General Caution

Please use a USB Memory Stick for firmware updates.

Suitable firmware can be found on Anritsu's web site under the instrument library tab.

If there is a firmware update question, please contact Anritsu service support at www.Anritsu.com, and then click on "Technical Support" for further information.

What will the Customer See in this release?

Application Package for MW82119A: V2.30   04-19-2016

NEW FEATURES

High Accuracy Power Meter
- Added support for MA243xxA USB power sensors.

ENHANCEMENTS

General
- Substantial updates to Japanese language translation files for System applications.
- Substantial updates to Chinese language translation files for all applications.
- Added a disclaimer notice on web server login page. QDF-81
- Allow WEB server admin login to access all instrument control capabilities. QDF-79

BUG FIXES

General
- Fixed an issue where the instrument would display an incorrect IP address when using a Zyxel mobile router powered by the instrument's USB port. #23728
- Fixed an issue where the status window reported an invalid IP address of 169.254.x.x if the window was opened shortly after the Ethernet cable was plugged in. #23045
- Fixed an issue with the first attempt to login to the web server after a timeout. QDF-80
- Fixed an issue where the file type warning message was not shown in the Select File Type dialog.

High Accuracy Power Meter
- Fixed an issue with zeroing external USB high accuracy sensors.

Application Package for MW82119A: V2.20   02-05-2016

NEW FEATURES

General
- Scripts created by easyTest Tools V1.08 or higher may be executed on the PIM Master. #2720.

Passive Intermodulation Analyzer
- Added capability to bypass a high reflection warning to PIM test a system with poor return loss for a maximum of 60 seconds at 43 dBm maximum power. A bypass dialog appears on the screen and stops the current measurement when a high reflection is detected.
  The bypass dialog can be disabled in the Setup menu.
  The words "High Reflection warning bypassed!" appear on the screen anytime the high reflection warning is bypassed. #2644.
- Calibration is no longer turned off when more than 12 hours have elapsed since the last calibration for the current configuration. Instead, a warning dialog is presented that asks the user to verify the residual PIM level and recalibrate if it is too high for their test requirements. #3270.
- Menu buttons are now disabled during a calibration. #2288.
- The PIM Master now beeps once for each calibration step and beeps twice when the calibration is complete.

MISCELLANEOUS

General
- Adjusted LCD Horizontal and Vertical timing to work with display manufacturer revision changes.
  Updated SPL/IPL to V3.60 and ATABoot revision to V3.71 for improved handling of battery charge termination while unit is in the powered down state.
  SPL/IPL and ATABoot are only available for update at Factory or Customer Service Centers.

ENHANCEMENTS

General
- Added 'Active Client Detection' to enable a user to maintain instrument control via the instrument's WEB page, until the browser is closed for more than 1 minute.
- Added a warning that appears when downloading multiple files via a WEB browser now indicates that the process may make the instrument unresponsive until the download is completed. If there is an error during the process, another message will appear to suggest a smaller download. #22945
- Added additional monitoring of Battery SMBus to improve the handling of battery charge termination while unit is in operation. #23219.
- Added the ability to lock an instrument from Telnet and FTP connections.
- After setting the remote password and rebooting the unit, the unit will no longer allow Telnet and FTP connections.
- To remove the lock, either do a factory reset or remove the remote password by setting it to blank. #22432
- Changed several icons used in Night Vision mode for better visibility. #22831
- Improved start-up power management to prevent reboot when first turned on after being off for a while, especially with less than full battery or running on external power. #21153
- Updated the CableList.txt file to add 9 additional cables in response to customer request.
- WEB browser file download attempts are no longer possible with iOS devices. #22499

Passive Intermodulation Analyzer
- Fixed an issue on instruments with PCS/AWS capability that could cause IM frequency range warnings to appear when recalling measurement files. #21795
- Initiating a touch screen calibration is no longer possible while the PIM Application Self Test dialog is open. #23074.

BUG FIXES

General
- Changed the Spanish Language translation of ON/OFF to fit within the allowable space of the Marker Table. #22315
- Fixed an issue in easyTest execution where a script with auto advance step would run until end when a dialog window was open on the screen. #22554
- Fixed an issue in easyTest menu shortcuts to test for the existence of the script file before attempting to execute the script file. #22842
- Fixed an issue in the WEB UI of device where the scale on the graph showed incorrect units under certain conditions. #22659
- Fixed an issue in the WEB UI of the device where the 'Menu' button would occasionally not be displayed, when using Internet Explorer version 10/11. #22535
- Fixed an issue in the WEB UI where error messages associated with file save events provide more relevant information as to the cause of the error. #21444
- Fixed an issue in the WEB UI where the login button would not work when accessing the device remotely with a Safari browser. #22155
- Fixed an issue in the WEB UI where the Remote Control screen did not show the instrument menu button when accessed with a Safari browser. #22158
- Fixed an issue in WEBserver where SPL/IPL versions did not show. #23041
- Fixed an issue that could cause the Quick Name or the Quick Name Matrix button configuration to become undefined after a setup was saved via a remote command or PC tool and recalled at a later time. #22810
- Fixed an issue where the Menu buttons were outlined in red when the Display Blank feature was activated on a PIM Master instrument. #22944
- Fixed an issue while executing easyTest scripts where errors during auto-advance script steps were not handled properly. #22554

Passive Intermodulation Analyzer
- Fixed an issue where the "IM Overload" warning message could be displayed on instruments without -50 dBm measurement capability. #23086
- Fixed an issue where the dialog that appears when the factory calibration is due was missing the instruction to press ENTER to dismiss the dialog. #3305.
- Fixed an issue where the output power was not set correctly following a custom calibration performed at multiple power levels. #23542
- Fixed an issue with the DTP normalization calibration that was triggered by the "Start Calibration" button in the Calibration menu.

Application Package for MW82119A: V1.21   05-22-2015

NEW FEATURES

General
- A small camera icon has been added to the system title bar next to the floppy disk save icon. This touch screen icon can be used to quickly save a screenshot to the last-used save location. #2719
- Added a timer that automatically dims the display of the instrument when it is operating under battery power to save power.
  "Auto-Dim" feature is enabled in System Options -> Display -> Brightness menu.
  Each Model has a unique default time. Most are approximately 15 minutes. #2521
- Added an error message pop up during Code Loading to notify the user in the case the USB stick does not have enough space to store all of the user files from the instrument. #20524
- Added separate message dialog box when deleting folders when file type selection is not set to "All Files" type. #21672
- File sort method and sort order will now be persistent through window closes. #21827

High Accuracy Power Meter
- Adding support for the MA24208A and MA24218A Hi_Accuracy power sensors.

Passive Intermodulation Analyzer
- A Distance-To-Fault (DTF) measurement can now be performed and displayed by the PIM Master as part of a Distance-To-PIM (DTP) measurement. The
  DTF measurement is enabled by default and may be controlled by the "Low Resolution DTF" button in the Setup menu in DTP mode. A new step in the PIM calibration sequence has been added to support this new measurement capability. #2338
- Added a dialog that allows for configuring the start and stop frequencies of a Swept PIM measurement.
- New "Spectrum View" shows the noise floor across the entire (option based) receive-frequency range of the PIM Analyzer.
  The Distance-To-PIM (DTP) measurement mode now shows information on a dBm scale by default. The scale in DTP mode may be changed between dBm and dBc units as desired.
  The "Instrument Busy" message is cleared in a web browser remote control session after a timeout.
  Added detection of calibration data when cycling through Intermod Orders in PIM vs. Time and Swept PIM modes.

ENHANCEMENTS

General
- Added a warning message to the SAVE FILE dialog to indicate excessive files saved in a single directory, which may slow down file access performance. #20113
- Changed color for magenta to a darker shade when in "Black on White" Display mode, for better visibility of traces and text. #21738
- Changed the Spanish Language translation of ON/OFF to fit within the allowable space of the Marker Table. #22315 #22315
- Corrected error message displayed to a more meaningful one, when saving files with target memory nearly full. #21966
- Free space on the storage device will be checked before JPGs can be saved. #21369
- The menu shortcuts can now be saved and restored when performing firmware upgrades in the future. #2513
- The PASS/FAIL indicator text is now easier to read in the PIM application when using the Black and White color profile. #2305
- The same file type used when SAVING a measurement is initially selected when opening the RECALL measurement dialog.

- Updated the Support File, CableList.txt in V3.06, by adding support for an additional manufacturer of RG58C-U Cable with a propagation velocity of 0.656.
- When in Arrow Navigation Mode (touchscreen disabled) with the PIM Master, input focus can now be toggled between the menu buttons and file lists for the Copy, Delete, and Recall dialogs by using the +/- key. #20433

Passive Intermodulation Analyzer
- A new dialog will appear during residual PIM calibration if the PIM Master detects a poor PIM signal from the test port. The dialog will prompt the user to check the connections before continuing with the calibration. #2718
- Removed "Span View IM/RX" button from Swept PIM mode. Only the IM span view will be available.
- The Distance-To-PIM (DTP) measurement mode now shows information on a dBm scale by default. The scale in DTP mode may be changed between dBm and dBc units as desired. Requires Line Sweep Tools V1.58 or later to open this file in a PC Tool. #2593

BUG FIXES

General
- Fixed an issue related to defaults on Quick Name features causing unit lockup. #20441
- Fixed an issue when attempting to set Feb. 29 (a leap year date) before setting the year to a leap year. #21366
- Fixed an issue where a '(null)' was displayed on web server unit buttons. #21038
- Fixed an issue where a message "Successfully Saved File to USB1" when the save operation actually failed due to the disk being full. #20031
- Fixed an issue where a Save/Recall message would partially cover the parameter status area. #20786
- Fixed an issue where buttons in web server fast mode no longer shows '0' for their toggle states. #21038
- Fixed an issue where dragging an open dialog box would leave tracers on the screen. #21961
- Fixed an issue where icons in Save/Recall window were not being updated to match the current color scheme of the device. #20996
- Fixed an issue where the instrument would shut down after scrolling to the bottom of the System Status window using the touchscreen. #20675
- Fixed an issue where the web server appeared to lock out when the client PC powered down overnight without logging out of the web server and was assigned a different IP address when powering up the next day. The web server considered it as a different client and it gave the "old" client 2 minutes to keep the connection, so it appeared to lock out. #21740
- Fixed an issue with an overflowing USB SCPI command queue by increasing the buffer size from 50 to 500. #21312
- Fixed an issue with changing the instrument device name to close the dialog box cleanly. #21135
- Fixed an issue with file and directory naming. Files or directories with leading spaces in their names are prevented from being saved. #21560
- Fixed an issue with 'Save Measurement As' to properly handle multiple '_' in the filename. #20540
- Fixed an issue with the Save/Recall dialog screen size. Enlarged the screen to allow entire warning messages to fit. #20113

High Accuracy Power Meter
- Fixed an issue with the Save Measurement button in High Accuracy Power Meter. Now it correctly selects a measurement file type instead of a setup file type. #21088
- Hi Accuracy Power Meter summary window now correctly clears with preset command. #21352

Passive Intermodulation Analyzer
- Fixed a configuration error that limited 5th and 7th order IM frequency selection for the Option 700 in low-band mode. #21451
- Fixed an issue with Option 700 units. The upper limit of the low-band receiver is now 717 MHz.
  The initial date of the Calibration Due Date dialog is now set to one year from the Factory Calibration Date when no due date has been set.
  #21784
- Fixed incorrect calculation of IMD frequency and displayed Output Power range in the PIM Aid dialog. #21354
- Fixed the detection of calibration data when cycling through Intermod Orders in PIM vs. Time and Swept PIM modes. #21812

- Fixed the display of trace, marker, and limit values when output power is adjusted while dBc units are selected. #21168

Application Package for MW82119A: V1.20   07-17-2014

General Features
- (New) Added a timer that automatically dims the display of the instrument when it is operating under battery power to save power. This new "Auto-Dim" feature may be configured in a new System Options -> Display -> Brightness menu.
- (New) Future firmware upgrades will no longer clear out shortcuts from the Menu screen when choosing "Save & Restore User Data" from the firmware upgrade dialog.
- Fixed translated text display errors in the Save/Recall dialog.
- Fixed displaying an IP address in the Ethernet editor dialog when no Ethernet connection was present.
- Fixed output of incorrect filenames from the MMEMory:DIRectory? SCPI query.
- Fixed displaying misleading "Successfully Saved File" message when there was a failure saving files to a USB device that was full.

PIM Analyzer
- (New) The Marker menu is now available in Swept PIM mode. Markers can now be placed manually on either of the frequency sweep traces.
- Fixed synchronization of marker input (white text) and marker value (green text) in PIM vs. Time and Swept PIM modes.
- Fixed incorrect Pass/Fail indicator in Swept PIM on frequency option 260 (2600 MHz).
- Increased the calibration temperature window from 10°C to 20°C.
- Changed the default stop distance in Distance-To-PIM mode to 100 ft.
- The "Test Duration" parameter in Distance-To-PIM mode now displays "N/A" when Enhanced Resolution is enabled because only one measurement is performed in that configuration.
- Touching the "Cable" parameter in Distance-To-PIM mode now opens the cable list.
- Touching the "Data Points" parameter in Distance-To-PIM mode now opens the DTP Aid dialog with the Data Points parameter selected.
- When touched, all status parameters now consistently allow editing or open the appropriate menu to change the parameter.

High Accuracy Power Meter
- No Changes

Application Package for MW82119A: V1.17   03-17-2014

General Features
- (New) The current Quick Name Matrix (QNM) configuration is now saved to setup files, which may be used to save/restore particular QNM configuration for different situations.
- Fix multiple fields getting highlighted in the Ethernet editor.
- Fix being unable to use left/right arrows to navigate the Confirm Delete dialog when the language is set to French.
- Fix intermittent JPEG saving error.

PIM Analyzer
- (New) Provide on-screen warnings when selected F1/F2 or IM product is outside of the transmit or receive capability of the instrument.
- (New) Added the ability to turn on a reference line in Distance-To-PIM mode in the Limit menu.
- (New) Updated the status display area to show the current and last calibration temperatures.

- (New) Added the ability to change the graph scale units to dBc in PIM vs.Time and Swept PIM modes.
- (New) The PIM Aid window now shows the input ranges available to the instrument.
- Synchronized IMD order selection between PIM vs. Time and Swept PIM modes.
- Default upper and lower limits changed to -97 and -107 dB, respectively.
- Fix incorrect calibration status being displayed after recalling a setup.
- Fix an input conflict when upgrading the firmware on an instrument with an undefined or expired calibration due date.

High Accuracy Power Meter
- Corrected the "KHz" string in the Limit menu to "kHz".

Application Package for MW82119A: V1.16   02-18-2014

General Features
- Improved USB compatibility with Windows 7 computers.

PIM Analyzer
- No Changes

High Accuracy Power Meter
- No Changes

Application Package for MW82119A: V1.15   12-13-2013

General Features
- No Changes

PIM Analyzer
- (New) Browser-based data access and remote control of the PIM Master with mobile computers.
- Support for new PCS/AWS 1900/2100 MHz Option 193.
- Adjusted default propagation velocity to 1 and fixed some typos in warning messages.
- Fixed incorrect configuration that prevented selection of F1 down to 925 MHz on Option 900.
- Fixed an uncommon lockup related to DTP Aid and Cable List interaction.

High Accuracy Power Meter
- Fix inconsistent limit menus with the MA42105A sensor.

Application Package for MW82119A: V1.14   10-09-2013

General Features
- No Changes

PIM Analyzer
- (New) Enhanced resolution calculation option for faults in Distance-To-PIM (DTP) mode improves resolution by a factor of two.

- (New) Selectable trace modes for PIM-vs-Time measurements: fast (default), and low-noise.
- (New) Built-in tracking of instrument calibration due date, configurable by the customer, for inclusion in PIM reports generated by Anritsu Line Sweep Tools.
- Support for new LTE 800 MHz, UMTS 2100 MHz and LTE 2600 MHz frequency options.
- Several improvements to the user interface, including:
  o   IM Overload warning message when the PIM signal exceeds the measurement range.
  o   Pressing the "Start Calibration" button no longer clears calibration state until the calibration process begins.
  o   Assume negative number was intended for limit and reference levels.

High Accuracy Power Meter
- No changes

Application Package for MW82119A: V1.11   08-16-2013

General Features
- Improved boot-up performance.
- Quick-save icon now defaults save type to measurements instead of setups.

PIM Analyzer
- New feature: ability to overlay a reference trace on top of an active trace in DTP mode.
- Additional marker functionality to support DTP overlay feature.
- Minor visual changes to emphasize peak PIM values.

High Accuracy Power Meter
- Prevent a potential crash when saving setup files.

Application Package for MW82119A: V1.10   06-28-2013

General Features
- No changes.

PIM Analyzer
- Cable name is now restored after a power-cycle or recall, if one was set.
- Using the Emergency Stop button will no longer cause the next measurement to stop prematurely.
- Instrument calibration is no longer cleared by recalling measurements.
- Changing output power levels loads the correct DTP calibration data if a recent calibration was done at the chosen power level.
- Prevent reporting data below the minimum sensitivity level of the instrument.
- Corrected a gap in receiver range checking for the PCS 1900 model.
- Prevent measurements from being started before the instrument has fully configured.
- Addressed several minor UI inconsistencies.

High Accuracy Power Meter
- No changes

Application Package for MW82119A: V1.08   05-30-2013

General Features
-    Addressed an issue that could cause the loss of UI responsiveness when certain dialogs were open.

PIM Analyzer
-    Spur dodging of 700MHz High Band for PVT and Swept PIM.
-    Changed IF Gain so that Reference channel would continue to make measurements below 27.5dBm.

High Accuracy Power Meter
-    No changes

Application Package for MW82119A: V1.06   05-08-2013

General Features
-    No changes

PIM Analyzer
-    A peak marker is automatically placed after a DTP measurement.
-    Markers will be placed at the nearest maximum, if one exists, near where the trace is touched while in the marker menu.
-    Markers placed at a local maximum will have the diamond-shaped point turn solid for DTP measurements.
-    Enabling "Auto Range" in PIM vs. Time or "Auto Scale" in DTP causes the graph to redisplay with new settings, rather than requiring a new measurement.
-    Changed 700MHz model Rx frequency range from 698-722 MHz to 698-716 MHz.

High Accuracy Power Meter
-    No changes

Application Package for MW82119A: V1.05   04-16-2013

General Features
-     Corrected power and charge LED blinking while unit is powered off, but plugged into a power source

PIM Analyzer
-    Test duration is now limited to 1200 seconds
-    Added a "Save Measurement" button to the Noise Floor measurement menu
-    Progress bar in DTP and Swept PIM modes is only displayed during an active measurement
-    Measurement table in PvT mode displays frequencies with two decimal places
-    Fixed limit detection in PvT/Swept PIM modes
-    Added "Clear All Favorites" button for cable menu

High Accuracy Power Meter
-    No changes

Application Package for MW82119A: **V1.04** **03-20-2013**

General Features
- No changes

PIM Analyzer
- DTP normalization files are used instead of EEPROM memory – greater flexibility to change measurements and parameters.
- Custom Cable Files added (similar to VNA).
- Quick Name Matrix for saving files added (similar to VNA).
- PIM vs. Time measurement speed up.
- PIM vs. Time Noise Floor measurement added.
- Extended Frequency range for 900MHz and 1900/2100 models (900 and 192 option numbers).
- Progress Bar for Swept PIM and DTP measurements added.
- Independent PIM and DTP calibrations to complete necessary CALs faster.
- Passive GPS antenna measurement capability added.
- Modifications for better connectivity to Remote Access Tool.
- Pass/Fail display words for PVT and Swept PIM measurements.

High Accuracy Power Meter
- No changes

Application Package for MW82119A: **V1.03** **01-22-2013**

General Features
- No changes

PIM Analyzer
- Fix for PIM Amplitude Tone not allowing other audio sounds to function.

High Accuracy Power Meter
- No changes

Application Package for MW82119A: **V1.02** **01-17-2013**

General Features
- No changes

PIM Analyzer
- Changed PIM Amplitude Tone to use FPGA created tone based on input frequency.
- Fixed issue with 700MHz High Band not displaying Fixed F2 sweep in 7th order Swept PIM.
- DTP saves to .pim and .stp ALWAYS have limit flags turned OFF to keep limit lines from being displayed in DTP.
- Removed re-ranging of limit (not keeping current amplitude) when switching measurements.
- Fix for save/recall wrong trace peak data in Swept PIM measurement.
- Don't turn cal off due to temperature when recalling measurement.

<u>High Accuracy Power Meter</u>
- No changes

Application Package for MW82119A: V1.01   12-13-2012

<u>General Features</u>
V1.01 is the initial release for Customers

<u>PIM Analyzer</u>

<u>High Accuracy Power Meter</u>
- No changes