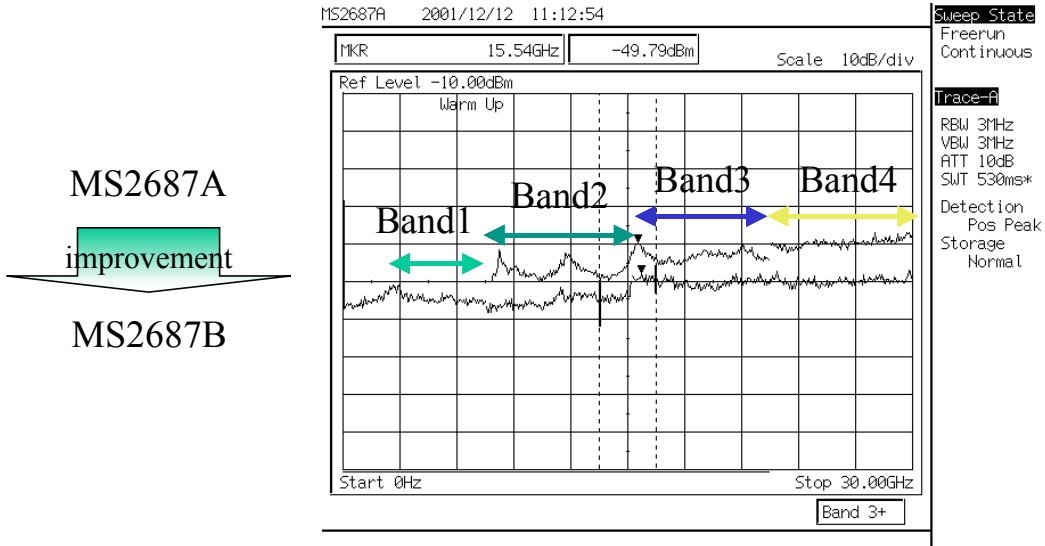
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3. The floor noise of a main frame (MS2687A vs. MS2687B Spectrum Analyzer)

The level of an improvement is shown in the following figure.



MS2687A

improvement

MS2687B

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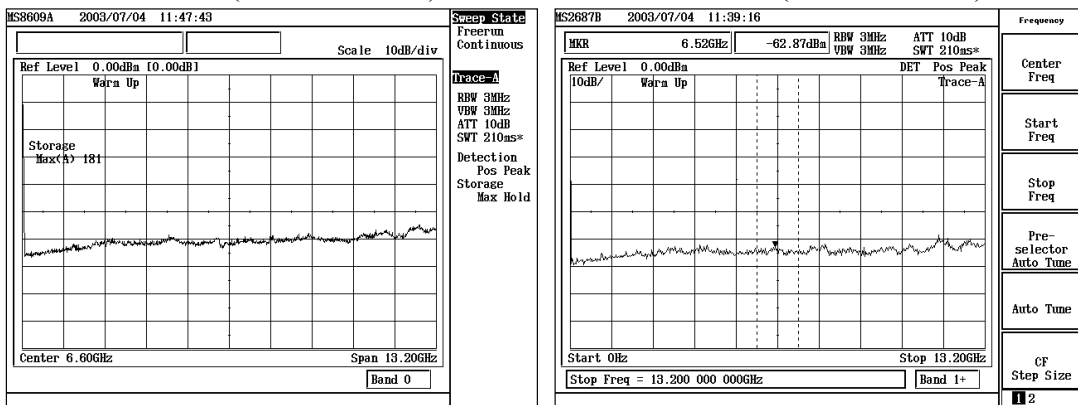
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3. The floor noise of a main frame (MS8609A Transmitter Tester vs. MS2687B Spectrum Analyzer)

MS2687B has almost equivalent performance to the transmitter tester (MS8609A).

MS8609A(MAX13.2GHz)

MS2687B(MAX30GHz*1)



*1) In order to make it easy to compare, the upper frequency range of MS2687B is set to 13.2GHz, the same value as MS8609A.

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