

General Caution

Please use a USB Memory Stick for firmware updates.

If there is a firmware update question, please contact Anritsu service support at <https://www.anritsu.com/test-measurement/contact-us> for further information.

What will the customer see in this release?

Product : S820E

Application Package : V4.40

Release Date : Quarterly Release March 2025

Information below may not apply to every model/option in Product list.

*** BUG FIXES ***

-> Software - S820E

[SNC-1018] Fixed unit turning back on during power off sequence.

What will the customer see in this release?

Product : S331L, S820E

Application Package: V4.30

Release Date : Quarterly Release Aug. 2024

Information below may not apply to every model/option in Product list

*** BUG FIXES ***

--> Software - S331L

[SNC-1010] Resolved an issue with the HIPM app and MA24105A sensor where the instrument would not measure after changing the Forward mode setting or switching

into Summary mode.

[SNC-1014] Resolved issue where the HIPM app and MA24105A sensor zero operation would fail with a 'Zero Sensor Error'.

-> Software - S820E

[SNC-1010] Resolved an issue with the HIPM app and MA24105A sensor where the instrument would not measure after changing the Forward mode setting or switching into Summary mode.

[SNC-1014] Resolved issue where the HIPM app and MA24105A sensor zero operation would fail with a 'Zero Sensor Error'.

What will the customer see in this release?

Product : S331L, S820E

Application Package: V4.20

Release Date : Quarterly Release Sept. 2023

Information below may not apply to every model/option in Product list

*** IMPROVEMENTS ***

-> Software - S331L

[SNC-986] Added new fire rated cable AFW-2HFR-3 7/8 to the CableList.

[SNC-989] Updated and revised the End User License Agreement.

-> Software - S820E

[SNC-986] Added new fire rated cable AFW-2HFR-3 7/8 to the CableList.

[SNC-989] Updated and revised the End User License Agreement.

What will the customer see in this release?

Product : S331L, S820E

Application Package: V4.00

Release Date : Release August, 2020

Information below may not apply to every model/option in Product list

*** NEW FEATURES ***

-> Software - S331L

[SNC-961] The following cables have been added per customer requests: RLCX-SL 158R; RLCX-SL 114R; RLCX-SL 078R; RLCX-SL012R; RLCX-SL038R; RLCX-SL014R; RLCX-SL012S; RLCX-SL038S; RLCX-SL014S; RLCX-SL012R FPR

-> Software - S820E

[SNC-961] The following cables have been added per customer requests: RLCX-SL 158R; RLCX-SL 114R; RLCX-SL 078R; RLCX-SL012R; RLCX-SL038R; RLCX-SL014R; RLCX-SL012S; RLCX-SL038S; RLCX-SL014S; RLCX-SL012R FPR

*** BUG FIXES ***

-> Software - S331L

[SNC-956] Resolved an issue where some files could accidentally get permanently deleted if a failure occurred during a file copy/move operation from the internal memory to an external USB memory device.

-> Software - S820E

[SNC-956] Resolved an issue where some files could accidentally get permanently deleted if a failure occurred during a file copy/move operation from the internal memory to an external USB memory device.

What will the customer see in this release?

Product : S331P, S331L, S820E

Application Package: V3.80

Release Date : Release February 2020

Information below may not apply to every model/option in Product list

*** BUG FIXES ***

-> Software - S820E

[SNC-952] Resolved an issue where the instrument would not sweep after recalling a setup with calibration or after a power cycle.

What will the customer see in this release?

Product : S820E

Application Package: V3.30

Release Date : Quarterly Release October 2018

Information below may not apply to every model/option in Product list

*** NEW FEATURES ***

-> Software - S820E

[SNC-923] Added S820E support for Rosenberger cal kits with the 4.3-10 connectors.

What will the customer see in this release?

Product : S820E

Application Package: V3.10

Release Date : Quarterly Release beginning April 2018

*** NEW FEATURES ***

-> Software - S820E

[SNC-912] Adds a dialog prompting the user to disconnect the external DC supply during a firmware update when the core version of the FPGA changes as the result of the update.

Note that firmware versions prior to V3.10 will not have the prompt to disconnect the external DC power supply. When updating from a version prior to V3.10, the user will be required to remove all power to the unit in order for the FPGA changes to take effect. In most cases, this means simply disconnecting the external DC supply and power off the unit, but in some cases, removing and reinstalling the battery may also be necessary.

What will the customer see in this release?

Product : S820E

Application Package: V3.00

Release Date : Quarterly Release beginning January 2018

Information below may not apply to every model/option in Product list

*** NEW FEATURES ***

-> Software

[SNC-884] Includes new FPGA firmware to support latest hardware changes.

What will the customer see in this release?

Product : S331L, S820E

Application Package: V2.90

Release Date : Quarterly Release beginning October 2017

Information below may not apply to every model/option in Product list

*** NEW FEATURES ***

-> Software

[SNC-842] Added support for High and Low RF Immunity.

Added support for option 101 - Chinese only language.

*** BUG FIXES ***

-> Software

[SNC-826] Fixed an issue which caused the application to stop responding when multiple save operations were executed in quick sequence.
Removed non-functional menu bar items (Restore, Size, Maximum, and Move).

What will the customer see in this release?

Product : S820E

Application Package: V2.81

Release Date : Quarterly Release beginning July 2017

Information below may not apply to every model/option in Product list

*** BUG FIXES ***

-> Software - S820E

[SNC-838] Fixed an issue where the power button could become non-responsive if pressed repeatedly after plugging in external supply.

What will the customer see in this release?

Product : S331L, S820E

Application Package: V2.80

Release Date : Quarterly Release beginning July 2017

Information below may not apply to every model/option in Product list

*** NEW FEATURES ***

-> Software - S331P

[SNC-814] Enhanced DTF Return Loss Measurements by using the center frequency of the sweep, instead of the stop frequency, to determine the Cable Loss value from the Cable List selection.

-> Software - S331L

[SNC-814] Enhanced DTF Return Loss Measurements by using the center frequency of the sweep, instead of the stop frequency, to determine the Cable Loss value from the Cable List selection.

-> Software - S820E

[SNC-814] Enhanced DTF Return Loss Measurements by using the center frequency of the sweep, instead of the stop frequency, to determine the Cable Loss value from the Cable List selection.

*** BUG FIXES ***

-> Software - S820E

[SNC-783] Fixed an issue where the status bar at the bottom of the Save dialog would be clipped when the 'Filetype' button is activated.

-> Software

[SNC-783] Fixed an issue where the status bar at the bottom of the Save dialog would be clipped when the 'Filetype' button is activated.

What will the customer see in this release?

Product : S331L, S820E

Application Package: V2.70

Release Date : Quarterly Release beginning April 2017

Information below may not apply to every model/option in Product list

*** BUG FIXES ***

-> Software - S331P

[SNC-812] Fixes issue where the Save/Recall dialog keypad would change to Korean characters when the language setting was changed to Korean. Desired behavior is to have the keypad characters remain in English when the language is changed to Korean.

-> Software - S331L

[SNC-486] Resolved an issue when using the 'Previous Step' function in the calibration dialog that prevented the calibration process from being restarted.

[SNC-812] Fixes issue where the Save/Recall dialog keypad would change to Korean characters when the language setting was changed to Korean. Desired behavior is to have the keypad characters remain in English when the language is changed to Korean.

-> Software - S820E

[SNC-486] Resolved an issue when using the 'Previous Step' function in the calibration dialog that prevented the calibration process from being restarted.

[SNC-812] Fixes issue where the Save/Recall dialog keypad would change to Korean characters when the language setting was changed to Korean. Desired behavior is to have the keypad characters remain in English when the language is changed to Korean.

What will the customer see in this release?

Product : S820E

Application Package: V2.60

Release Date : Quarterly Release beginning January 2016

*** BUG FIXES ***

-> Software - S820E

[SNC-662] Fixed an issue in VNA mode where the saved S2P file would not contain all the sweep points if the calibration had been turned off and the number of points in the sweep was modified.

[SNC-758] Fixed an issue which caused VVM mode to not start measuring when first entering this mode.

[SNC-764] Fixed an issue where the message An Unexpected Error has occurred...." was displayed upon boot-up when the instrument was previously shut down with the Start and Stop frequencies equal and an enabled marker set outside this Start/Stop frequency range."

What will the customer see in this release?

Product : S820E

Application Package: V2.50

Release Date : Quarterly Release beginning October 2016

*** IMPROVEMENTS ***

-> Updates are for internal production use only.

What will the customer see in this release?

Product : S820E

Application Package: V2.40

Release Date : Quarterly Release beginning July 2016

*** NEW FEATURES ***

-> Software - S820E

[SNC-506] Added support for new G0306B Visual Inspection Probe (VIP), including the new 65 deg tip.

*** IMPROVEMENTS ***

-> Software - S820E

[SNC-502] Expanded the number of User Cal kits from 4 to 10.

[SNC-503] Added the capability to enter Thru Offset values for user cal kits. The values can be entered in either units of distance or time.

*** BUG FIXES ***

-> Software - S820E

[SNC-486] Resolved an issue when using the 'Previous Step' function in the calibration dialog that prevented the calibration process from being restarted.

[SNC-510] Addressed an issue in the VIP app that caused the instrument to use an older captured image when the Analyze button is selected directly from Live mode. The Analyze button should prompt the user to Capture the image but in some cases it bypassed the prompt and used an older image.

[SNC-511] Resolved issue that caused cal kit port settings to reset to default when the Thru Device was set (in the Cal Setup dialog).

What will the customer see in this release?

Product : S820E

Application Package: V2.30

Release Date : April 28, 2016

*** NEW FEATURES ***

General [2]

- Updated the S820E instrument installed Users Guide and FAQ files to Revision J.
- Added support for option 101, Chinese language only.

*** ENHANCEMENTS ***

Cable and Antenna Analyzer [1]

- Added the ability to select IFBW of 2kHz with SCPI command ":SENSe:SWEep:IFBW".

Vector Network Analyzer [1]

- Added the ability to select IFBW of 2kHz with SCPI command ":SENSe:SWEep:IFBW".

Vector Volt Meter [1]

- Added the ability to select IFBW of 2kHz with SCPI command ":SENSe:SWEep:IFBW".

*** BUG FIXES ***

General [2]

- Fixed an issue by correcting the SCPI syntax/comments to match the printed documentation.
- Fixed problem where changing the propagation velocity and cable loss would change the cable name, even though the new value is the same value as the current one. #23654

Vector Network Analyzer [2]

- Fixed an issue in unwrap phase graph where use of the rotary knob in negative phase area did not increment or decrement the reference value properly. #23193
- Fixed an issue with auto scale where it did not scale correctly for a fairly flat line. #23206

Cable and Antenna Analyzer [5]

- Fixed an intermittent issue that would cause trace math to stop working after a copy trace to memory operation. #23271
- Fixed an issue that prevented measurement from saving under the following unique conditions: trace 1 set to Return Loss and trace 2 set to DTF Return Loss and Marker 1 was set before Marker 2 on trace 2. #23625
- Fixed an issue where the ":CALCulate:LIMit:TYPE" SCPI command was setting the upper limit active when lower was specified (and vice versa). #23276
- Fixed an issue where the delta marker readout could show the imaginary readout to be 0.
- Fixed an issue where the DTF Aid Stop Distance header for the parameter entry was showing as Start Distance. #23743

Visual Inspection Probe [1]

- Fixed an issue where the VIP analysis overlay was missing when Auto-Analysis was enabled. #23545

What will the customer see in this release?

Product : S820E

Application Package: V1.18

Release Date : January 20, 2016

*** NEW FEATURES ***

General [1]

- Added "AutoAdvance" feature to easyTest®.

*** ENHANCEMENTS ***

Vector Network Analyzer [1]

- Added SCPI command ":CALCulate:LIMit:TYPE 0|1" for setting active limit type.

Cable and Antenna Analyzer [1]

- Added SCPI command ":CALCulate:LIMit:TYPE 0|1" for setting active limit type.

*** BUG FIXES ***

General [4]

- Fixed an issue where creating a menu shortcut also activated the shortcut. #23283
- Fixed an issue where recalling a setup and continuously clicking on the menu shortcut to recall another setup while the first setup had not completed caused an application error. #23223
- Fixed an issue where the USB stick transfer rate was slower than normal.
- Fixed an issue with the application icon of the menu shortcut or mode selector being displayed partially.

Vector Network Analyzer [2]

- Fixed an issue where changing to VSWR after recalling a setup with marker outside of display range would cause an application error. #23243
- Fixed an issue with sweep being slow when booting up in VIP or HiPM applications and then switching to VNA, CAA, or Classic CAA mode. #13789

High Accuracy Power Meter [1]

- Fixed an issue with power sensors not being recognized after bootup in VIP mode and then switching to HiPM mode. #23305

Cable and Antenna Analyzer [2]

- Fixed an issue where changing to VSWR after recalling a setup with marker outside of display range would cause an application error. #23243
- Fixed an issue with sweep being slow when booting up in VIP or HiPM applications and then switching to VNA, CAA, or Classic CAA mode. #13789

Visual Inspection Probe [2]

- Fixed an issue where the VIP probe's live update would hang intermittently.
 - Fixed an issue with VIP Analysis incorrectly passing defects in the "SM PC > 45" and "SM APC" profiles.
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S820E Application Package: V1.17 (10-16-2015)

*** NEW FEATURES ***

Cable and Antenna Analyzer [1]

- Added Interpolation for S820E CAA mode.

Visual Inspection Probe [1]

- Added new VIP Mode to support measurements using external USB optical Video Inspection Probe.

*** ENHANCEMENTS ***

General [2]

- Improved the marker update efficiency.

- Updated Marker Table formatting for improved readability.

Vector Network Analyzer [1]

- Updated the instrument installed Users Guide and FAQ files to Revision D.

High Accuracy Power Meter [1]

- Improved the external behavior of the PSN50 and MA24106A external sensors.

*** BUG FIXES ***

General [4]

- Fixed an intermittent issue with the external trigger Run/Hold status.
- Fixed an issue preventing selection of 1MHz as the start frequency for the SC8268 external sensor while connected to a S820E. #23062
- Fixed an issue where the active marker would automatically change in a recalled setup. #23055
- Fixed an issue where the GUI looked like it was freezing when changing the data points via SCPI command after calibration. #23218

Vector Network Analyzer [3]

- Fixed an issue with a marker out of range, and added a user message.
- Fixed an issue with marker position when changing measurement displays from Distance to Frequency views.
- Fixed an issue with the Calibration turning Off message when changing source power.

High Accuracy Power Meter [2]

- Fixed an issue where the sweep slowed down when switching from HiPM mode to CAA mode with Transmission Ext. Sensor #22825
- Fixed an issue with the measurement rate changing when you disconnect and then reconnect an external MA24106A sensor.

Cable and Antenna Analyzer [2]

- Fixed an issue where setting up or recalling a setup where two markers and a third tracking marker were all off screen resulted in an application error. #23055
- Fixed an issue with marker value inconsistency in Hold mode. #23068

Vector Volt Meter [1]

- Fixed an issue where switching from Cable and Antenna Analyzer to Vector Volt Meter could potentially display incorrect calibration step.
-

S820E Application Package: V1.16 (6-26-2015)

General Features

- Updated automatic screenshot file names to include a timestamp.
- Resolved an issue that caused the memory trace to not be recalled correctly under certain conditions.
- Added the capability to Move a file/folder in file management (instead of just copying it).
- Resolved an issue where the boot-up slide show was not updating correctly.
- Resolved an issue where the external frequency reference indicator could say "External" even after a reference was removed.
- Resolved an issue where the external frequency reference connection could get lost right after a connection is made.
- Resolved an issue where a user can get stuck in the Edit Segment Table.
- Updated Limit Line State to include a Single-type limit line, in addition to Segmented.
- Resolved an issue in the averaging count, which caused the count to increment more frequently and stop at the wrong number.

Cable & Antenna Analyzer Application

- Added a Thru Update menu that will be available if a calibration with a Thru step was performed.
- Resolved an issue that caused a command error when sending a SCPI command after booting up in Classic mode.
- Resolved an issue that caused the application to crash when the TRES calibration was performed when the graph type was not set to Transmission using External Sensor.
- Resolved an issue which caused the zeroing step of the Transmission using External Sensor cal to not update the progress to the user.
- Resolved an issue which caused the calibration dialog to show incorrect steps and pictures when trying to start a calibration for the Transmission using External Sensor measurement.

Vector Volt Meter Application

- Added a new measurement type: Unwrapped Phase
- Resolved an issue which caused an application error to occur when the cal line was changed from waveguide to coax.
- Resolved an issue which caused the maximize icon to not be present when the trace format was set to single.
- Resolved an issue which caused the number of overlaid traces displayed to be incorrect if the instrument was shut down with a 2-trace overlay setup.
- Resolved an issue which caused the limit line values to not get set correctly when the measurement domain was changed from frequency to distance.
- Resolved an issue which caused the active trace not to be set correctly when the active trace was changed with the display in Maximize mode.
- Resolved an issue which caused the grid line to be displayed as two lines when a group delay measurement was overlaid on another rectilinear chart and the active trace was switched.

- Added support for the MA24208A and MA24218A USB power sensors.

[illegible]

S820E Application Package: V1.13 (4-6-2015)

- Added External Trigger Capability, available in VNA and Advanced Cable & Antenna Analyzer modes.
- Improved overall Gui responsiveness in several areas, including displays with multiple traces, sweeps with large point count, and during DTF calculations.
- Improved the readability of the Hold status indicator, which is now bold and red.
- Resolved an issue that caused the axis labels to not be visible when the instrument booted up with daytime color scheme.
- Resolved an issue that was causing the system parameters to get reset to default values after a firmware update.

- Increased maximum distance allowed in DTF from 1500 m to 100000 m.
- Resolved an issue with boundary tracking marker that caused the target marker position to exceed the boundry, under certain conditions.
- Added sweep trigger type to the status info column under Run/Hold.

- Increased maximum distance allowed in DTF from 1500 m to 100000 m.
- Resolved an issue that caused the calibration status to be turned off when the current temperature was outside the calibration temperature window - now the Calibration will remain on but the status will change from "OK" to "X".
- Resolved an issue, seen after mode switching, where the display of the active trace does not match with the active trace indicator in the status information column.
- Resolved an issue, seen after mode switching followed by a preset, where setting the S-Parameter and Domain for the active trace (when it was not TR1) would change the settings for TR1 instead.
- Resolved an issue where the parameter entry window for the data point remains open when the value entered is set greater than 2147363837.

- Resolved an issue that was causing the frequency parameter on the left side status column to not be initialized when switching modes.

[illegible]

- Improved beep tone when limit alarm is active. Now delivers clearly audible chirp sound when failing
- Added beep tone during calibration. Signifies user when each calibration step has completed
- Improved trace sweep indicator. Now much easier to see in all modes

High Accuracy Power Meter Application

- No changes

[illegible]

S820E Application Package: V1.06 (09-03-2014)

General Features

- Added a setting to allow the user to adjust the delay before the display brightness is dimmed.
- Updated User Guide in Help menu to revision C.

Cable & Antenna Analyzer Application

- Added support for dual limit lines (upper and lower) in advanced mode.
- Added support for Segmented Limit Lines in advanced mode.
- Added tracking marker feature to allow automatic tracking of Peak/Valley search functions.
- Added support for sweep averaging function.
- Improved high level noise and sweep speed of transmission measurements using MA series external USB sensors.
- Added warning message when user frequency settings exceed range of external USB sensor during transmission measurements.
- Resolved an issue causing the delta marker entry to be in absolute frequency instead of relative frequency.
- Resolved an issue causing the Cal Type: TRES (Transmission with External Sensor) to fail when the Cal Line was set to Waveguide.
- Resolved an issue causing the Smith Chart Trace Math function to behave differently depending on when the trace math function was executed.

High Accuracy Power Meter Application

- No changes

[illegible]

S820E Application Package: V1.04 (03-13-2014)

General Features

- Added support for setting a Static IP Address
- Added support for programming the FPGA during the firmware update process.
- Updated User Guide in Help menu to revision B
- Resolved an issue causing the power supplies and Fan to remain on while in Standby mode, causing the battery to drain quickly in that mode.

Cable & Antenna Analyzer Application

- Resolved an issue causing the instrument to not perform a soft shutdown while in Transmission (Ext. Sensor) mode.
- Resolved an issue causing the instrument GUI to possibly stop responding when initiating a calibration for Transmission (Ext. Sensor) mode.
- Resolved an issue that was causing the instrument GUI to possibly stop responding when switching modes while trace math is applied.
- Resolved issue causing the instrument to stop responding if a cal kit selection was changed (via SCPI) in the middle of the calibration process.

High ACcuracy Power Meter Application

====S820E Application Package: V1.00 (01-10-2014)

- Initial Release

- Initial Release

- Initial Release

[illegible]