R&S®NRPV Virtual Power Meter Release Notes

Software Version 4.24.1

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The software makes use of several valuable open source software packages. For information, see the "Open Source Acknowledgment" provided with the product.
The following abbreviations are used throughout this document: R&S®NRPV is abbreviated as R&SNRPV.

PAD-T-M: 3574.3288.02/07.00/CV1/EN

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Contents

1 Information on the current version and history

General information

This document describes the installation procedure for the R&S®NRPV Virtual Power Meter Software. It furthermore describes the differences between the several software versions. The most current version of the application can be obtained from **www.rohde-schwarz.com**.

1.1 Version 4.24.1

Released: September 2024

Changes

- Added support for waveguide power sensors NRPxxTWG(N)
- Added support for diode power sensors NRPxxE

Fixes

- Fixed some smaller GUI issues

1.2 Version 3.23

Released: September 2023

Changes

- Added support for new high frequency NRPxxS[N] power sensors
- Added support for new NRP18P, NRP40P and NRP50P wideband power sensors
- Added Droop display in Pulse Measurements for sensors which support Droop (currently the NRPxxP series)
- If R&S VISA is used for sensor communication, the NRPV now requires R&S VISA v7.2.1 or higher

Fixes

- Fixed issues with sensor recognition in conjunction with R&S VISA v5.12 and above. If R&S VISA is to be used, this NRPV release absolutely requires R&S VISA v7.2.1 or higher
- Fixed some smaller GUI issues

1.3 Version 3.2

Released: September 2017

Changes

- Added support for new NRPxxS[N], NRPxxT[N] and NRPxxA[N] series power sensors. Communication with these sensors is via VISA only
- Added VISA Sensor Configuration dialog
- Since VISA environment does not provide a hot-plug system, connecting and disconnecting of VISA sensors during active measurements is not supported anymore. USB hot-plugging is still supported for NRP Legacy sensors, as long as no VISA sensor is configured for use. If at least 1 VISA sensor is configured, any running measurement is stopped in case of a plug or unplug event of **any** sensor
- Implemented “Find USB Sensors” for sensors under VISA communication
- Added “Sensor is in use” notification when trying to initialize a sensor which is already opened in another application

Fixes

- Fixed Timeslot measurement mode with VISA sensors
- Fixed “sensor name not being assigned” in numerical measurement window
- Smoothing is selectable now for sensors which provide that feature
- Fixed crash when unplugging a legacy sensor while 4 measurement windows were open
- Fixed trigger setting dialog for VISA sensors. Trigger level for VISA sensors are adjustable now during an active measurement
- Fixed S-Parameter handling
- Fixed layout of various settings dialogs

Fixed display unit ‘Δ%’

1.4 Version 2.5

Released: November 2016

Maintenance Release

Fixes

- Fixed window update/refresh issues
- Fixed issue when double-clicking vertical splitter-bar to hide/show right function panel
- Fixed issues with window resize
- Fixed problem that Splash screen won't disappear
- Fixed loosing 'View' information after click on [Apply] button when defining Math channels in Numerical Measurement modes
- Fixed program crash when un-plugging a sensor directly before closing the NRPV application
- Fixed broken up/down spin-buttons for Average Count settings in measurement configuration dialogs

1.5 Version 2.1

Released: August 2016

Changes

- Ported application to Unicode environment, using a current compiler (VS2015)
- Fixed font-rendering in numerical measurement panels
- Fixed display of measurement results directly after program start. When unit Watt was selected the program used to display the absolute power value instead of signed power value

1.6 Version 1.8.1

Released: January 2016

Changes

- Fixed infinite recursion when setting the upper limit of an offset-table as actual measurement frequency
- Digitally signed installer

1.7 Version 1.8.0

Released: June 2015

Changes

- Fixed handling of file change notification reload mechanism
- Fixed issue of changes in offset-files are not recognized after loading
- Fixed issue of unsent parameter to sensor when changing trigger from auto to normal
- Added ‘Save Data’ function in Trace context-menu to save data to CSV files
- Enhanced ‘Task-file-was-modified’ recognition
- Increasing resolution of recording data depending on selected resolution unit
- New Trigger Master/Slave dialog and handling
- Deactivated Trigger Master Submenu
- Considering Fence on/off switch when setting timeslot fence timing parameters
- Supporting new NRPxxS[N] series power sensors

1.8 Version 1.6.5

Released: July 2014

Changes

- Refrain from sending commands to sensors which do not support them
- Considering Fence on/off setting in Timeslot mode

1.9 Version 1.6.2

Released: August 2013

Changes

- Added 'Save Data' function in Trace measurement for exporting Trace data to CSV files
- Added an entry in the 'File' menu to open NRPV data folder in an explorer window
- Added possibility to enlarge result fields of Trace Markers (also known as 'zoomed out result display' [see NRPV user-manual chapter 5.1.1.1])

Known issues

- Display unit '%' should read 'Δ%'

1.10 Version 1.6.0

Released: June 2013

Changes

- Added data recorder for numerical measurements
- Marker capable of searching -3 dB point also in linear (Watt) scaling
- Fixed scaling/auto-scaling in linear and logarithmic trace display
- Fixed missing storage of certain settings in taskfiles (MaxHold in Trace mode; DisplayUnit in ContAV mode)
- Corrections in documentation/user manual

Known issues

- Display unit '%' should read 'Δ%'

1.11 Version 1.4.0

Released: May 2012

Changes

- Fixed display of Statistics graph (‘0.0’ values have been shown incorrectly)
- While writing an NRPZ-K1 license into a sensor a busy window is displayed to prevent the user from disconnecting the sensor before the write operation is finished
- Licensing dialog sometimes displayed an old device ID for activation of an unregistered license for a given sensor. This has been fixed.
- Entering temporary activation key gives a grace period of 2 hours for unlicensed sensors (instead of formerly 1 hour)
- Handling of Triggered/Trigger Waiting symbols in single-triggered Trace mode fixed
- Fixed Averaging Off state for sensors which support Realtime-mode
- Installer now also creates an uninstall option in NRPV program group
- Fixed ‘Next Peak’ calculation in Trace mode
- Added ‘Print’ functions to all measurement modes
- Added ‘Copy To Clipboard’ functions to all measurement modes
- Fixed installer’s splash screen position
- Added a check to the installer whether the NRP-Toolkit driver package has already been installed

Known issues

- Display unit ‘%’ should read ‘Δ%’

1.12 Version 1.2.0

Released: April 2011

Initial Release

Known issues

- Occasionally the drawing of a new trace result is delayed by up to 0.1 second
- While processing NRPZ-K1 license for a sensor no hourglass is shown
- System shutdown closes all measurement windows before taskfile becomes saved

2 Modifications to the documentation

The current documentation is up-to-date.

3 Firmware update

3.1 Validity information

3.2 Update information

This section describes the installation of the NRPV software on a Microsoft® Windows based PC. Additionally, the section contains information on the software packages, prerequisites and uninstalling.

Prerequisites

- It is recommended that you use the latest version of the NRPV software, provided at the R&S website http://www.rohde-schwarz.com
- Close all running applications before installing
- The driver-suite for R&S® NRP-Zxx series and R&S® NRPxxS[N] series of USB power sensors needs to be installed for being able to communicate with the power sensors. This package is called NRP-Toolkit. It can be installed before or after the installation of the NRPV software. NRP-Toolkit can be obtained from the R&S website http://www.rohde-schwarz.com/en/software/nrp_s_sn/

3.3 Updating the firmware

NRPV requires at least 50 MB of free disk space.

1. Download or copy the latest version of NRPV setup program from the R&S website http://www.rohde-schwarz.com. At the time of this writing, version 2.5.0 was current.
2. Execute `NRPV_SetupV`**`Error! Unknown document property name.`**`.0.exe`,
   and follow the instructions of the setup wizard.

During installation, the setup program:

- installs the "Microsoft VC Runtime libraries", which may take some time
- provides selection of the destination directories for the NRPV application files and user manual
- checks whether a reasonably new NRP-Toolkit is installed on the PC and informs the user if an action is required to update or install the NRP-Toolkit

3.3.1 Uninstalling NRPV

Uninstall a version of NRPV with the aid of the PC´s control panel:

1. "Start > Settings > Control Panel" in the windows task bar and then open the "Add or Remove Programs" dialog.
2. Select NRPV **Virtual Power Meter V2.x.y** and uninstall the program with "Remove" (x.y represents the version/subversion).

4 Customer support

Technical support – where and when you need it

For quick, expert help with any Rohde & Schwarz product, contact our customer support center. A team of highly qualified engineers provides support and works with you to find a solution to your query on any aspect of the operation, programming or applications of Rohde & Schwarz products.

Contact information

Contact our customer support center at www.rohde-schwarz.com/support or follow this QR code:

Figure 4-1: QR code to the Rohde & Schwarz support page