

LabVIEW driver history for the R&S® CLGD DOCSIS Cable Load Generator

Products:

| R&S® CLGD



Driver history for LabVIEW

Table of Contents

1	Supported Instruments.....	3
2	Installation of the LabVIEW driver	4
2.1	Installation on a Windows machine.....	4
2.2	Installation on a non-Windows machine.....	5
3	LabVIEW driver history.....	6

1 Supported Instruments

In the following table the supported Rohde & Schwarz instruments and firmware versions are listed:

Which instruments are supported?		
Current revision of instrument driver supports these instruments and firmware versions:		
Instrument	Supported Firmware	Remarks
CLGD	1.3.0	

2 Installation of the LabVIEW driver

Before you start the installer, please close your LabVIEW application.

2.1 Installation on a Windows machine

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

Preconditions:

- LabVIEW 2010 or newer installed
- Any VISA installed – R&S VISA 5.5.4 or newer / NI VISA 5.4 or newer

When you start the driver WinZip installer, the following steps are being performed:

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\rscldg-lv-1.3.0**
The driver is compiled in LabVIEW 2010 32-bit. From there you can copy 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 the data in this temporary folder.
2. After unpacking, the **Installer.vi** is automatically started 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 use the driver. If that's not the case, cancel the installation at this point, 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 have a choice to uncheck the **Mass-compiling** option (**not recommended, because of the driver's performance penalty as well as VIs opening times**) and also 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 function.
On this page you also see the actual LabVIEW version.
Hitting **Next** button will first delete the old driver (if it existed), copy the new driver and mass-compile it.
4. The LabVIEW is closed and after starting it again the driver is ready for use.

2.2 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 doesn't need to have LabVIEW installed.**

After the **Step 1** from the previous chapter is finished, 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 the previous chapter Steps 2, 3, and 4

3 LabVIEW driver history

rsclgd Instrument Driver		
Driver history for LabVIEW		
Revision	Date	Note
1.3.0	06/2016	<p>* New:</p> <ul style="list-style-type: none"> * Configure RF Tilt.vi Configure Output PLC Mode.vi Configure Reference Oscillator.vi Set Reference Oscillator Frequency To Default.vi Initiate Trigger.vi Query DOCSIS 3.1 Data Rate.vi Query DOCSIS 3.1 Profile Data Rate.vi Query DOCSIS 3.1 Profile Source Data Source.vi Configure Downstream Trigger.vi Configure OFDMA Wideband Probe Symbol In Frame.vi Query Unit Information.vi Query Unit Hardware Status.vi Bin Data From File To Instrument.vi Bin Data To File From Instrument.vi Clear Status.vi ID Query Response.vi Process All Previous Commands.vi Query OPC.vi <p>* Updated:</p> <ul style="list-style-type: none"> Configure Micro Reflection.vi - SCPI command fixed Query Downstream Channel Configuration.vi - returned data parsing fixed Query Upstream Channel Configuration.vi - returned data parsing fixed Query Channel Configuration.vi - returned data parsing fixed Query Block Configuration.vi - returned data parsing fixed <p>* Deleted VI:</p> <ul style="list-style-type: none"> Query Unit Status.vi - use 'Query Unit Information.vi' and 'Query Unit Hardware Status.vi' <p>* New attributes:</p> <ul style="list-style-type: none"> - Reference Oscillator State (RSCLGD_ATTR_REFERENCE_OSCILLATOR_STATE) - Reference Oscillator Frequency (RSCLGD_ATTR_REFERENCE_OSCILLATOR_FREQUENCY) - Default Reference Oscillator Frequency (RSCLGD_ATTR_DEFAULT_REFERENCE_OSCILLATOR_FREQUENCY) - RF Tilt (RSCLGD_ATTR_RF_TILT) - Output PLC Mode (RSCLGD_ATTR_OUTPUT_PLC_MODE) - Initiate Trigger (RSCLGD_ATTR_INITIATE_TRIGGER) - DOCSIS 3.1 Data Rate (RSCLGD_ATTR_DOCSIS31_DATA_RATE) - DOCSIS 3.1 Profile Data Rate (RSCLGD_ATTR_DOCSIS31_PROFILE_DATA_RATE) - DOCSIS 3.1 Profile Source Data Source (RSCLGD_ATTR_DOCSIS31_PROFILE_SOURCE_DATA_SOURCE)

rsclgd Instrument Driver		
Driver history for LabVIEW		
Revision	Date	Note
		<ul style="list-style-type: none"> - Downstream Trigger Source (RSCLGD_ATTR_DOWNSTREAM_TRIGGER_SOURCE) - Downstream Trigger Edge (RSCLGD_ATTR_DOWNSTREAM_TRIGGER_EDGE) - Downstream Trigger Timing Synchronization (RSCLGD_ATTR_DOWNSTREAM_TRIGGER_TIMING_SYNCHRONIZATION) - Downstream Trigger Timestamp (RSCLGD_ATTR_DOWNSTREAM_TRIGGER_TIMESTAMP) - OFDMA Wideband Probe Symbol In Frame (RSCLGD_ATTR_OFDMA_WPR_SIFRAME) * Modified attributes: <ul style="list-style-type: none"> - Upstream Trigger Edge (RSCLGD_ATTR_UPSTREAM_TRIGGER_EDGE) - SCPI command changed
1.1.0	11/2015	<ul style="list-style-type: none"> * New: <ul style="list-style-type: none"> Configure Reference Source.vi Configure DOCSIS 31 Continuous Pilot.vi Configure DOCSIS 31 Encompassed Spectrum.vi Import Export DOCSIS 31 Advanced Configuration.vi Configure Upstream Waveform.vi Configure Upstream Trigger Logic.vi Configure Upstream Trigger.vi Query Upstream Channel Configuration.vi Configure Waveform File.vi Generate Upstream Arb File.vi Configure HUM Upstream.vi Configure Noise AWGN Upstream.vi Configure Narrowband Interface Upstream.vi Configure Micro Reflection Upstream.vi Configure Base Port.vi Configure WiFi.vi Configure SFP Port.vi Configure A-TDMA Minislot.vi Configure A-TDMA Modulation Type.vi Configure A-TDMA Preamble.vi Configure A-TDMA FEC.vi Configure A-TDMA Scrambler.vi Configure A-TDMA Data Filename.vi Configure S-CDMA Minislot.vi Configure S-CDMA Modulation Type.vi Configure S-CDMA Preamble.vi Configure S-CDMA FEC.vi Configure S-CDMA Framer Spreader.vi Configure S-CDMA Scrambler.vi Configure S-CDMA Data Filename.vi Configure OFDMA Burst Type.vi

rsclgd Instrument Driver		
Driver history for LabVIEW		
Revision	Date	Note
		<p>Configure OFDMA.vi Configure OFDMA Advanced Profiles.vi Configure OFDMA Exclusion Bands.vi Configure OFDMA Data Mode.vi Configure OFDMA Initial Ranging.vi Configure OFDMA Fine Ranging.vi Configure OFDMA Wideband Probe.vi Configure OFDMA Bandwidth Requested Message.vi Configure Phase Noise Upstream.vi Query Phase Noise Level Upstream.vi Configure Phase Noise.vi Query Phase Noise Level.vi</p> <p>* Updated: Configure DOCSIS 31 Profile.vi - Port - remote command changed</p> <p>* Deleted: Configure Tilt Power Difference.vi Configure DOCSIS 30 Profile.vi</p>
1.0.0	05/2015	Initial release

Rohde & Schwarz

The Rohde & Schwarz electronics group offers innovative solutions in the following business fields: test and measurement, broadcast and media, secure communications, cybersecurity, radiomonitoring and radiolocation. Founded more than 80 years ago, this independent company has an extensive sales and service network and is present in more than 70 countries.

The electronics group is among the world market leaders in its established business fields. The company is headquartered in Munich, Germany. It also has regional headquarters in Singapore and Columbia, Maryland, USA, to manage its operations in these regions.

Sustainable product design

- Environmental compatibility and eco-footprint
- Energy efficiency and low emissions
- Longevity and optimized total cost of ownership



Regional contact

Europe, Africa, Middle East

+49 89 4129 12345

customersupport@rohde-schwarz.com

North America

1-888-TEST-RSA (1-888-837-8772)

customer.support@rsa.rohde-schwarz.com

Latin America

+1-410-910-7988

customersupport.la@rohde-schwarz.com

Asia/Pacific

+65 65 13 04 88

customersupport.asia@rohde-schwarz.com

China

+86 800 810 82 28 | +86 400 650 58 96

customersupport.china@rohde-schwarz.com

R&S® is a registered trademark of Rohde & Schwarz GmbH & Co. KG;
Trade names are trademarks of the owners.

Rohde & Schwarz GmbH & Co. KG

Mühlendorfstraße 15 | D - 81671 München

Phone + 49 89 4129 - 0 | Fax + 49 89 4129 - 13777

www.rohde-schwarz.com