

E5045A, E5046A, E5047A PN3 Signal Source Analyzer

Note: Allow at least 10 minutes to perform the update. For further information refer to the E5045A PN3, E5046A PN3, E5047A PN3 Signal Source Analyzer User's Manual. Updating and downgrading are supported for E504XA and APPH devices. Do not upgrade prealg4 devices with the firmware distributed on keysight.com. Doing so will render the device unusable. This concerns APPH devices only. Please contact support@keysight.com if you need to upgrade.

Software Version 1.1.3

Release Date:	October 6, 2025
File Name:	E504XA_update_1.1.3.tar

Known Issues or Special Considerations

- Update is recommended for E504xA devices with serial number `***-*****[G-H]**-****` if an older firmware version is currently installed.

New Features and Enhancements

- **Adjusted Reference Output Power Level for Improved Phase Noise Sensitivity**
The reference output power level has been recalibrated to enhance the system's sensitivity to phase noise and to protect the system from excessive power situations.
- **Additional Correction Tables for Better Calibration Tracking**
New correction tables have been integrated into the calibration routine to improve measurement reliability and extend support possibilities.
- **Additive Phase Noise Measurement Mode Added to ATE Set**
The additive phase noise mode has been added to the Automated Test Equipment (ATE) suite, enabling direct evaluation of additive phase noise via SCPI commands

- **Transient Measurement Mode Added to ATE Set**
The transient mode has been added to the Automated Test Equipment (ATE) suite, enabling direct transient analysis via SCPI commands.
- **Improve Locking Reliability of Absolute Phase Noise Measurements in ATE**
The locking reliability has been improved by adjusting the parameter determination method and lock detection algorithm.

Defect Fixes

- **Close Frequency Gap for External Reference Port with IS_4 Boards**
The frequency threshold between the external reference ports LOW/HIGH was adjusted to 2GHz to fix a frequency gap between 0.9-2GHz.

Software Version 1.1.2

Release Date:	January 24, 2025
File Name:	E504XA_update_1.1.2.tar

Known Issues or Special Considerations

N/A

New Features and Enhancements

- Support for new hardware platform (HW-Nr: ***_*****H**_****)

Defect Fixes

- Fix pulsed measurement locking
- Bugfixes for ATE locking

Software Version 1.1.1

Release Date:	December 13, 2024
File Name:	AP504XA_update_1.1.1.tar

Known Issues or Special Considerations

N/A

New Features and Enhancements

- mDNS support

Software Version 1.1.0

Release Date:	November 29, 2024
File Name:	E504XA_update_1.1.0.tar

Known Issues or Special Considerations

N/A

New Features and Enhancements

- Keysight rebranding

Software Version 1.0.4

Release Date:	October 1, 2024
File Name:	APPH_update_1.0.4.tar

Known Issues or Special Considerations

N/A

New Features and Enhancements

- improve ATE locking stability

Defect Fixes

- fix locking issue at 1.2 GHz
- fix license read out for APPH gen2 devices

Software Version 0.4.181

Release Date:	October 17, 2023
File Name:	APPH_update_0.4.181.tar

Known Issues or Special Considerations

N/A

New Features and Enhancements

- Support of new hardware platform
- Support for dual down converter box
- Compatibility with APPH GUI v1.3.22

Software Version 0.4.180

Release Date:	July 6, 2023
File Name:	APPH_update_0.4.180.tar

Known Issues or Special Considerations

N/A

New Features and Enhancements

N/A

Defect Fixes

- various bugfixes

Software Version 0.4.179

Release Date:	December 21, 2022
File Name:	APPH_update_0.4.179.tar

Known Issues or Special Considerations

N/A

New Features and Enhancements

- adjustment for absolute phase noise - high drift mode

Software Version 0.4.177

Release Date:	July 20, 2022
File Name:	APPH_update_0.4.177.tar

Known Issues or Special Considerations

N/A

New Features and Enhancements

- improve PN performance at high frequencies
- support for external down conversion