

LabVIEW driver history for the R&S® ZNL / ZNLE Vector Network Analyzers

Products:

| [R&S®ZNL / ZNLE](#)



Contents

1	Supported Instruments.....	3
2	Revision History.....	3
2.1	1.70.1 / 04 – 2023	3
2.2	1.70.0 / 05 – 2023	3
2.3	1.61.0 / 09 – 2022	4
2.4	1.40.0 / 01 – 2022	5
2.5	Version 1.0.0 / 08 - 2018	6
3	Installation of the LabVIEW driver	7
3.1	Installation on a Windows machine.....	7
3.2	Installation on a non-Windows machine.....	7
4	Customer support	8

1 Supported Instruments

In the following table, the supported R&S instruments and firmware versions are listed:

Which instruments are supported?		
Instrument	Supported Firmware	Remarks
ZNL / ZNLE	1.70	

2 Revision History

2.1 1.70.1 / 04 – 2023

* New core 7.10.0

* New:

- Synchronize Dynamic Repeated Capability.vi
- OPC Sync Write Enable
- OPC Sync Query Enable.vi
- OPC Sync Query Mechanism.vi

* Updated:

- Fixed Query Current Reference Type.vi
- Data Instrument Settings Recall.vi - added call to SynchronizeDynamicRepeatedCapability.vi

* Deleted:

- RSZNL_ATTR_GENERAL_CURRENT_REFERENCE_TYPE

2.2 1.70.0 / 05 – 2023

* Update for ZNL FW 1.70

* New Core 7.5.0

* New:

- Validation (Class)
- Power Calibration Settings (Class)
- Configure Stimulus Power Sweep Start Stop.vi
- Configure Stimulus Source Power Linear Factor.vi
- Configure Stimulus RF Source Enabled.vi
- Trace Copy.vi
- Configure Time Gate Link.vi
- Configure Statistics Compression Point State.vi
- Configure Statistics Compression Level.vi
- Configure Statistics Compression Phase.vi
- Query Statistics Compression Result.vi
- Configure Statistics Compression Reference.vi
- Configure Statistics Compression Reference Marker.vi
- Configure Statistics Compression Reference Range.vi
- Configure Statistics Compression Range Start Stop.vi
- Configure Statistics Compression Show Range Enabled.vi

- Configure Statistics Compression Reference Level.vi
- Configure Statistics Compression Reference Phase.vi
- Define Power Meter.vi
- Delete Power Meter.vi
- Configure Power Meter Auto Configure.vi
- Select Power Meter.vi
- Power Calibration Receiver.vi
- Query Power Calibration Label.vi
- Write Calibration Power Data Set.vi
- Read Calibration Power Data Set.vi
- Activate Power Calibration.vi
- Deactivate Power Calibration.vi
- Configure Calibration Validation Limit Check Format.vi
- Configure Calibration Validation Average State.vi
- Run Calibration Validation.vi
- Query Calibration Validation Result.vi
- Calibration Validation Limits Magnitude.vi
- Calibration Validation Limits Phase.vi
- Calibration Validation Limits Real.vi
- Calibration Validation Limits Imaginary.vi
- Restore Default Calibration Validation Limits.vi
- Configure Calibration Validation Characterization.vi
- Configure Calibration Validation Standard.vi
- Configure Items To Store Instrument Calibration Data.vi
- Configure Items To Store Channel Calibration Data.vi
- Configure General Touchstone Export Comment.vi

* Updated:

- Select Calibration Type.vi - Added Star-Shaped Through to Calibration Type

* Deleted:

- Configure Calibration Signal Bandwidth.vi

2.3 1.61.0 / 09 – 2022

* Version 1.61.0

* Update for ZNL FW 1.61

* New:

- Configure Reference Marker Excursion.vi
- Configure Reference Marker Threshold.vi
- Reference Marker Search.vi
- Reference Marker Target Search.vi
- Configure Reference Marker Target Value.vi
- Configure Reference Marker Target Format.vi
- Reference Marker Bandfilter Search.vi
- Configure Reference Marker Tracking.vi
- Configure Reference Marker Search Range.vi
- Configure Reference Marker Search Limit Lines State.vi
- Query Reference Marker Search Results.vi
- Configure Sweep Range To Reference Marker.vi
- Repeat Calibration.vi
- Configure Calibration Temperature Compensation.vi
- Calibration Unknown Through Measurement.vi
- Query All Calibration Submodule Units.vi
- Configure Calibration Unit Characterization.vi
- Join Calibrations.vi
- Are Calibrations Joinable.vi
- Layout Overlay All.vi
- Layout Split All.vi

- Query Limit Effective Points.vi
- Configure Hcopy Print Headers.vi
- Configure Hcopy Print Diagram Area.vi
- Configure Calibration Due Days.vi
- Configure Calibration Due Schedule.vi
- Configure Calibration Due Shutdown.vi
- Configure Calibration Due Time.vi
- Configure Calibration Due Warmup.vi
- Configure Remote Control.vi

* Updated:

- Query Marker Search Results.vi - Stimulus output change to array of ViReal64
- Configure Display Date And Time Format.vi - Added ISO to ring

2.4 1.40.0 / 01 – 2022

* Update for ZNL FW 1.40

- New core 7.3.0

* New:

- Multiple Peak (Class)
- Infinite Average (Class)
- Info Window (Class)
- Memory (Class)
- Configure Stimulus Attenuation.vi
- Configure Memory Trace Math Formatted.vi
- Configure VSWR Enabled.vi
- Configure Marker Coupling Type.vi
- Configure Reference Marker Format.vi
- Configure Marker Excursion.vi
- Configure Marker Threshold.vi
- Configure Infinite Average.vi
- Configure Automatic Calibration.vi
- Correction Discard.vi
- Correction Delete.vi
- Configure Wave Correction Logic Enabled.vi
- Configure Correction Calculate After De-Embed.vi
- Configure Correction Method.vi
- Configure Channel Segment.vi
- Configure One Way Loss At Second Frequency.vi
- Display Trace Label.vi
- Query Layout Catalog.vi
- Configure Display Lock.vi
- Query Limit Fail Sweep Points.vi
- Configure Limit Line Formula.vi
- Configure Limit Line Interpolation.vi
- Data Instrument Settings Recall Mode.vi
- Query Service Function Battery Level.vi
- Password Reset.vi
- Configure System Password.vi

* Updated:

- Configure Trace Format.vi - Format values updated
- Configure Default Marker Format.vi - Format values updated
- Load Calibration Data From Cal Group File.vi - Standard values updated
- Configure Connector.vi - Connector values updated
- Configure Virtual Network Single Ended Data.vi - Interchange values updated
- Configure Virtual Network Balanced Data.vi - Interchange values updated
- Configure Virtual Network Differential Match Data.vi - Interchange values updated
- Data Delete File.vi - help updated
- Hcopy File Format.vi - Format values updated

2.5 Version 1.0.0 / 08 - 2018

* Initial Release

3 Installation of the LabVIEW driver

Before you start the installer, close your LabVIEW application.

3.1 Installation on a Windows machine

The driver is distributed as WinZip self-extracting executable file. Installer supported operation systems: Win7, Win8, Win10.

Preconditions:

- LabVIEW 2015 or newer installed
- Any VISA installed – R&S VISA 5.12.3 or newer / NI VISA 18.0 or newer

When you start the driver WinZip installer, it performs the following steps:

1. Unpacking of the driver's **instr.lib** and **user.lib** directories content as well as the **Installer.vi** into a temporary folder: `C:\temp\rszn1-1v2015-1.70.0`
The driver is compiled in LabVIEW 2015 64-bit. From there you can copy it to another location or run the **Installer.vi** manually later. The content of the temporary folder is not deleted after the installation is finished. Starting the same installation again will overwrite all the data in that temporary folder.
2. After unpacking, the **Installer.vi** automatically starts in the **last opened version of LabVIEW**. In case you have more than one version of LabVIEW installed on your machine, make sure that the last opened LabVIEW version is the one in which you want to install the driver. If that is not the case, cancel the installation, open and close your desired LabVIEW version and run the installer again. You can have the driver installed parallel for more LabVIEW versions by repeating the installation process for each desired version.
3. On the installer options page you can change the location of the **instr.lib** part of the driver. **user.lib** part must be placed in the default location, otherwise the Express VI configuration will not properly function.
Hitting **Next** button will first delete the old driver (if it existed), copy the new driver and mass-compile it.
4. If you have an older rsidr_toolbox, the installer updates it to the last version.
5. The LabVIEW is closed and after starting it again, the driver is ready for use.

3.2 Installation on a non-Windows machine

In case you would like to install the driver on a non-Windows machine, use a Windows machine to start the driver's WinZip self-extracting executable file. **This machine does not need to have LabVIEW installed.**

After the **Step 1** (see the chapter 2.1), copy the content of the temporary folder to your target machine and start the **Installer.vi** manually.

From that point onwards, the installation process is the same as described in Steps 2, 3, 4 and 5.

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:

