LabWindows/CVI, VXIpnp driver history for the R&S® Power Supplies NGL / NGM / NGP / NGU

Products:

- R&S®NGL

- R&S®NGM

- R&S®NGP

- R&S®NGU

Driver history for LabWindows/CVI and VXIplug&play Instrument Driver

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ROHDE&SCHWARZ

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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?		
Current revision of instrument driver supports these instruments and firmware versions:		
Instrument	**Supported Firmware**	**Remarks**
NGL20x	3.034	
NGM20x	3.034	
NGP8xx	2.011	
NGUx01	3.047	First supported firmware

2 Getting Started

2.1 LabWindows/CVI driver

The Rohde & Schwarz **rsngx** Instrument driver can be used in LabWindows/CVI 6 and later. In order to be able to compile an application it is required to add following files to your LabWindows/CVI project:

- *rsngx.c + rsngx.h*
- *rsngx_attributes.c + rsngx_attributes.h*
- *rsngx_utility.c + rsngx_utility.h*
- *rsidr_core.c + rsidr_core.h*
- *rsngx_callbacks.c*
- *rsngx.fp + rsngx.sub*

2.2 VXIplug&play driver in C/C++, LabWindows/CVI

In this case, the compiled source code from LabWindows/CVI driver is used. The compiled ANSI-C libraries exist for Windows XP and newer, 32-bit / 64-bit.

Add the following files to your 32-bit target project:

- C:\Program Files (x86)\IVI Foundation\VISA\WinNT\include\rsngx.h
- C:\Program Files (x86)\IVI Foundation\VISA\WinNT\lib\msc\rsngx.lib (static)
- C:\Program Files (x86)\IVI Foundation\VISA\WinNT\Bin\rsngx_32.dll (dynamic)
- C:\Program Files (x86)\IVI Foundation\VISA\WinNT\rsngx\rsngx.fp (in CVI only)
- C:\Program Files (x86)\IVI Foundation\VISA\WinNT\rsngx\rsngx.sub (in CVI only)

Add the following files to your 64-bit target project:

- C:\Program Files\IVI Foundation\VISA\Win64\Include\rsngx.h
- C:\Program Files\IVI Foundation\VISA\Win64\Lib_x64\msc\rsngx64.lib (static)
- C:\Program Files\IVI Foundation\VISA\Win64\Bin\rsngx_64.dll (dynamic)
- C:\Program Files\IVI Foundation\VISA\Win64\rsngx\rsngx.fp (in CVI only)
- C:\Program Files\IVI Foundation\VISA\Win64\rsngx\rsngx.sub (in CVI only)

2.3 VXIplug&play driver in MATLAB

MATLAB instrument driver **rsngx.mdd** can be found in:

32-bit driver
C:\Program Files (x86)\IVI Foundation\VISA\WinNT\rsngx\rsngx.mdd

64-bit driver
C:\Program Files\IVI Foundation\VISA\Win64\rsngx\rsngx.mdd

For detailed description on how to use the driver in MATLAB please refer to the Application Note 1MA171 - How to use R&S instrument in MATLAB

2.4 Linux and Mac OS X

To be able to use Rohde & Schwarz **rsngx** Instrument driver in Linux or Mac OSX, the functioning VISA is required. Then, the process is the same as using LabWindows/CVI driver.

2.5 Additional Help

LabWindows/CVI and VXIplug&play instrument driver contains in addition the instrument driver documentation in compressed HTML format (Windows CHM help file **rsngx_vxi.chm**) and stored together with the driver sources or in the following folder:

32-bit driver
C:\Program Files (x86)\IVI Foundation\VISA\WinNT\rsngx\rsngx_vxi.chm

64-bit driver
C:\Program Files\IVI Foundation\VISA\Win64\rsngx\rsngx_vxi.chm

3 LabWindows/CVI and VXIplug&play driver history

rsngx Instrument Driver		
Driver history for LabWindows/CVI and VXIplug&play Instrument Driver for C/C++, VEE, etc.		
Revision	Date	Note
1.3.0	03/2021	* Added support for new instrument NGU * Update for firmware version 3.0 * New core 3.13.0 * New: - rsngx_ConfigureVoltageCurrentNegative - rsngx_ConfigureVoltageNegative - rsngx_ConfigureSourcePriorityMode - rsngx_ConfigureNumberOfPowerLineCycles - rsngx_ConfigureModulationGain - rsngx_QueryMeasurementDataDVM - rsngx_ConfigureEnergyCounterUnit - rsngx_QueryMeasurementStatisticsDataAll - rsngx_ConfigureFastLogTarget - rsngx_ConfigureArbitraryControl - rsngx_ConfigureDigitalIOFaultSignal - rsngx_ConfigureDigitalIOOutputSignal - rsngx_ConfigureBatterySimulatorLimits - rsngx_ConfigureBatteryModelLimits - rsngx_ConfigureInterfaceUSBClass * Updated: - rsngx_ConfigureFastLogSettings - sample rate - rsngx_ConfigureDigitalIOFault - source mode - rsngx_ConfigureTriggerSettings - Output channel
1.2.0	03/2020	* Added support for new instrument NGP800 * Update for firmware version 2.0 * New core 3.7.0 * New: - Tracking (Class) - Block (Class) - Analog Input (Class) - Adjustment (Class) - Digital Trigger IO (Class) - Communications (Class) - Sound (Class)

rsngx Instrument Driver		
Driver history for LabWindows/CVI and VXIplug&play Instrument Driver for C/C++, VEE, etc.		
Revision	Date	Note
		- rsngx_ConfigureOutputRemoteSenseDetection - rsngx_QueryOutputRemoteSenseDetection - rsngx_ResetOCP - rsngx_ConfigureOCPFuse - rsngx_ConfigureOCPFuseInitialDelay - rsngx_ConfigureOCPFuseLinking - rsngx_QueryOCPLinkedFusesList - rsngx_QueryOCPFuseTripped - rsngx_ResetOCPFuse - rsngx_ResetProtectionTrippedState - rsngx_ConfigureLogLocation - rsngx_ConfigureSystemTouchEnabled - rsngx_ConfigureSoundBeeperSettings - rsngx_GetSoundBeep * Updated: - rsngx_QueryMeasurementStatisticsData - Help updated
1.1.0	07/2019	* Update for firmware version 2.0 * New core 3.6.1 * Added support for Fast Log, Digital I/O and Battery Simulator subsystems. * New: - rsngx_ConfigureOutputMode - rsngx_ConfigureOutputTriggerSettings - rsngx_ConfigureDVMMeasurementSettings - rsngx_QueryMeasurementStatisticsData - rsngx_ResetMeasurementStatistics - rsngx_QueryMeasurementCount - rsngx_ConfigureTriggerSettings - rsngx_ConfigureTriggerDIOPin - rsngx_QueryOCPLinking * Modified: - rsngx_ConfigureFuse - Replaced with rsngx_ConfigureOCP - rsngx_ConfigureFuseInitialDelay - Replaced with rsngx_ConfigureOCPInitialDelay - rsngx_ConfigureFuseLinking - Replaced with rsngx_ConfigureOCPLinking - rsngx_QueryFuseTripped - Replaced with rsngx_QueryOCPTripped - rsngx_ConfigureArbitrary - Endpoint removed * Deleted: - rsngx_ConfigureOVPMode - rsngx_ConfigureChannelLoggingEnabled - rsngx_ConfigureImageFormat
1.0.0	02/2019	Initial release

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- Continuous improvement in environmental sustainability
- ISO 14001-certified environmental management system

Certified Quality System
ISO 9001

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