Anritsu
envision : ensure

Wireless Connectivity Test Set
MT8862A

Excellent Eco Product

Have you

measured me up?

MT8862A

Ideal for RF TRx Tests of WLAN Devices

Wireless communications over WLAN are increasing rapidly due to the widespread use of mobile terminals, such as smartphones, as well as integration of network-connected TVs, cleaners, automobiles, industrial equipment, sensors, and more, into the Internet of things (IoT). Makers of these equipment are anticipating more end-user enquiries related to WLAN performance, including network coverage, reception sensitivity, etc.

Anritsu's Wireless Connectivity Test Set is ideal for measuring the RF TRx characteristics at design and manufacturing inspection of WLAN devices. It has a built-in Network Mode for measuring the performance of the WLAN DUT under realistic operation conditions to play a key role in quality evaluation and improvement.

11ac — Supports Latest Standards

As well as supporting IEEE802.11a/b/g/n, the MT8862A supports the latest WLAN IEEE802.11ac standard to evaluate a broader range of WLAN-device RF TRx characteristics including Tx power, Rx sensitivity, and more.

Network Mode — Measurement under Realistic Operation Conditions

The MT8862A uses standard WLAN protocol messaging with a built-in Network Mode to establish a connection with the WLAN device and measure the RF TRx characteristics under realistic operation conditions.

- Smartphone Tablet
- Smart appliances
- Wearable device
- Gateway
- Automotive
- Smart grid

Wireless Connectivity Test Set MT8862A

RF TRx Measurements of WLAN Equipment

The Wireless Connectivity Test Set MT8862A is designed for measuring the RF TRx characteristics of WLAN equipment. It has standard WLAN protocol messaging (WLAN signalling) to connect with the device under test (DUT) for measuring the TRx performance items as Network Mode.

Supported Communications Standards

WLAN IEEE802.11a/b/g/n/ac (2.4 GHz and 5 GHz bands)
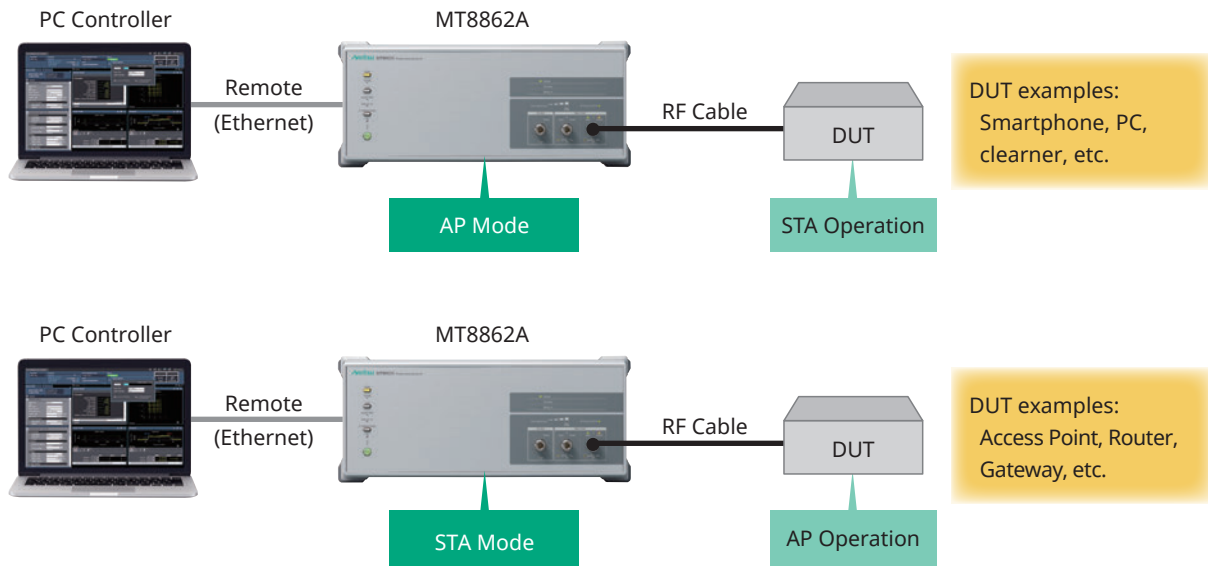
Wireless Connectivity Test Set
MT8862A

RF Performance Measurement under Actual Operation Conditions (Network Mode)

By using the MT8862A Network Mode, RF TRx characteristics, such as Tx power, modulation accuracy (EVM), etc., can be measured with the WLAN device in actual operation conditions. No necessary to put the DUT into a dedicated test mode with directly controlling the DUT, the DUT RF performance can be quantified under the firmware conditions at actual shipment.

Easy Measurement Environment Configuration

The MT8862A can simulate access points (AP) and station (STA)* to establish the DUT network connection using IEEE802.11a/b/g/n/ac WLAN protocol messaging. When the connection is established, RF measurements can be made using general WLAN communications procedures without requiring special tools and control procedures, eliminating the need for configuring a special measurement environment.

∗: The MT8862A will support the STA mode with a future upgrade.

PC Controller		MT8862A			
	Remote (Ethernet)		RF Cable	DUT	DUT examples: Smartphone, PC, clearner, etc.
		AP Mode		STA Operation	

| PC Controller		MT8862A			
	Remote (Ethernet)		RF Cable	DUT	DUT examples: Access Point, Router, Gateway, etc.
		STA Mode		AP Operation	

WLAN Measurement Software MX886200A Features

ICMP Echo Request for Tx Measurement

With the ICMP echo request, the MT8862A can measure RF Tx characteristics of reply packets from the DUT. The measurement targets are both data frames and ACK frames.
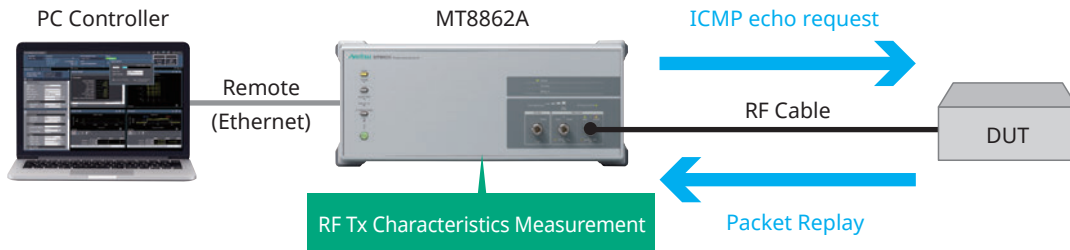
## Rx Sensitivity Measurements using ACK Frame Count for Bathtub Curve Generation

The MT8862A supports Rx sensitivity measurements using the ACK frame count; counting the ACK frames sent by the DUT versus the test packets sent from the MT8862A supports calculation of the packet error rate (PER). Packets can be sent while lowering the power level by setting the power level range (0 to −120 dBm) and step size, and the Rx sensitivity Bathtub curve can be generated automatically. Packets including MAC address and payload length can be configured in real-time for measurement at various data rates.
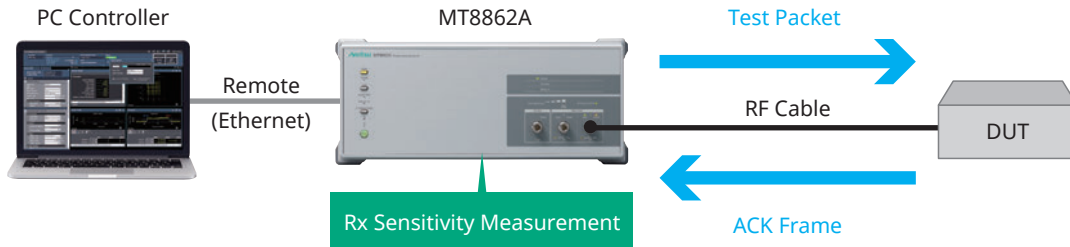
Web Browser GUI Operation Immediately after Connection

Connect the MT8862A to the external PC using an Ethernet cable for instant access from the Web browser to complete setup of the GUI operation environment without requiring test setup operation.
The Web-browser based GUI eliminates usage worries about version matching with the main frame firmware. Additionally, the MT8862A remote control port supports the DHCP client function and both host and domain name settings offer easy control simply by connecting the PC controller and MT8862A to the same network.
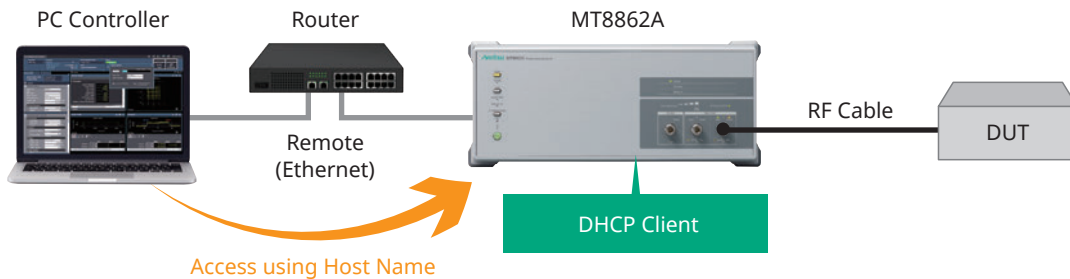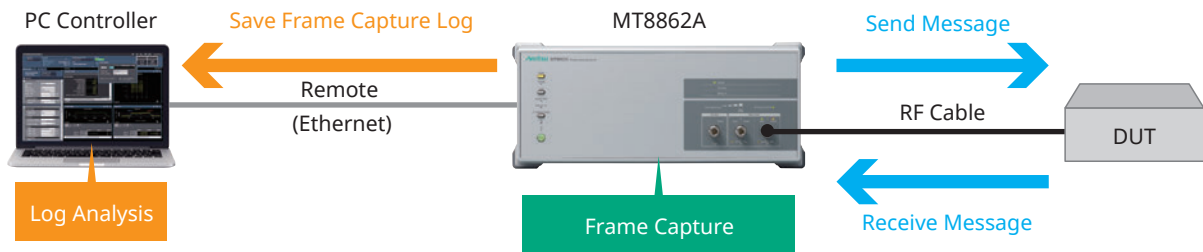
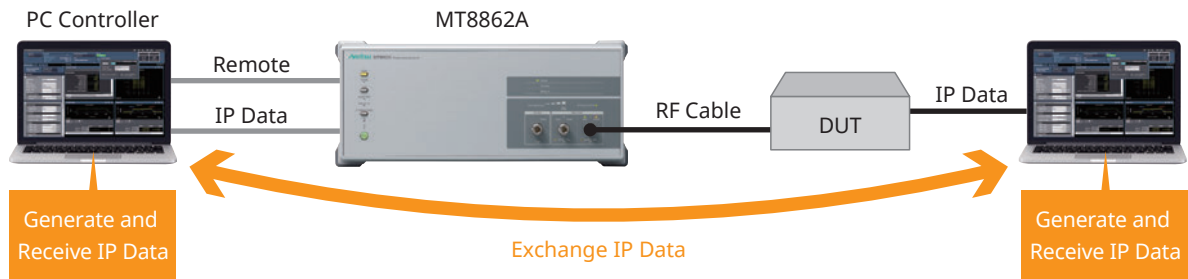# WLAN Measurement Software MX886200A Features

Function Test

Frame Capture Logging for Troubleshooting Connection Problems

With built-in frame capture logging function, the MT8862A can capture and save frame logs for troubleshooting DUT connection problems. Captured logs are in the *.pcap format for viewing by supported applications, making it easier to analyze DUT connection problems.

PC Controller — Save Frame Capture Log — MT8862A — Send Message

Remote (Ethernet) — RF Cable — DUT

Log Analysis — Frame Capture — Receive Message

IP Data Transfer using Connection Verification Test

The Ethernet port on the back panel of the MT8862A can be used for exchanging IP data with an external server; IP connections between the client PC connected to the DUT and the external server connected to the MT8862A can be checked using the ping function, etc.
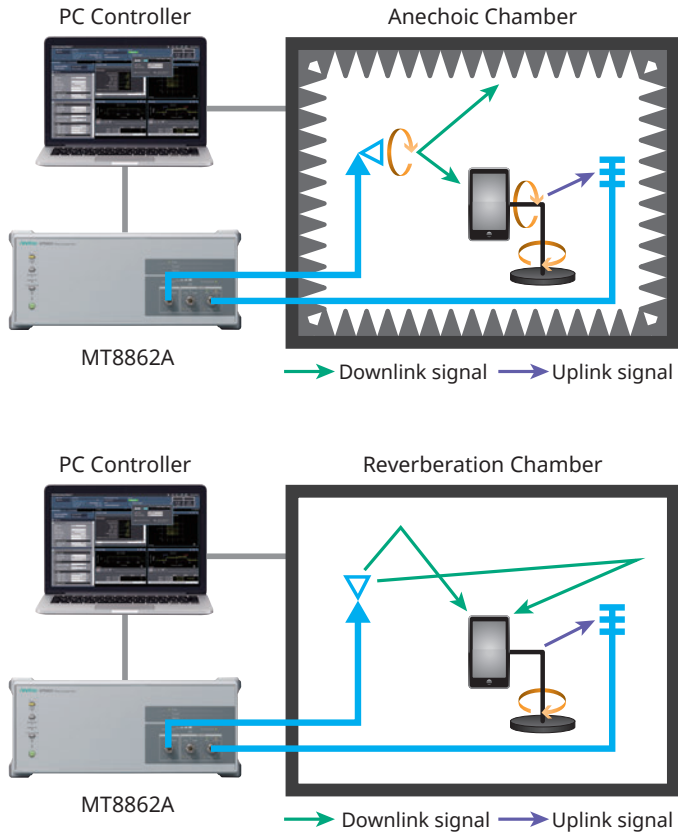
PC Controller — MT8862A

Remote

IP Data — RF Cable — DUT — IP Data

Generate and Receive IP Data — Exchange IP Data — Generate and Receive IP Data

WLAN Measurement Software MX886200A Features

Function Test (Continued)

Network Mode for Over The Air (OTA) Test

The TRx performance of wireless terminals is affected by factors such as the terminal form and antenna characteristics. The OTA test measures the general TRx performance of the wireless terminal using actual radio waves. The WLAN OTA test measures RF performance specifications in accordance with the recommendations of CTIA* and the Converged Wireless Group (CWG) of the Wi-Fi Alliance, including Total Radiated Power (TRP), Total Isotropic Sensitivity (TIS), making the MT8862A an ideal test solution for future system integrators.

∗: Cellular Telecommunications & Internet Association; international non-profit organization composed of wireless-communications-related businesses, manufacturers, service providers, etc.

PC Controller   Anechoic Chamber

MT8862A   → Downlink signal   → Uplink signal

PC Controller   Reverberation Chamber

MT8862A   → Downlink signal   → Uplink signal

WLAN Measurement Software MX886200A Key Functions

RF Tx Test

### Tx Power Measurement and Power Profile Display

The MT8862A measures the Tx power and displays the average and peak power between gate intervals. The gate interval of the Tx power signal can be freely specified based on packets, payload and user definitions. The crest factor indicating the difference between the average power and peak power between gate intervals is also displayed. The power profile is displayed as a graph of the power vs time for the signal between gate intervals.
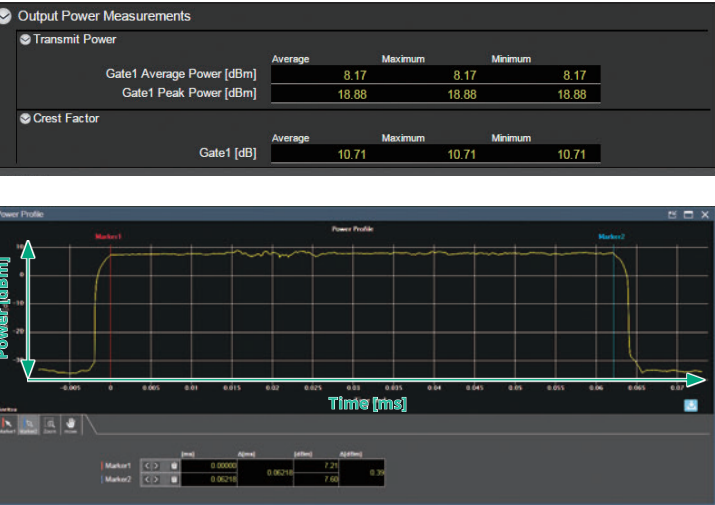
Frequency and Modulation Analysis/IQ Constellation Display/Spectrum Display

The MT8862A performs frequency and modulation analyses to measure the Error Vector Magnitude (EVM), which is a good of overall indicator of transmitter quality. When the numerical EVM is bad, the Packet Error Rate (PER) is usually high at WLAN connection. The average EVM and Peak EVM for DSSS- and OFDM-modulated carrier waves are expressed as % and dB values, respectively. The measurement mode and measurement symbol/chip values can be set freely.

In addition to EVM, the frequency error, symbol clock error, IQ offset, rms phase error, rms amplitude error, phase imbalance, and amplitude imbalance are also displayed. At DSSS modulation, the chip clock error and carrier wave suppression are also displayed. Furthermore, the IQ constellation and spectrum analysis results are displayed as graphs.
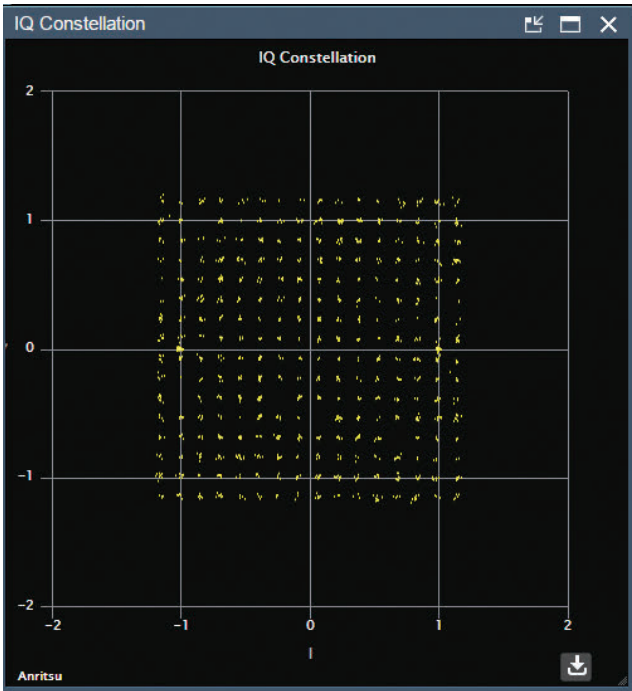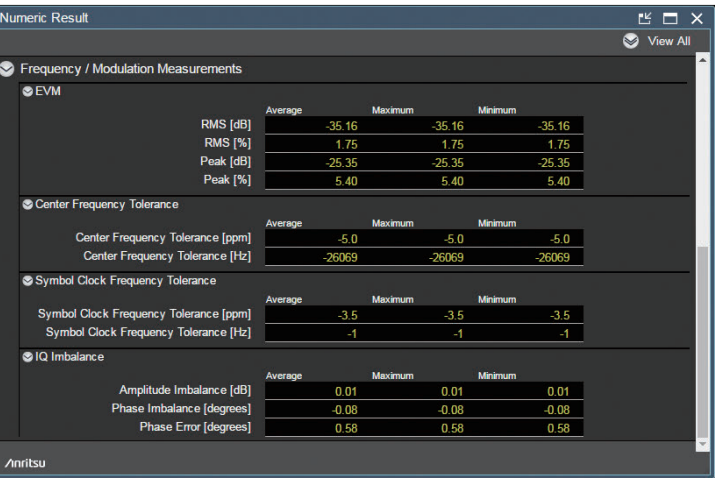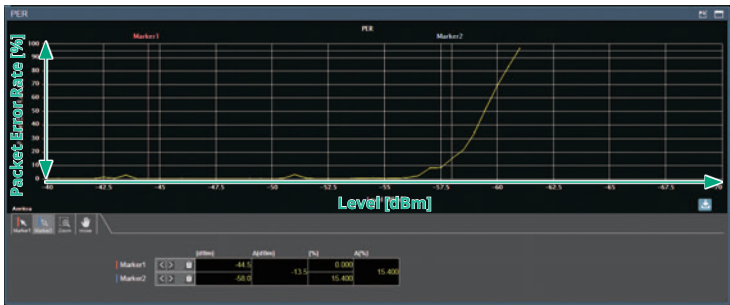
WLAN Measurement Software MX886200A Key Functions

RF Rx Test

Packet Error Rate (PER)

The MT8862A Network Mode is a unique function that eliminates the need for chipset-vendor-provided control software and instead automatically implements the 802.11a/b/g/n/ac device sensitivity search measurement to output the Bathtub curve. By using this function, the device performance can be analyzed at high speed for each data rate, offering a convenient measurement solution for verifying compliance with the 802.11b minimum receiver sensitivity test specifications. This is a flexible test solution because the number of packets sent at each power level can be specified both as the start and stop search level and as step size.

Frame Rx rate (FRR)

The Frame Rx Rate can be displayed instead of displaying the Packet Rx Error Rate (PER).
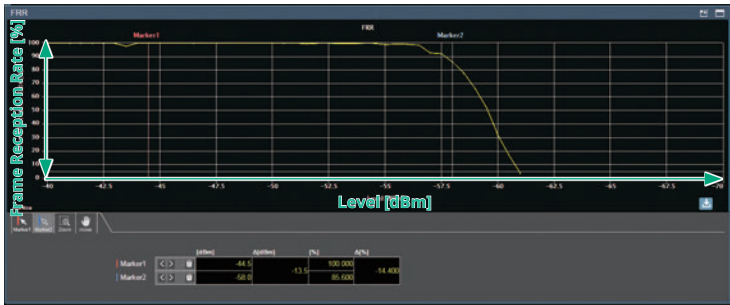
WLAN Measurement Software MX886200A Key Functions

Connectivity

	802.11a
Frequency Range	5180 MHz to 5825 MHz
Operation Mode	—
Modulation	OFDM (BPSK, QPSK, 16QAM, 64QAM)
Data Rate	6, 9, 12, 18, 24, 36, 48, 54 Mbps

	802.11b	802.11g
Frequency Range	2412 MHz to 2484 MHz	
Operation Mode	—	ERP-OFDM
Modulation	DSSS, CCK	OFDM (BPSK, QPSK, 16QAM, 64QAM)
Data Rate	1, 2, 5.5, 11 Mbps	6, 9, 12, 18, 24, 36, 48, 54 Mbps

	802.11n	802.11ac*
Frequency Range	2412 MHz to 2484 MHz and 5180 MHz to 5825 MHz	5180 MHz to 5825 MHz
Bandwidth	20 MHz, 40 MHz	20, 40, 80 MHz
MCS	MCS0 to MCS7	MCS0 to MCS9
FEC	BCC	BCC
PPDU Format	Non-HT, HT-mixed, HT-greenfield	Non-HT, HT-mixed, HT-greenfield, VHT
Guard Interval Type	Long, Short	Long, Short
RF Chain	Single (SISO)	Single (SISO)

∗: 802.11ac connection requires MX886200A-001

WLAN Measurement Software MX886200A Measurement Items

Tx Measurements

IEEE802.11-2012: 802.11b Tx Measurements

802.11b	Measurement Item
17.4.7.2	Transmit power levels
17.4.7.3	Transmit power level control
17.4.7.5	Transmit center frequency tolerance
17.4.7.6	Chip clock frequency tolerance
17.4.7.8*	RF carrier suppression
17.4.7.9	Transmit modulation accuracy

∗: Sold separately; requires signal generator

Other 802.11b Measurements

Measurement Item
Crest Factor
IQ Offset
Phase Error
Magnitude Error
Amplitude Imbalance
Phase Imbalance

Graph Display (DSSS)

Measurement Item
IQ Constellation
Power Profile
Spectrum

IEEE802.11-2012: 802.11a/g/n Tx Measurements, IEEE802.11ac-2013: 802.11ac Tx Measurements

802.11a	802.11g	802.11n	802.11ac*	Measurement Item
18.3.9.2	19.4.8.2	20.3.20.3	N/A	Transmit power levels
18.3.9.5	19.4.8.3	20.3.20.4	22.3.18.3	Transmit center frequency tolerance
18.3.9.6	19.4.8.4	20.3.20.6	22.3.18.3	Symbol clock frequency tolerance
18.3.9.7.2	19.4.8(18.3.9.7.2)	20.3.20.7.2	22.3.18.4.2	Transmitter center frequency leakage
18.3.9.7.3	N/A	N/A	N/A	Transmitter spectral flatness
18.3.9.7.4	19.4.8(18.3.9.7.4)	20.3.20.7.3	22.3.18.4.3	Transmitter constellation error
18.3.9.8	19.4.8(18.3.9.8)	20.3.20.7.4	22.3.18.4.4	Transmitter modulation accuracy test

∗: 802.11ac Tx measurement requires MX886200A-001

Other 802.11a/g/n/ac Measurements

Measurement Item
Transmit power
Crest Factor
Symbol clock frequency tolerance
Amplitude Imbalance
Phase Imbalance
Phase Error

Graph Display (OFDM)

Measurement Item
IQ Constellation
Power Profile
Spectrum

WLAN Measurement Software MX886200A Measurement Items

Rx Measurements

IEEE802.11-2012: 802.11b Rx Measurements

802.11b	Measurement Item
17.4.8.2	Receiver minimum input level sensitivity
17.4.8.3	Receiver maximum input level
17.4.8.4	Receiver adjacent channel rejection*
17.4.8.6	Received Channel Power Indicator Measurement

*: Sold separately; requires signal generator

IEEE802.11-2012: 802.11a/g/n Rx Measurements; IEEE802.11ac-2013: 802.11ac Rx Measurements

802.11a	802.11g	802.11n	802.11ac*[1]	Measurement Item
18.3.10.2	19.5.2	20.3.21.1	22.3.19.1	Receiver minimum input level sensitivity
18.3.10.3	19.5.3	20.3.21.2	22.3.19.2	Adjacent channel rejection*[2]
18.3.10.4	N/A	20.3.21.3	22.3.19.3	Nonadjacent channel rejection*[2]
18.3.10.5	19.5.4	20.3.21.4	22.3.19.4	Receiver maximum input level

*1: 802.11ac Rx measurement requires MX886200A-001
*2: Sold separately; requires signal generator

Graph Display

Measurement Item
Packet Error Rate (PER)
Frame Reception Rate (FRR)

Wireless Connectivity Test Set MT8862A Configuration

System Configurations/Options/Software/PC Controller Operation Environment

System	Wireless LAN
Main Frame	Wireless Connectivity Test Set MT8862A
Basic Configuration (Hardware)	RF Frequency 2.4 GHz, 5 GHz MT8862A-001
Basic Configuration (Software)	WLAN Measurement Software MX886200A
Options	WLAN 802.11ac Option MX886200A-001

Verified PC Operation Environment

PC	Software 　OS: Windows 7 　Browser: Chrome CPU: Intel Core i5 processor Clock: 2.5 GHz Memory: 1 GB minimum Hard Disk: 500 MB minimum free space LAN: 100 Base-T LAN (1000-base T preferred)
Peripherals	Display: WXGA 1024 × 768 minimum

Wireless Connectivity Test Set MT8862A Panel Layout

Front Panel

1. Power switch
Turns the power On or Off.
Off: Power is Off, Green: Power is On.

2. Standby lamp
The power is supplied to the AC inlet and the power switch can be turned On.

3. Access lamp
Green: Accessing the built-in storage device.

4. IP Address Reset key
Long-pressing this switch resets the network settings such as IP address to defaults.

5. External Ref. lamp
Indicates status of external reference signal.

6. System Error lamp
Indicates errors of the unit.

7. Local key
Reset the remote control state by Ethernet to local and enable panel setting.

8. Remote lamp
Off: Local control.
Green: Remote control.

9. Preset key
Long-pressing this switch resets the parameter settings to defaults.

10. Ready lamp/Connect lamp/ Measure lamp
Ready lamp: Indicates the MT8862A startup state.
Connect lamp: Indicates the connection state between MT8862A and DUT.
Measure lamp: Indicates the MT8862A measurement state.

11. Input Signal Level lamp
Indicates the input signal level.

12. RF Output On/Off lamp
Indicates setting state of RF output.

13. Main In/Out 1, 2 connector/Aux Out connector/ Output lamp/Input lamp
Main In/Out 1, 2 connector: Inputs or outputs RF signal.
Aux Out connector: Outputs RF signal.
Output lamp: Indicates the connector's setting state.
Input lamp: Indicates the connector's setting state.

Wireless Connectivity Test Set MT8862A Panel Layout

Rear Panel
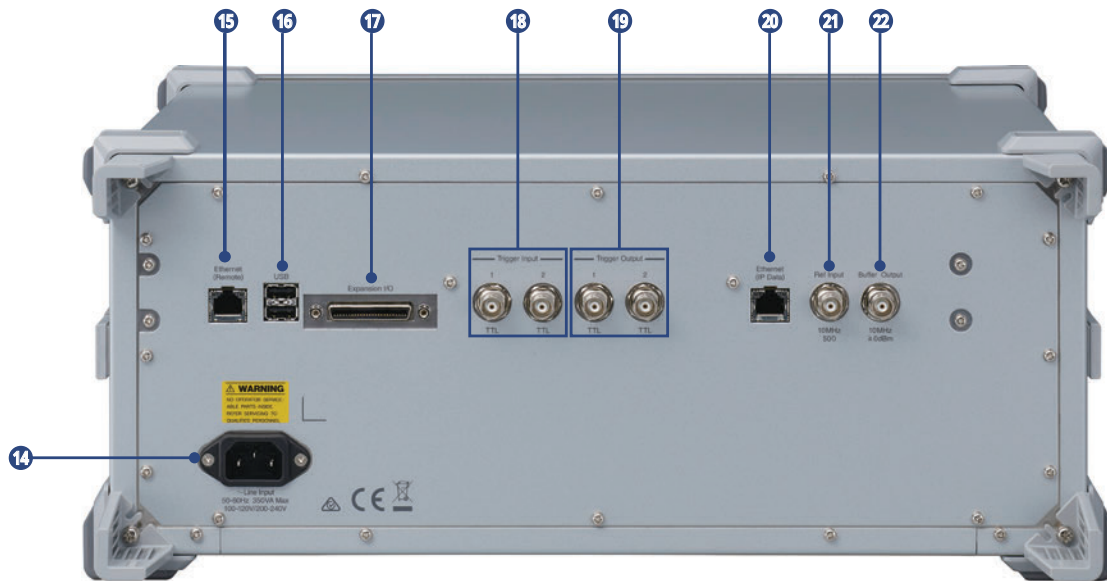
⑭ AC inlet
AC power inlet for the power cable.

⑮ Ethernet (Remote) connector
Connect a personal computer (PC) or Ethernet network for remote control.

⑯ USB connector (A type)
Connector for feature expansion.
Currently not supported.

⑰ Expansion I/O connector
Connector for feature expansion.
Currently not supported.

⑱ Trigger Input
Inputs external trigger signals (TTL).
(BNC connector)

⑲ Trigger Output
Outputs trigger signals (TTL).
(BNC connector)

⑳ Ethernet (IP Data) connector
Connects a PC or Ethernet network for IP Data input/output.

㉑ Reference Input connector
Inputs an external reference frequency signal (10 MHz).
(BNC connector)

㉒ Buffer Output connector
Outputs the reference frequency signal (10 MHz).
(BNC connector)

Typical value: Reference data and not assured value

Receiver	Frequency
	  Range: 2.4 GHz to 2.5 GHz, 5.0 GHz to 6.0 GHz (with MT8862A-001 installed)
	  Resolution: 1 Hz
	  Accuracy: Depends on reference oscillator accuracy
	Level
	  Setting Range: –65 to +25 dBm
	  Setting Resolution: 0.1 dB
	  Accuracy
	    Measurement Conditions: CW, Measurement Bandwidth: 300 kHz, 20° to 30°C
	      2.4 GHz ≤ Frequency ≤ 2.5 GHz
	        ±0.7 dB (–30 dBm ≤ Setting Level ≤ +25 dBm)
	        ±0.9 dB (–55 dBm ≤ Setting Level < –30 dBm)
	        ±1.1 dB (–65 dBm ≤ Setting Level < –55 dBm)
	      5.0 GHz ≤ Frequency ≤ 6.0 GHz
	        ±0.7 dB (–30 dBm ≤ Setting Level ≤ +25 dBm)
	        ±0.9 dB (–55 dBm ≤ Setting Level < –30 dBm)
	        ±1.1 dB (–65 dBm ≤ Setting Level < –55 dBm)
	    Measurement Conditions: CW, Measurement Bandwidth: 160 MHz, 20° to 30°C
	      2.4 GHz ≤ Frequency ≤ 2.5 GHz
	        ±0.7 dB (–30 dBm ≤ Setting Level ≤ +25 dBm)
	        ±1.0 dB (–50 dBm ≤ Setting Level < –30 dBm)
	      5.0 GHz ≤ Frequency ≤ 6.0 GHz
	        ±0.7 dB (–30 dBm ≤ Setting Level ≤ +25 dBm)
	        ±1.0 dB (–50 dBm ≤ Setting Level < –30 dBm)
	  Linearity
	    Measurement Conditions: CW, Measurement Bandwidth: 300 kHz, 0 dB ≤ Setting Level ≤ –40 dB
	      ±0.2 dB (–55 dBm ≤ Input Level)
	      ±0.4 dB (–65 dBm ≤ Input Level < –55 dBm)
	    Measurement Conditions: CW, Measurement Bandwidth: 160 MHz, 0 dB ≤ Setting Level ≤ –30 dB
	      ±0.4 dB (–40 dBm ≤ Input Level)

Transmitter	Frequency
	  Output Frequency Range: 2.4 GHz to 2.5 GHz, 5.0 GHz to 6.0 GHz (with MT8862A-001 installed)
	  Setting Resolution: 1 Hz
	  Accuracy: Depends on reference oscillator accuracy
	Level
	  Setting Range: –120 to 0 dBm
	  Setting Resolution: 0.1 dB
	  Accuracy
	    Output Setting: CW
	    20° to 30°C, Output Level: ≥–110 dBm, after Calibration
	      ±1.0 dB, ±0.7 dB (typ.) (2.4 GHz ≤ Frequency ≤ 2.5 GHz)
	      ±1.3 dB, ±1.0 dB (typ.) (5.0 GHz ≤ Frequency ≤ 6.0 GHz)
	Signal Purity
	  Harmonic: ≤–25 dBc

Reference Oscillator	At Start: ±5 × 10^{-7} (2 minutes after power-on, at 25°C referenced to frequency at 24 hour after power-on) ±5 × 10^{-8} (5 minutes after power-on, at 25°C referenced to frequency at 24 hour after power-on) Aging Rate: ±1 × 10^{-7}/year Temperature Characteristics: ±2 × 10^{-8} (5° to 45°C) Shipped Frequency Accuracy: ±2.2 × 10^{-8} (1 hour after power-on at 20° to 30°C)

Wireless Connectivity Test Set MT8862A Specifications

Front Panel Connectors	RF Input/Output Main1, 2 　Connector: N-J, 50Ω (nominal) 　VSWR: ≤1.5 (2.4 GHz ≤ Frequency ≤ 2.5 GHz) 　　　≤1.7 (5.0 GHz ≤ Frequency ≤ 6.0 GHz) Aux Out 　Connector: N-J, 50Ω (nominal) 　VSWR: ≤1.5 (2.4 GHz ≤ Frequency ≤ 2.5 GHz) 　　　≤1.6 (5.0 GHz ≤ Frequency ≤ 6.0 GHz)
Back Panel Connectors	Reference Signal 　External Reference Input 　　Connector: BNC-J 　　Frequency: 10 MHz, Impedance: 50Ω 　　Operation range: ±1 ppm, Input Level: –15 dBm ≤ Level ≤+20 dBm, 50Ω (AC coupled) 　Reference Signal Output 　　Connector: BNC-J 　　Frequency: 10 MHz, Impedance: 50Ω 　　Output Level: ≥0 dBm (AC coupled)) External Trigger 　Trigger Input 1/2 　　Connector: BNC 1/2, Input Level: TTL 　Trigger Output 1/2 　　Connector: BNC 1/2, Output Level: TTL External Interfaces 　Ethernet (Remote): Required for remote control from external controller 　　Connector: RJ-45, Speed: 1000BASE-T 　USB: General Purpose, USB 2.0 　　Connector: USB-A, 2 Ports 　Expansion I/O: Connector for function expansion 　　Connector: 50 pin (DX10A-50S) 　Ethernet (IP Data): IP Data Transfer 　　Connector: RJ-45, Speed: 1000BASE-T
Dimensions and Mass	426 (W) × 177 (H) × 390 (D) mm (excluding projections), ≤14 kg
Power Supply	Rated voltage: 100 V(ac) to 120 V(ac) or 200 V(ac) to 240 V(ac) Rated frequency: 50 Hz/60 Hz Power consumption: ≤350 VA
Operating Conditions	Temperature 　Operating: +5° to +45°C, Storage: –20° to +60°C EMC: EN61326-1, EN61000-3-2 LVD: EN61010-1

WLAN Measurement Software MX886200A Specifications

Frequency Range	2.4 GHz Band: 2412 MHz to 2484 MHz 5 GHz Band: 5180 MHz to 5825 MHz
Amplitude Measurement	Input Level Range: –50 to +25 dBm Input Level Accuracy: ±0.7 dB (–30 dBm ≤ Input Level ≤+25 dBm), ±1.0 dB (–50 dBm ≤ Input Level <–30 dBm), After Calibration at 20° to 30°C Linearity: ±0.4 dB (–40 dBm ≤ Input Level, 0 to –30 dB range compared to setting level) Bandwidth: 40 MHz/20 MHz (802.11n), 20 MHz (802.11a/b/g), 80/40/20 MHz (802.11ac, with MX886200A-001 installed)
Spectrum Measurement	Input Level Range: –10 to +25 dBm

EVM
(Modulation Accuracy)
	EVM Measurement Range: –20 to +25 dBm
	Residual EVM
	  DSSS: <–28 dB (–20 dBm ≤ Input Level, Average of 20 Packets)
	  OFDM (802.11a/g/n): <–40 dB (–20 dBm ≤ Input Level, Average of 20 Packets, Channel Estimate: Full Packets)
	  OFDM (802.11ac, with MX886200A-001 installed):
	    <–38 dB (–10 dBm ≤ Input Level, Average of 20 Packets, Channel Estimate: Full Packets)
	EVM Data Format: % or dB
	Measurement Resolution: 0.01% or 0.01 dB

Carrier Frequency Measurement	Measurement Level Range: –20 to +25 dBm
	Carrier Frequency Accuracy:
	  ± (Setting Frequency × Reference Oscillator Accuracy +1 kHz) (Average of 20 Packets, DSSS)
	  ± (Setting Frequency × Reference Oscillator Accuracy +1 kHz) (Average of 20 Packets, Channel Estimate: Full Packets, OFDM)

RF Signal Generator	EVM: Packet Length 1472 byte
	  802.11b: ≤–38 dB rms (2412 MHz to 2484 MHz, Long Preamble, Gaussian Filter BT0.5, 5° to 45°C)
	  802.11g (OFDM): ≤–40 dB rms(2412 MHz to 2484 MHz, 20° to 30°C)
	  802.11a: ≤–38 dB rms (5180 MHz to 5825 MHz)
	  802.11n: ≤–40 dB rms (2412 MHz to 2484 MHz, Long GI, HT-mixed format, Channel Bandwidth 40 MHz, 20° to 30°C)
	         ≤–38 dB rms (5180 MHz to 5825 MHz, Long GI, HT-mixed format, Channel Bandwidth 40 MHz, 20° to 30°C)
	  802.11ac (with MX886200A-001 installed): ≤–37 dB rms (5180 MHz to 5825 MHz, Long GI, Channel Bandwidth 80 MHz, 20° to 30°C)

Functions	Network Functions
	  Connection: Network Connection using Messages defined by IEEE802.11
	  Role: Access Point (AP)
	  Frame Capture: 1, 2, 4, 8, 16, 32, 64, 128, 256 MB
	Tx Test
	  Measurement Type: Data, ACK
	Rx Test
	  Measurement Type: Packet Error Rate (PER), Frame Reception Rate (FRR)
	  Payload Type: All 0's, 0101, 1010, PN7, PN9, Random, Counting

Wireless Connectivity Test Set MT8862A Ordering Information

Please specify the model/order number, name and quantity when ordering.
The names listed in the chart below are Order Names. The actual name of the item may differ from the Order Name.

Model/Order No.	Name
	Main frame
MT8862A	Wireless Connectivity Test Set
	Standard accessories
J0017F	Power Code (2.6 m,100 V, 3-core, Grey): 1
	Manual Operation DVD: 1
W3901AE	MT8862A Operation Manual (Operation)
W3902AE	MT8862A Operation Manual (Remote Control)
W3903AE	MX886200A WLAN Measurement Software Manual (Operation)
W3904AE	MX886200A WLAN Measurement Software Manual (Remote Control)
	Options
MT8862A-001	RF Frequency 2.4 GHz, 5 GHz
	Software Options
MX886200A	WLAN Measurement Software (Requires MT8862A-001)
MX886200A-001	WLAN 802.11ac Option (Requires MX886200A)
	Options
MT8862A-ES210	2 Years Extended Warranty Service
MT8862A-ES310	3 Years Extended Warranty Service
MT8862A-ES510	5 Years Extended Warranty Service
	Application parts
J0127A	Coaxial Cord, 1 m (BNC-P, RG-58A/U, BNC-P)
J0127B	Coaxial Cord, 2 m (BNC-P, RG-58A/U, BNC-P)
J0127C	Coaxial Cord, 0.5 m (BNC-P, RG-58A/U, BNC-P)
J0576B	Coaxial Cord, 1 m (N-P, 5D-2W, N-P)
J0576D	Coaxial Cord, 2 m (N-P, 5D-2W, N-P)
J0322A	Coaxial Cord, 0.5 m (SMA-P, SMA-P)
J0322B	Coaxial Cord, 1.0 m (SMA-P, SMA-P)
J0322C	Coaxial Cord, 1.5 m (SMA-P, SMA-P)
J0322D	Coaxial Cord, 2.0 m (SMA-P, SMA-P)
J0004	Coaxial Adapter (N-P, SMA-J)
J1261A	Ethernet Cable (Straight, 1 m)
J1261B	Ethernet Cable (Straight, 3 m)
J1261C	Ethernet Cable (Cross, 1 m)
J1261D	Ethernet Cable (Cross, 3 m)
B0635A	Rack Mount Kit (EIA)
B0657A	Rack Mount Kit (JIS)
B0636C*	Carrying Case (Hard type, with a front cover and casters)
B0671A	Front Cover (1MW4U)

∗: The Carrying Case B0636C includes a Front Panel Protective Cover (B0671A).

Anritsu envision:ensure

Specifications are subject to change without notice.

● **United States**
Anritsu Company
1155 East Collins Blvd., Suite 100, Richardson,
TX 75081, U.S.A.
Toll Free: 1-800-267-4878
Phone: +1-972-644-1777
Fax: +1-972-671-1877

● **Canada**
Anritsu Electronics Ltd.
700 Silver Seven Road, Suite 120, Kanata,
Ontario K2V 1C3, Canada
Phone: +1-613-591-2003
Fax: +1-613-591-1006

● **Brazil**
Anritsu Eletronica Ltda.
Praça Amadeu Amaral, 27 - 1 Andar
01327-010 - Bela Vista - Sao Paulo - SP
Brazil
Phone: +55-11-3283-2511
Fax: +55-11-3288-6940

● **Mexico**
Anritsu Company, S.A. de C.V.
Av. Ejército Nacional No. 579 Piso 9, Col. Granada
11520 México, D.F., México
Phone: +52-55-1101-2370
Fax: +52-55-5254-3147

● **United Kingdom**
Anritsu EMEA Ltd.
200 Capability Green, Luton, Bedfordshire, LU1 3LU, U.K.
Phone: +44-1582-433200
Fax: +44-1582-731303

● **France**
Anritsu S.A.
12 avenue du Québec, Bâtiment Iris 1- Silic 612,
91140 VILLEBON SUR YVETTE, France
Phone: +33-1-60-92-15-50
Fax: +33-1-64-46-10-65

● **Germany**
Anritsu GmbH
Nemetschek Haus, Konrad-Zuse-Platz 1
81829 München, Germany
Phone: +49-89-442308-0
Fax: +49-89-442308-55

● **Italy**
Anritsu S.r.l.
Via Elio Vittorini 129, 00144 Roma, Italy
Phone: +39-6-509-9711
Fax: +39-6-502-2425

● **Sweden**
Anritsu AB
Kistagången 20B, 164 40 KISTA, Sweden
Phone: +46-8-534-707-00
Fax: +46-8-534-707-30

● **Finland**
Anritsu AB
Teknobulevardi 3-5, FI-01530 VANTAA, Finland
Phone: +358-20-741-8100
Fax: +358-20-741-8111

● **Denmark**
Anritsu A/S
Kay Fiskers Plads 9, 2300 Copenhagen S, Denmark
Phone: +45-7211-2200
Fax: +45-7211-2210

● **Russia**
Anritsu EMEA Ltd.
Representation Office in Russia
Tverskaya str. 16/2, bld. 1, 7th floor.
Moscow, 125009, Russia
Phone: +7-495-363-1694
Fax: +7-495-935-8962

● **Spain**
Anritsu EMEA Ltd.
Representation Office in Spain
Edificio Cuzco IV, Po. de la Castellana, 141, Pta. 8
28046, Madrid, Spain
Phone: +34-915-726-761
Fax: +34-915-726-621

● **United Arab Emirates**
Anritsu EMEA Ltd.
Dubai Liaison Office
902, Aurora Tower,
P O Box: 500311- Dubai Internet City
Dubai, United Arab Emirates
Phone: +971-4-3758479
Fax: +971-4-4249036

● **India**
Anritsu India Private Limited
2nd & 3rd Floor, #837/1, Binnamangla 1st Stage,
Indiranagar, 100ft Road, Bangalore - 560038, India
Phone: +91-80-4058-1300
Fax: +91-80-4058-1301

● **Singapore**
Anritsu Pte. Ltd.
11 Chang Charn Road, #04-01, Shriro House
Singapore 159640
Phone: +65-6282-2400
Fax: +65-6282-2533

● **P.R. China (Shanghai)**
Anritsu (China) Co., Ltd.
Room 2701-2705, Tower A,
New Caohejing International Business Center
No. 391 Gui Ping Road Shanghai, 200233, P.R. China
Phone: +86-21-6237-0898
Fax: +86-21-6237-0899

● **P.R. China (Hong Kong)**
Anritsu Company Ltd.
Unit 1006-7, 10/F., Greenfield Tower, Concordia Plaza,
No. 1 Science Museum Road, Tsim Sha Tsui East,
Kowloon, Hong Kong, P.R. China
Phone: +852-2301-4980
Fax: +852-2301-3545

● **Japan**
Anritsu Corporation
8-5, Tamura-cho, Atsugi-shi, Kanagawa, 243-0016 Japan
Phone: +81-46-296-6509
Fax: +81-46-225-8359

● **Korea**
Anritsu Corporation, Ltd.
5FL, 235 Pangyoyeok-ro, Bundang-gu, Seongnam-si,
Gyeonggi-do, 13494 Korea
Phone: +82-31-696-7750
Fax: +82-31-696-7751

● **Australia**
Anritsu Pty. Ltd.
Unit 20, 21-35 Ricketts Road,
Mount Waverley, Victoria 3149, Australia
Phone: +61-3-9558-8177
Fax: +61-3-9558-8255

● **Taiwan**
Anritsu Company Inc.
7F, No. 316, Sec. 1, NeiHu Rd., Taipei 114, Taiwan
Phone: +886-2-8751-1816
Fax: +886-2-8751-1817

1603