

ME7873F

W-CDMA TRX/Performance Test System

ME7874F

W-CDMA RRM Test System



Conformance Tests becoming Increasingly Important

To meet users' needs, mobile terminals are evolving from GSM (2G) to W-CDMA/CDMA2000 (3G) to LTE (3.9G).

The 3GPP standards for manufacturing and conformance tests support this progress.

Network problems caused by non-compliant terminals at new service rollout are not permissible. 3G usage was limited in the early days due to limited service areas but now 3G is the global mainstream due to user demand and technology innovation.

As a result, conformance tests have become much more important in assuring mobile terminals meet the standards.

By combining versatile measuring instruments and software packages into a tailored full-featured test platform, the ME7873F/ME7874F supports the various test functions required for W-CDMA frequency bands in use today, as well as future applications, such as HSDPA, HSUPA and HSPA Evolution, offered by both high-end mobiles and standard units in all countries of the world.

The ME7873F LTE option supports the LTE frequency bands to be used worldwide and users can choose the FDD/TDD test functions matching their test terminals. In addition, the ME7873F can be tailored to the required test environment, matching customers' RF TRx, performance, and RRM requirements, as well as minimizing their investment costs.

ME7873F/ME7874F

W-CDMA TRX/Performance Test System W-CDMA RRM Test System





ME7873F/ME7874F

Standard Function

Temperature Chamber Control Function

DC Power Supply Control Function

(Customer supplies power supply and temperature chamber)

| Test Function Options Test Function | | | |
|--|---|---|--|
| WI-013 Test Function | WI-076 Test Function | WI-148 Test Function | |
| WI-014 Test Function | WI-069 Test Function | WI-080 Test Function | |
| WI-024 Test Function | WI-070 Test Function | WI-090 Test Function | |
| WI-025 Test Function | WI-113 Test Function | RRM Test Function | |
| WI-049 Test Function | WI-129 Test Function | Japan TRCC Test Function | |
| WARNING IN | Opera | nting Band | |
| W-CDMA Band O | ptions | | |
| Band I Test Function | Band V Test Function | Band XI Test Function | |
| Band II Test Function | Band VI Test Function | Band XIX Test Function | |
| Band III Test Function | Band VIII Test Function | | |
| | | | |
| Band IV Test Function | Band IX Test Function | I.,,_,,_,,_, | |
| | | ating Band | |
| Band IV Test Function LTE Band Option | | iting Band | |
| | S Opera | ting Band TDD Band | |
| LTE Band Option | S Opera | | |
| LTE Band Option | S Band | TDD Band | |
| LTE Band Option FDD I Band 1 Test Function | S Opera Band Band 12 Test Function | TDD Band Band 33 Test Function | |
| LTE Band Option FDD I Band 1 Test Function Band 2 Test Function | S Opera Band Band 12 Test Function Band 13 Test Function | TDD Band Band 33 Test Function Band 34 Test Function | |
| Eand Option FDD I Band 1 Test Function Band 2 Test Function Band 3 Test Function | S Opera Band 12 Test Function Band 13 Test Function Band 14 Test Function | TDD Band Band 33 Test Function Band 34 Test Function Band 35 Test Function | |
| Example 1 Test Function Band 2 Test Function Band 3 Test Function Band 4 Test Function | Band 12 Test Function Band 13 Test Function Band 14 Test Function Band 17 Test Function | TDD Band Band 33 Test Function Band 34 Test Function Band 35 Test Function Band 36 Test Function | |
| Band 1 Test Function Band 2 Test Function Band 3 Test Function Band 4 Test Function Band 5 Test Function | Band 12 Test Function Band 13 Test Function Band 14 Test Function Band 17 Test Function Band 18 Test Function | Band 33 Test Function Band 34 Test Function Band 35 Test Function Band 36 Test Function Band 37 Test Function | |

Band 24 Test Function

Band 25 Test Function

Band 41 Test Function

Supports High-Speed Data Tests of Mobile Terminals

HSDPA. HSUPA and HSPA Evolution test functions are supported.

Like the RRM measurement function, the installed HSDPA, HSUPA and HSPA Evolution measurement functions can be selected. The ME7873F/ME7874F can add the LTE function.*1

Band 10 Test Function

Band 11 Test Function

The required mobile terminal test functions can be installed as options to minimize capital costs while offering a customized test environment.

Supports Global Mobile Terminals

3GPP-compliant frequency bands operators starting to use are supported, so most mobiles used worldwide can be tested.*1

Supports Most Approved Test Cases*2

The ME7873F/ME7874F platform boasts the largest number of GCF*3/PTCRB*4 approved test cases of any platform.

High-Stability Measurement

Exceptional measurement stability is achieved by pre-measurement calibration backed-up by comprehensive self-test functions for trouble-free peace of mind.

UMTS/LTE Parallel Measurement

W-CDMA and LTE parallel measurement can be performed by adding LTE function to the ME7873F/ME7874F. The ME7873F/ME7874F supports these tests with a single customized platform, eliminating the need to switch the connection setup in mid-test.

- *1 Requires option
- *2 This is based on GCF and PTCRB test case approvals following the GCF and PTCRB meeting in July 2012.
- *3 GCF (Global Certification Forum)
- The GCF is an organization composed of mainly of European carriers and vendors that verifies UE standard compliance for frequency bands in Europe.
- *4 PTCRB (PCS Type Certification Review Board)
 - The PTRCB is the N. American equivalent of the GCF, verifying standards compliance for frequency bands in N. America.

RF Conformance Test System Supporting Most Approved Test Cases

Supporting Most GCF/PTCRB Approved **Test Cases**

These test platforms support the GCF/PTCRB requirements for TS34.121 Conformance Testing and offer the industry leading GCF/PTCRB approved test cases.

By configuring a test system from various instruments and dedicated software centered around the MD8480C W-CDMA Signalling Tester, these Test Platforms support the testing of W-CDMA terminal with non-call-processing conditions as well as loop-back conditions*1.

When LTE function is added, it uses the MD8430A Signalling Tester as a LTE base station simulator, and is configured from various test instruments and dedicated software. It supports RF/ RRM tests while communicating with LTE mobile terminals.

ME7873F W-CDMA TRX/Performance Test System

The ME7873F is for testing the Tx and Rx characteristics of W-CDMA terminal in accordance with measurement items*2 in Chapter 5 (Transmitter Characteristics), Chapter 6 (Receiver Characteristics), and Chapter 7 (Performance Requirements) of the 3GPP TS 34.121 standards. Measurement items defined by Chapter 8 (Requirements for Support of RRM*3), Chapter 9 (Performance requirements for HSDPA), Chapter 10 [Performance requirement (E-DCH)], and Chapter 11 [Performance requirement (MBMS)] can also be measured by installing the ME7873F-xx

In addition, all Inter-RAT tests, including handover tests, can be performed.

ME7874F W-CDMA RRM Test System

The ME7874F is for the specific testing of the Radio Resource Management functions (RRM) defined in 3GPP TS 34.121. It supports the measurement items defined by Chapter 8 (Requirements for Support of RRM) of the 3GPP TS 34.121 standard.

Optimized for HSPA/HSPA Evolution Mobile Terminal Tests

Supports High-Speed HSUPA/HSDPA/HSPA Evolution Test

Both downlink and uplink speeds are being increased to offer new services for high-speed data communications.

This system supports both high-speed uplinks as well as high-speed downlinks, permitting evaluation of both HSDPA and HSUPA mobile terminals with one platform.

Additionally, WI-024 test items included in the Release-6 Enhancements, WI-076 HSDPA RF Performance, WI-069 HSPA-64QAM for HSDPA, WI-070 HSPA-CPC, WI-113 Type 3, WI-129 DC-HSDPA, and WI-148 Type1 are also supported, making this system the optimum test solution for high-speed data communications terminals.

- *1: Not supported by RRM tests
- *2: In principle, defined by GCF Work Item*4 and targeting measurement items certified by GCF/PTCRB
- *3: RRM:
 - Abbreviation for Radio Resource Management

Name for test item group for each function chosen by GCF for test items for certifying UE conformance

Supports Global Mobile Terminals

Worldwide Operating Bands

This system supports operating bands in most countries worldwide, including Europe and Japan.

In addition to 3GPP Band I (2 GHz), Band II (1.9 GHz), Band IV (1.7 GHz/2 GHz), and Band V (850 MHz) used in the USA, Band VI (800 MHz), Band IX (1.7 GHz) and Band XIX (800 MHz) used in Japan, are also supported.

Moreover, the following bands used in worldwide are also supported.

| UTRA Operating Band | UL Operating Band (MHz) | DL Operating Band (MHz) |
|------------------------|----------------------------|----------------------------|
| I | 1920 to 1980 | 2110 to 2170 |
| II | 1850 to 1910 | 1930 to 1990 |
| III | 1710 to 1785 | 1805 to 1880 |
| IV | 1710 to 1755 | 2110 to 2155 |
| V | 824 to 849 | 869 to 894 |
| VI | 830 to 840 | 875 to 885 |
| VIII | 880 to 915 | 925 to 960 |
| IX | 1749.9 to 1784.9 | 1844.9 to 1879.9 |
| XI | 1427.9 to 1452.9 | 1475.9 to 1500.9 |
| XIX | 830 to 845 | 875 to 890 |

Optimized for LTE Mobile Terminal Tests

When LTE function is added, this system can support RF TRx characteristics, performance requirements, and RRM performance of FDD/TDD LTE mobile terminals in compliance with the requirements of 3GPP TS 36.521-1 Chapter 6 (Transmitter Characteristics), Chapter 7 (Receiver Characteristics), Chapter 8 (Performance Requirement), Chapter 9 (Reporting of Channel State Information) and TS 36.521-3 RRM including LTE→GSM/UMTS/ CDMA2000/TD-SCDMA Inter-RAT tests.*2

Moreover, TS 34.121 UMTS \rightarrow LTE and TS34.122 TD-SCDMA \rightarrow LTE Inter-RAT test is supported.*2

Not only are GCF/PTCRB-approved bands planned for use in Europe and North America fully supported, but the following bands defined by 3GPP are also supported too.

Unlisted bands can be supported by request.

| E-UTRA Operating Band Operating Band (MHz) UL Operating Band (MHz) DL Operating Band (MHz) Operation Ar (MHz) 1 1920 to 1980 2110 to 2170 Europe, Asi 2 1850 to 1910 1930 to 1990 North Ameri 3 1710 to 1785 1805 to 1880 Europe, Asi 4 1710 to 1755 2110 to 2155 North America, 5 824 to 849 869 to 894 North America, 7 2500 to 2570 2620 to 2690 Europe, Asi 9 1749.9 to 1784.9 1844.9 to 1879.9 Japan 10 1710 to 1770 2110 to 2170 North America, 11 1427.9 to 1447.9 1475.9 to 1495.9 Japan 12 698 to 716 728 to 746 North America, 13 777 to 787 746 to 756 North America, 14 788 to 798 758 to 768 North America, |
|---|
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| 7 2500 to 2570 2620 to 2690 Europe 8 800 to 915 925 to 960 Europe, Asi 9 1749.9 to 1784.9 1844.9 to 1879.9 Japan 10 1710 to 1770 2110 to 2170 North Ameri 11 1427.9 to 1447.9 1475.9 to 1495.9 Japan 12 698 to 716 728 to 746 North Ameri 13 777 to 787 746 to 756 North Ameri |
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| 13 777 to 787 746 to 756 North Americ |
| |
| 14 788 to 798 758 to 768 North Ameri |
| 700 10 700 |
| 17 704 to 716 734 to 746 North Ameri |
| 18 815 to 830 860 to 875 Japan |
| 19 830 to 845 875 to 890 Japan |
| 20 832 to 862 791 to 821 Europe |
| 21 1447.9 to 1462.9 1495.9 to 1510.9 Japan |
| 24 1626.5 to 1660.5 1525 to 1559 North Ameri |
| 25 1850 to 1915 1930 to 1995 North Ameri |
| 33 1900 to 1920 1900 to 1920 TBD |
| 34 2010 to 2025 2010 to 2025 TBD |
| 35 1850 to 1910 1850 to 1910 North Ameri |
| 36 1930 to 1990 1930 to 1990 North Ameri |
| 37 1910 to 1930 1910 to 1930 North Ameri |
| 38 2570 to 2620 2570 to 2620 Asia |
| 39 1880 to 1920 1880 to 1920 Asia |
| 40 2300 to 2400 2300 to 2400 Asia |
| 41 2496 to 2690 2496 to 2690 North America, |

Higher Test Efficiency, Emphasizing Measurement Stability and Reliability

Continuous Testing of Multiple Terminals

Installing this option in the system supports continuous testing of up to four mobile terminals. The power supply and serial control line can be switched automatically using a terminal switching unit. Test preparations for multiple units can be completed at one time, simplifying progress management after starting tests.

Remote Systems Control via Network

This system supports remote control of the PC measurement controller from another PC on the network.

Until now, the operator has been required to remain at the test site to monitor the test status, but by using this remote monitoring function, the measurement progress can be remotely monitored over a networked PC and measurement sequences can be selected and set, bench-top testing while working in office.

Easy Control of Various External Devices

The system software has built-in functions for controlling a DC power supply and temperature chamber.*

A DC power supply and temperature chamber can be controlled easily in the same way as selecting test items.

Using these standard functions makes W-CDMA current consumption measurement and temperatures tests easy.

*: Current consumption measurements and temperature tests requires a separate DC power supply and temperature chamber. Refer to the ordering information for more details.

Test Items based on Technical Regulations **Conformity Certification (W-CDMA Option)**

Mobile terminal used in Japan must be in compliance with the Technical Regulations Conformity Certification (TRCC). This option adds test items based on the W-CDMA TRCC test items, so the operator can perform tests easily based on the TRCC items.

*: This function offers tests based on the TRCC tests, which the operator can use to perform 3GPP-compliant measurements. However, since the transmission speed test items are not supported, note that this function is exactly equivalent to the TRCC test.

R&TTE-compliant Test Items (LTE Option)

This option is fully compliant with the European ETSI-defined R&TTE LTE RF TRx test items. Anritsu launched this Europeantest-house approved option ahead of market competitors. Simple operation supports easy R&TTE-compliant tests like normal test items.

Continuous Testing (Auto-testing) of Multiple Measurement Items

Auto-testing is supported by sequencing 3GPP-compliant test items.

Automation allows long measurements to run overnight, making more efficient use of available test time by producing results early next morning*.

*: Requires option for continuing sequence files created using several software

Parallel W-CDMA and LTE Testing

Supports parallel independent W-CDMA and LTE RF conformance test with upgrade from ME7873F or ME7874F.

Simultaneous parallel measurement of W-CDMA and LTE terminals cuts test times and optimizes equipment cost-performance investment

Calibration Functions Supporting Increased Measurement Reliability

To improve measurement stability and reliability, the system has the following three calibration and correction methods:

- (1) Basic calibration at acceptance inspection
- (2) Auto-calibration at work start
- (3) Individual measurement correction (Patent applied for)

Since measurement correction applies a correction immediately before measurement, temperature-related changes in the measurement system are eliminated to greatly improve the reliability of the measured value.

In addition, Anritsu engineers perform calibration when installing the system at acceptance inspection, eliminating the need for operators to perform this complex calibration and correction work.

Support Service

An Anritsu Support Service contract keeps the system operating at peak performance, maximizing return on investment, minimizing downtime, and keeping work on schedule.

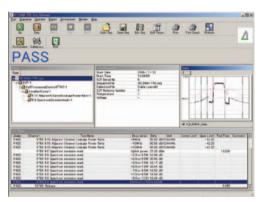
- · Latest software updates matching the latest changes to the 3GPP standards
- Information on 3GPP trends, consultation and technical support for troubleshooting test problems
- · Free hardware repair and maintenance with a back-up loan unit

Convenient Functions for Wide Applicability

Full Line of Versatile Functions Supporting Every Stage of W-CDMA/HSPA/HSPA Evolution/LTE Mobile Terminal Production from R&D to Final Shipping Inspection

Clear and Easy to Use Main Screen

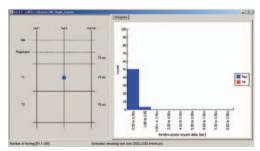
The Main screen is operated using a top toolbar displaying icons indicating the main operations. Test sequence items are indicated at the center left while details are displayed at the screen center and right side. Test results are displayed in real time at the screen bottom. This GUI design gathers all the important information to the main screen at the same time.



Main Screen

Test Condition and Results Distribution at-a-Glance

RRM tests display the transitions in connection conditions, which is useful for understanding the connection status at any time. Additionally, test items and results are displayed as a histogram indicating the PASS/FAIL rates for multiple operations and making it easy to identify equipment operation trends.



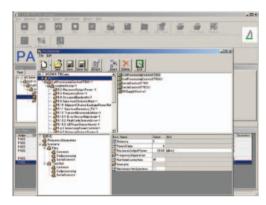
Test Conditions Screen

Useful Measurement Functions (Search Method) for Optimum Measurement

Measurements can be searched repeatedly while changing measurement parameters such as interference signal level. Using this function supports both PASS/FAIL evaluation at 3GPP-defined conditions as well as efficient measurement of UE in the development stage.

Flexible Parameter Setting

In addition to selecting any frequency channel for each test item. detailed parameters such as evaluation values and averagings can be set too. This permits testing under ideal conditions matching the test objective. Furthermore, changed test conditions can be saved to a file for easy recall when required.



Test Scheduler Screen

Measurement Data Management Functions

Measurement results from the system can be displayed as a measurement report using a browser as well as printed in the same format. The header for measurement reports can display various information, such as test start time. Moreover, these results can be saved either as an HTML file, or in numeric format as a CSV file for later data processing.

LTE measurement results are confirmed at the Measurement Result screen and saved either as HTML for easy confirmation or as XML/CSV for easy database management.



Measurement Results Output

Supported Test Specifications

UMTS Measurement

The design of the ME7873F test platform is based on the following standards.

3GPP TS 34.121 **Terminal Conformance Specification** 3GPP TS 34.108 Common Test Environment for UE 3GPP TS 34.109 Terminal logical test interface

And the Release 99. Release 4. Release 5. Release 6. Release 7. Release 8, and Release 9 parts of these specifications are

Contact your Anritsu sales representative for details of the supported versions.

Supported Test Items and Options

| | 3GPP | ME7873F | |
|-----------|-----------|-----------------|-----------------|
| Work Item | TS 34.121 | TRX/Performance | ME7874F |
| | Chapter | Test System | RRM Test System |
| | 5 | ✓ | |
| WI-010 | 6 | ✓ | |
| VVI-010 | 7 | ✓ | |
| | 8 | ✓ (Option) | ✓ |
| WI-012 | 7 | ✓ | |
| | 5 | ✓ (Option) | |
| WI-013 | 6 | ✓ (Option) | |
| VVI-013 | 7 | ✓ (Option) | |
| | 8 | ✓ (Option) | ✓ (Option) |
| | 5 | ✓ (Option) | |
| WI-014 | 6 | ✓ (Option) | |
| | 9 | ✓ (Option) | |
| | 5 | ✓ (Option) | |
| WI-024 | 7 | ✓ (Option) | |
| | 8 | ✓ (Option) | ✓ (Option) |
| | 5 | ✓ (Option) | |
| WI-025 | 8 | ✓ (Option) | ✓ (Option) |
| | 10 | ✓ (Option) | |
| | 5 | ✓ (Option) | |
| WI-038 | 6 | ✓ (Option) | |
| | 8 | ✓ (Option) | ✓ (Option) |
| WI-049 | 8 | ✓ (Option) | ✓ (Option) |
| VVI-049 | 11 | ✓ (Option) | |
| WI-076 | 9 | ✓ (Option) | |
| WI-069 | 6 | ✓ (Option) | |
| VVI-009 | 9 | ✓ (Option) | |
| WI-070 | 9 | ✓ (Option) | |
| WI-113 | 9 | ✓ (Option) | |
| WI-129 | 6 | ✓ (Option) | |
| VVI-129 | 9 | ✓ (Option) | |
| WI-148 | 5 | ✓ (Option) | |

For detailed test cases, contact our sales representative.

LTE Measurement

The design of the ME7873F with LTE option is based on the following standards.

3GPP TS 36.521-1

E-UTRA UE Conformance Specification Radio Transmission and Reception Part 1: Conformance Testing

3GPP TS 36.521-3

E-UTRA UE Conformance Specification Radio Transmission and Reception Part 3: RRM Conformance Testing

3GPP TS 36.508

E-UTRA and EPC Common Test Environments for UE Conformance Testing

3GPP TS 36.509

E-UTRA and EPC Special Conformance Testing Functions for UE

Release 8 and 9 of above standards is also supported. Contact our sales representative for detailed of the supported versions.

Specifications

ME7873F W-CDMA TRX/Performance Test System ME7874F W-CDMA RRM Test System

| I/O Connector | N-type, 50Ω | |
|----------------------|--|--|
| Max. Input Level | 33 dBm (2 W) 37 dBm (5 W, no path switching) | |
| Reference Oscillator | Uses MS8609A Digital Mobile Radio Transmitter Tester (with MS8609A-01 High-Stability Reference Oscillator) as reference Supports input of external reference signal Frequency: 10 MHz/13 MHz (selectable), BNC connector | |
| Frequency Range | As defined by 3GPP UTRA Operating Band I, II, III, IV, V, VI, VIII, IX, XI, XIX As defined by 3GPP E-UTRA Operating Band 1 to 5, 7 to 14, 17 to 21, 24, 25, 33 to 41 | |
| Temperature Range | 15° to 35°C (operating), 0° to 50°C (storage)*1 | |
| Power Supply | 100 V(ac) to 120 V(ac) or 200 V(ac) to 240 V(ac) ME7873F : 50 Hz/60 Hz, ≤3300 VA*2 ME7873F (with LTE Option) : 50 Hz/60 Hz, ≤6600 VA*2 ME7874F : 50 Hz/60 Hz, ≤3000 VA*2 | |
| Dimension | 1710 (W) × 1597 (H) × 797 (D) mm*3 2280 (W) × 1597 (H) × 797 (D) mm*3 (with LTE Option) ME7873F : ≤600 kg*4 ME7873F (with LTE Option) : ≤930 kg*4 ME7874F : ≤530 kg*4 | |
| Mass | | |
| EMC | EN61326-1 EN61000-3-2 | |
| LVD | EN61010-1 | |

*1: Ambient Temperature

The ambient temperature must meet the conditions when delivery calibration was performed. To assure stable measurement, we recommend installation in an air-conditioned environment.

*2: Power Consumption

In addition to the typical power consumption of the ME7873F/ME7874F, it is necessary to provide sufficient power (600 VA) for the instruments used at delivery

- *3: To prevent the risk of the rack toppling over, we recommend securing the top of the rack to the wall, etc.
- *4: About Equipment Weight and Floor Strength

At delivery, the floor of the installation location must be strong enough to support the above mass of the equipment plus 100 kg.

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 | |
|-----------------|---|--|
| ME7873F | Main frame W-CDMA TRX/Performance Test System | |
| | Configuration items | |
| MD8480C | W-CDMA Signalling Tester | |
| MS8609A | Digital Mobile Radio Transmitter Tester | |
| MP8302A | Bit Error Rate Tester | |
| MG3692C | Synthesized Signal Generator | |
| MG3700A | Vector Signal Generator | |
| MF6900A | Fading Simulator | |
| ME7416B | RF Switch Driver Unit | |
| MN7451A | RF Switch Driver Unit | |
| MN7462A | RF Interface Unit | |
| MN7463A | RF Combiner Unit | |
| MX787103F | W-CDMA TRX/Performance Test Software | |
| MX787135F | Selftest Software for Conformance Test System | |
| Z1396A | User Operation PC | |
| Z1629A | Express Card-GPIB | |
| J1415A | USB-Serial Converter Cable | |
| | | |
| | Standard accessory ME7973E Operation Manual (CD BOM): 1 act | |
| | ME7873F Operation Manual (CD-ROM): 1 set | |
| | Options | |
| ME7873F-10 | RRM Test Addition*2 | |
| ME7873F-60 | WI-113 Toolkit | |
| ME7873F-61 | WI-129 Toolkit | |
| ME7873F-70 | WI-013 Toolkit (TRx/Performance) | |
| ME7873F-72 | WI-013 Toolkit (RRM) | |
| ME7873F-74 | WI-014 Toolkit | |
| ME7873F-75 | WI-024 Toolkit | |
| ME7873F-76 | WI-025 Toolkit | |
| ME7873F-77 | WI-049 Toolkit | |
| ME7873F-78 | WI-076 Toolkit*2 | |
| ME7873F-79 | Additional Hardware for Diversity | |
| ME7873F-80 | WI-069 Toolkit | |
| ME7873F-81 | WI-070 Toolkit | |
| ME7873F-90 | MF6900A Exchange | |
| MX787190F | MCTS Integration Software | |
| MX787103F-09 | JAPAN TRCC TEST*3 | |
| MN7462A-01 | 4 Antenna Connections*4 | |
| ME7419B | Mobile Radio Switching Unit | |
| Z0788 | Additional Accessory Kit for Power Supply | |
| 20700 | Frequency band options*5 | |
| | (without RRM Test Function) | |
| ME7072E 11 | 3GPP Band I Addition | |
| ME7873F-11 | 3GPP Band II Addition | |
| ME7873F-12 | | |
| ME7873F-13 | 3GPP Band III Addition 3GPP Band IV Addition | |
| ME7873F-14 | | |
| ME7873F-15 | 3GPP Band V Addition | |
| ME7873F-16 | 3GPP Band VI Addition | |
| ME7873F-18 | 3GPP Band VIII Addition | |
| ME7873F-19 | 3GPP Band IX Addition | |
| ME7873F-31 | 3GPP Band XI Addition | |
| ME7873F-32 | 3GPP Band XIX Addition | |
| | (with RRM Test Function) | |
| ME7873F-21 | 3GPP Band I Addition (Including RRM) | |
| ME7873F-22 | 3GPP Band II Addition (Including RRM) | |
| ME7873F-23 | 3GPP Band III Addition (Including RRM) | |
| ME7873F-24 | 3GPP Band IV Addition (Including RRM) | |
| ME7873F-25 | 3GPP Band V Addition (Including RRM) | |
| ME7873F-26 | 3GPP Band VI Addition (Including RRM) | |
| | | |
| ME7873F-28 | 3GPP Band VIII Addition (Including RRM) | |
| | 3GPP Band VIII Addition (Including RRM) 3GPP Band IX Addition (Including RRM) | |
| ME7873F-28 | | |

- *1: Requires two or three MG3700A units.
- *2: Remember to order additional equipment such as signal generators. Consult your Anritsu sales representative when matching the ME7873F test platform with previously purchased equipment.
- *3: Requires MX787103F and frequency band options.
- *4: Please order with the order for MN7462A. Addition after the system delivery is not possible.
- *5: When configuring system, requires at least one frequency band option.

| Model/Order No. | Name | |
|--|--|--|
| ME7874F | Main frame W-CDMA RRM Test System | |
| MD8480C MS8609A MG3700A ME7416B MN7451A MN7462A MN7463A MN7465A MX787104F MX787135F Z1396A Z1629A J1415A | Configuration items W-CDMA Signalling Tester Digital Mobile Radio Transmitter Tester Vector Signal Generator* RF Switch Driver Unit RF Switch Driver Unit RF Interface Unit RF Combiner Unit RF Combiner Unit RF Switch Unit W-CDMA RRM Test Software Selftest Software for Conformance Test System User Operation PC Express Card-GPIB USB-Serial Converter Cable | |
| | Standard accessory ME7874F Operation Manual (CD-ROM): 1 set | |
| ME7874F-72 ME7874F-75 ME7874F-76 ME7874F-77 MX787190F MN7462A-01 ME7419B Z0788 | Options WI-013 Toolkit (RRM)*2 WI-024 Toolkit WI-025 Toolkit WI-049 Toolkit MCTS Integration Software 4 Antenna Connections*4 Mobile Radio Switching Unit Additional Accessory Kit for Power Supply | |
| ME7874F-11 ME7874F-12 ME7874F-13 ME7874F-14 ME7874F-15 ME7874F-16 ME7874F-18 ME7874F-19 ME7874F-31 ME7874F-31 | Frequency band options*5 3GPP Band I Addition 3GPP Band II Addition 3GPP Band III Addition 3GPP Band V Addition 3GPP Band V Addition 3GPP Band VI Addition 3GPP Band VI Addition 3GPP Band XI Addition 3GPP Band XI Addition 3GPP Band XI Addition 3GPP Band XI Addition 3GPP Band XIX Addition | |

| Model/Order No. | Name |
|-------------------------|--|
| MD0420A | LTE options |
| MD8430A | Signalling Tester |
| MS2692A | Signal Analyzer |
| MG3692C | Synthesized Signal Generator |
| MG3700A | Vector Signal Generator |
| MF6900A | Fading Simulator |
| ML2488B | Wideband Power Meter |
| SC7816 | Thermal Sensor |
| MD8470A | Signalling Tester |
| MT8820C MN7462A | Radio Communication Analyzer RF Interface Unit |
| MN7464D | Filter Unit |
| MN7451A | RF Switch Driver Unit |
| MN7463B | RF Combiner Unit |
| | |
| MN7484B MN7464E | RF Interface Unit for Diversity Additional Filter Unit |
| MN7464F | Filter Unit2 |
| MN7464G | Filter Unit3 |
| | LTE RF Conformance Test Software |
| MX787311L MX787361L | TD-LTE RF Conformance Test Software |
| | |
| MX787391L | HSPA RF Conformance Test Software LTE Common Kit |
| ME7873F-82 | LTE TRX Hardware |
| ME7873F-83 | LTE Performance Hardware |
| ME7873F-84 | |
| ME7873F-85 | LTE 4 × 2 MIMO Performance |
| ME7873F-86 | LTE CQI Performance |
| ME7873F-87 | LTE TRX Additional Hardware |
| ME7873F-91 | LTE RRM Hardware |
| ME7873F-92 | LTE to UMTS/GSM Inter-RAT RRM |
| ME7873F-93 | LTE to CDMA2000 Inter-RAT RRM |
| ME7873L-022 | Fading Accessory |
| ME7873L-038 | Filter Unit3 Accessory |
| ME7873L-044 | Filter Unit2 Accessory |
| ME7873L-048 | SV-LTE CDMA2000 RF Test Accessory |
| MX787311L-002 | LTE TRX Test Cases Conformance Package1 |
| MX787311L-003 | LTE TRX Test Cases Conformance Package2 |
| MX787311L-004 | LTE Performance Test Cases Conformance Package1 |
| MX787311L-005 | LTE 4 × 2 MIMO Test Cases Conformance Package1 |
| MX787311L-006 | LTE CQI Test Cases Conformance Package1 |
| MX787311L-011 | LTE RRM Test Cases Conformance Package1 |
| MX787311L-012 | LTE to UMTS/GSM Test Cases Conformance Package |
| MX787311L-013 | LTE to CDMA2000 Test Cases Conformance Package |
| MX787311L-021 | LTE TRX Test Cases Conformance Package3 |
| MX787311L-022 | UMTS to LTE Test Cases Conformance Package1 |
| MX787311L-023 | LTE RRM Test Cases Conformance Package2 |
| MX787311L-024 | LTE to UMTS/GSM Test Cases Conformance Package |
| MX787311L-033 | R&TTE Test Cases |
| MX787311L-034 | Band4 Supplementary TRx Test Cases |
| MX787311L-035 | Band4 Supplementary Performance Test Cases |
| MX787311L-036 | Band4 Supplementary 4 × 2 MIMO Test Cases |
| MX787311L-037 | Band17 Supplementary RF Test Cases |
| MX787311L-044 | SV-LTE TRX Test Cases |
| MX787311L-045 | SV-LTE Power Backoff Test Case |
| MX787311L-046 | SV-LTE Power Headroom Reporting Test Cases |
| MX787311L-047 | Band13 Supplementary RF Test Cases |
| MX787311L-048 | SV-LTE CDMA2000 RF Test Cases |
| MX787361L-002 | TD-LTE TRX Test Cases Conformance Package1 |
| MX787361L-003 | TD-LTE TRX Test Cases Conformance Package2 |
| MX787361L-004 | TD-LTE Perf Test Cases Conformance Package1 |
| MX787361L-005 | TD-LTE 4 × 2 MIMO Test Cases Conformance |
| | Package1 |
| MX787361L-006 | TD-LTE CQI Test Cases Conformance Package1 |
| MX787361L-011 | TD-LTE RRM Test Cases Conformance Package1 |
| MX787361L-022 | TD-SCDMA to TD-LTE Test Cases Conformance |
| | Package1 |
| MX787361L-023 | TD-LTE RRM Test Cases Conformance Package2 |
| MX787361L-024 | TD-LTE to UMTS/GSM Test Cases Conformance |
| | Package1 |
| MX787361L-025 | TD-LTE to TD-SCDMA Test Cases Conformance |
| | Package1 |
| MX787361L-026 | TD-LTE CQI Test Cases Conformance Package2 |
| MX787391L-001 | WI-069 TRx Test Cases |
| MX787391L-002 | WI-069 Performance Test Cases |
| MX787391L-011 | WI-070 Performance Test Cases |
| MX787391L-021 | WI-113 Performance Test Cases |
| MX787391L-021 | WI-129 TRx Test Cases |
| MX787391L-031 | WI-129 Performance Test Cases |
| 171/1/ 01/00 IL-00Z | |
| MX7873001 000 | |
| MX787300L-0xx Z1514A | FDD/TDD Band xx Capability Additional Accessory Kit for Power Supply |

In addition to the previous, use of the ME7873F requires the following customer-supplied parts.

UMTS Measurement

DC Power Supply

One of the following models is required when using the ME7873F or ME7874F to control power supply. In addition, rack mounting requires a rack-mount kit from the manufacturer.

| Model | Name | Manufacturer |
|---------|--|---------------------------|
| 2303 | High Speed Precision Readback Power Supply | Keithley Instruments Inc. |
| 2306-PJ | Dual-Channel Battery/Charger Simulator | Keithley Instruments Inc. |
| 66311 | Mobile Communication DC source | Agilent Technologies Inc. |

Consult the power supply manufacturer for details of the supported power supply accessory kit.

• Temperature Chamber

The following model is required when using the ME7873F or ME7874F to control the temperature chamber. Additionally, GPIB Cable (Double-Shield, 2m) is required to control this chamber automatically.

| Model | Name | Manufacturer |
|--------|--------------------------------|--------------|
| SH-241 | Temperature & Humidity Chamber | Espec Corp. |

Contact your Anritsu sales representative for details.

LTE Measurement

• DC Power Supply

The following models are required when controlling the power supply.

| Model | Name | pcs | Manufacturer | |
|-------------|-----------------------------------|-----|---------------------------|--|
| ME6700B | Main frame | 1 | | |
| ME6732B | 8 V, 6.25 A, 50 W DC Power Module | 4*1 | Agilent Technologies Inc. | |
| ME6700B-908 | Rack Mount Kit | 1 | 7 | |

^{*1:} Four modules are required when testing up to four mobiles continuously.

In addition, the following equipment can also be controlled. However, since rack-mounting is not possible when using the 2306-PJ, decide on the installation location for the DC power supply in advance.

| Model | Name | pcs | Manufacturer |
|---------|--|-----|---------------------------|
| 2306-PJ | Dual-Channel Battery/Charger Simulator with 500 mA Range | 2*2 | Keithley Instruments Inc. |

^{*2:} Two sets of the 2306-PJ are required when testing up to four mobiles continuously.

• Temperature Chamber

The following equipment is required to control the temperature chamber from the ME7873F Additionally, GPIB Cable (Double-Shield, 2m) is required to control this chamber automatically.

| Model | Name | Manufacturer |
|--------|--------------------------|--------------|
| SH-241 | Compact Environment Test | ESPEC Corp. |

Contact your Anritsu sales representative for details.



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