

LabVIEW driver history for the R&S® Vector Signal generators

R&S®SMW200A



R&S®SMBV100B



R&S®SMM100A



R&S®SMBV100A



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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
SMW200A	5.10.0	
SMM100A	5.10.0	
SMBV100B	5.0.0	
SMBV100A	4.70	
SGS100A	4.30	Treated as SMW
SGT100A	4.90	Treated as SMW

2 Revision history

Version 5.10.0 / 06 – 2023

- * Updated for the SMW FW version 5.10.xx
- * New core 7.6.0

* New VIs:

- Configure SatNav GNSS RTK Base Location Decimal PZ.vi
- Configure SatNav GNSS RTK Base Location Decimal WGS.vi
- Configure SatNav GNSS RTK Base Location DMS PZ.vi
- Configure SatNav GNSS RTK Base Location DMS WGS.vi
- Configure HUMS Tag Value.vi
- Query HUMS Tag Value.vi

* Updated:

- Configure SatNav GNSS ADG Synchronize.vi - Added Navic to Standard
- Configure SatNav GNSS ADG Reference Frame.vi - Added Navic to Standard
- Configure SatNav GNSS ADG Position Format.vi - Added Navic to Standard
- Configure SatNav GNSS ADG Coordinates Decimal PZ.vi - Added Navic to Standard
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- Configure SatNav GNSS ADG Duration.vi - Added Navic to Standard
- Configure SatNav GNSS ADG Resolution.vi - Added Navic to Standard
- Configure SatNav GNSS ADG SVID Enabled.vi - Added Navic to Standard

See the **rsrfsiggen.chm** file for detailed description.

Version 5.0.0 / 10 – 2022

* Updated for the SMW FW version 5.00.xx

See the **rsrfsiggen.chm** file for detailed description.

Version 4.90.0 / 12 – 2021

* Updated for the SMW FW version 4.90.xx

* New core 7.3.0

See the **rsrfsiggen.chm** file for detailed description.

Version 1.13.0 / 02 – 2021

* Added SMM100A to the list of supported instruments

* Reworked all the front panels to Silver-style

* New Core 6.72.0

* Fixed data types of several HexPattern attributes

Version 1.12.0 / 12 – 2020

* Updated for the SMW FW version 4.80.xx

* New core 6.71.0

See the **rsrfsiggen.chm** file for detailed description.

Version 1.11.0 / 05 – 2020

* Added support for SGS and SGT signal generators. They are treated as an SMW instrument

* New Core 6.60.0

Version 1.10.0 / 01 – 2020

* Updated for the SMW FW version 4.70.xx

- added support for LoRa

Version 1.9.0 / 04 – 2019

* Updated for the SMW FW version 4.50.100.xx

- added support for 5G New Radio

- added support for SatNav GNSS

- added support for DigitalDoherty

- renaming C5G to OFDM

* New VIs:

- User Correction Data Level Values.vi
- Query IQ Envelope Vcc For X.vi
- Configure IQ Output Envelope Tables New.vi
- Configure IQ Output Envelope Tables Data.vi
- Configure IQ Output Envelope Tables Auto New.vi
- Configure IQ Output Envelope Tables Auto Data.vi
- Configure IQ Output Envelope Polynomial Coefficients.vi
- Configure IQ Digital Predistortion DPD Shaping Tables Data.vi
- Configure IQ Digital Predistortion DPD Shaping Tables New File.vi
- Query IQ Digital Predistortion DPD Delta Phase Delta Power For X.vi
- Configure IQ Digital DPD Shaping Polynomial Coefficients.vi
- Configure IQ Digital Predistortion Normalized Data.vi
- Configure IQ Digital Doherty Shaping Tables Data.vi
- Configure IQ Digital Doherty Shaping Tables New File.vi
- Query IQ Digital Doherty Delta Phase Delta Power For X.vi
- Configure IQ Digital Doherty Shaping Polynomial Coefficients.vi
- Configure IQ Digital Doherty Predistortion Normalized Data.vi
- Query GSM User Slot Marker Definition.vi
- Configure EUTRA DL User APM Codebook Index.vi
- Configure SatNav SBAS Region Import Add Directory.vi
- Configure SatNav SBAS Region Import Add File.vi
- Query SatNav SBAS Region Import File Catalog.vi
- Load SatNav SBAS Region Import Files.vi
- Remove SatNav SBAS Region Import All Files.vi
- Remove SatNav SBAS Region Import File.vi
- Recall Instrument Settings.vi
- Save Instrument Settings.vi
- BER Test Gen State.vi
- BER Test Gen Config.vi
- Get BLER Result.vi
- Get BER Result.vi
- Preset.vi

* Updated functions:

- File Catalog.vi - renaming C5G to OFDM, adding 5g NR
- File Settings.vi - renaming C5G to OFDM, adding 5g NR
- Generate Waveform File.vi - renaming C5G to OFDM, adding 5g NR

3 Installation of the LabVIEW driver

Before you start the installer, close your LabVIEW application.

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\rsrfsiggen-lv2015-5.10.0`
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.

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.

To be able to use Rohde & Schwarz **rsrfsiggen** Instrument driver in Linux or macOS, the functioning VISA is required. Check out [R&S VISA](#) for Linux or macOS.

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:

