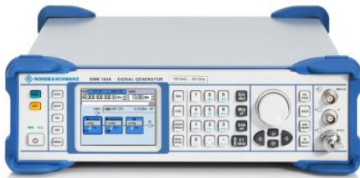


# LabVIEW driver history for the R&S® Signal Generators

## Products:

| R&S®SMB100A



| R&S®SMC100A



Driver history for LabVIEW

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# 1 Supported Instruments

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

<b>Which instruments are supported?</b>		
<b>Current revision of instrument driver supports these instruments and firmware versions:</b>		
<b>Instrument</b>	<b>Supported Firmware</b>	<b>Remarks</b>
SMB100A	3.20	
SMC100A	3.20	

## 2 Getting Started

### 2.1 LabVIEW version

The Rohde & Schwarz **rssmb** Instrument driver can be used in **LabVIEW 2010** and later

### 2.2 Installation

Install the 32-bit driver or 64-bit driver based on your LabVIEW type, **not based on your Windows OS type**.

Prior to the installation of the LabVIEW driver, please install the corresponding (x86 or x64) rssmb VxIpn driver available here:

<https://www.rohde-schwarz.com/driver/smb100a>

## 3 LabVIEW driver history

rssmb Instrument Driver		
Driver history for LabVIEW		
Revision	Date	Note
2.40.0	07/2018	<p>New LabVIEW installer, the precondition is installation of rssmb VXIpn driver 2.21.0 or newer</p> <p>Only LabVIEW wrapper changed, no changes to the underlying VXIpn driver</p> <p>Initialize.vi, Close.vi and Utility VIs have new VI icons</p> <p>New Help format</p> <p>Fixed buffer allocation bugs for VIs returning strings</p> <p>Removed ArraySize parameters when not necessary</p> <p>Changed inputs from recommended to mandatory on several VIs</p> <p>Several bug fixes</p>
2.30.0	02/2017	<ul style="list-style-type: none"> <li>- New automatic installer</li> <li>- Added possibility of using SCPI Searcher</li> <li>- All Front Panel controls converted from classis to Modern styles</li> <li>- Changed Palette Icon, Corrected Palette</li> <li>- New format of DLL-wrappers without the case structures</li> <li>- Error messages now also show the complete call chain</li> </ul>
2.21.0	07/2016	<p>Modified error reporting in case of invalid parameter. Instead of returning error code according to invalid parameter, functions return always the same code VI_ERROR_INSTR_PARAMETER. Using rsmf_error_message shall give name of invalid parameter in error message.</p> <p>RSSMB Error Query.vi reads all errors from instrument's error queue</p>
2.20.4	04/2016	Fixed calling to a wrong dll in 64bit version in several VIs
2.20.3	04/2015	Added High deviation mode to FM modulation
2.20.2	01/2013	Fixed 64 bit installer - revision applies only on installer package, not on driver inside
2.20.1	08/2012	<p>* Changed:</p> <p>Fixed small value rounding in some functions</p>
2.20.0	11/2011	<p>Driver update for Firmware version V2.20.237.31</p> <p>New VIs:</p> <p>Pulse Modulation Train</p> <p>RSSMB Set SYSTem Display Lock.vi</p> <p>RSSMB Get SYSTem Display Lock.vi</p> <p>RSSMB Get Stereo Adjustment.vi</p> <p>RSSMB Set Stereo ARI Type State.vi</p> <p>RSSMB Get Stereo ARI Type State.vi</p> <p>RSSMB Set ROsc External Synchronisation Bandwidth.vi</p> <p>RSSMB Get ROsc External Synchronisation Bandwidth.vi</p> <p>RSSMB Set RF Attenuator Power Search Mode.vi</p>

rssmb Instrument Driver		
Driver history for LabVIEW		
Revision	Date	Note
		RSSMB Get RF Attenuator Power Search Mode.vi RSSMB Set Frequency Sweep Multiplier.vi RSSMB Get Frequency Sweep Multiplier.vi RSSMB Get LIST Free Space.vi RSSMB Set Power Display Permanent Priority.vi RSSMB Get Power Display Permanent Priority.vi RSSMB TEST All Start.vi RSSMB SYSTem Factory Preset.vi Removed VIs: DNS settings RSSMB Set Keyboard Layout.vi RSSMB Get Keyboard Layout.vi RSSMB Set Keyboard Language.vi RSSMB Get Keyboard Language.vi RSSMB Set Display Blank Mode.vi RSSMB Get Display Blank Mode.vi RSSMB SYSTem Network Common Execute.vi
2.10.2	08/2010	Driver update for Firmware version V2.10.116.18  New VIs: RSSMB CALibration Stereo Coder.vi RSSMB Get Automatic File Path.vi RSSMB Get Power Connected Status.vi RSSMB Set Analog Modulations External Input Impedance.vi RSSMB Get Analog Modulations External Input Impedance.vi RSSMB Set LIST Index.vi RSSMB Get LIST Index.vi RSSMB SYSTem GPIB Resource.vi RSSMB SYSTem Serial Resource.vi RSSMB SYSTem Option User Defined.vi
2.10.0	10/2009	Driver update for Firmware version 2.10.001.22  Initial Release for Linux, support for: - Mandriva Linux 2008 and Mandriva Linux 2009 - openSUSE 10.3 and openSUSE 11.0  New VIs: RSSMB Set PULM Train Repetition.vi RSSMB Get PULM Train Repetition.vi RSSMB Get PULM Train Repetition Points.vi RSSMB Set All RF Outputs State.vi

rssmb Instrument Driver		
Driver history for LabVIEW		
Revision	Date	Note
		RSSMB Get Output Impedance.vi RSSMB Set ROSC RF Output.vi RSSMB Get ROSC RF Output.vi RSSMB Set Frequency Sweep Voltage Out.vi RSSMB Get Frequency Sweep Voltage Out.vi RSSMB Set Frequency Sweep Start Voltage.vi RSSMB Get Frequency Sweep Start Voltage.vi RSSMB Set Frequency Sweep Stop Voltage.vi RSSMB Get Frequency Sweep Stop Voltage.vi RSSMB Get Level Sweep Spacing.vi RSSMB Reset Level Sweep.vi RSSMB Set LIST Start Index.vi RSSMB Get LIST Start Index.vi RSSMB Set LIST Stop Index.vi RSSMB Get LIST Stop Index.vi RSSMB Learn LIST Mode Data.vi RSSMB Set CALibration Level Adjustment Data.vi RSSMB Get CALibration Level Adjustment Data.vi RSSMB Set Image Size.vi RSSMB Get Image Size.vi RSSMB Set Output Device.vi RSSMB Get Output Device.vi RSSMB Save Hard Copy.vi RSSMB Set Automatic Naming State.vi RSSMB Get Automatic Naming State.vi RSSMB Get Automatic File Name.vi RSSMB Set Automatic Directory.vi RSSMB Get Automatic Directory.vi RSSMB Delete Image Files.vi RSSMB Set Automatic File Date State.vi RSSMB Get Automatic File Date State.vi RSSMB Get Automatic File Date.vi RSSMB Set Automatic File Prefix State.vi RSSMB Get Automatic File Prefix State.vi RSSMB Set Automatic File Prefix.vi RSSMB Get Automatic File Prefix.vi RSSMB Get Automatic File Number.vi Modified VIs: RSSMB CALibration All.vi RSSMB CALibration Clock Synthesis.vi RSSMB CALibration FM Offset.vi

rssmb Instrument Driver		
Driver history for LabVIEW		
Revision	Date	Note
		RSSMB CALibration Frequency.vi RSSMB CALibration Modulation Generators.vi RSSMB CALibration Level.vi RSSMB Revision Query.vi
2.05.2	12/2008	Fixed instrument model checking
2.05.1	11/2008	New features: - Added <b>R&amp;S®SMC100A</b> support - Power Sensor measurement (NRP-Z View) improved  New VIs: RSSMB Reset All Sweeps.vi RSSMB Set LF Sweep Shape.vi RSSMB Get LF Sweep Shape.vi RSSMB Set LF Sweep Source.vi RSSMB Get LF Sweep Source.vi RSSMB Set All Modulations State.vi RSSMB Get FM Sensitivity.vi RSSMB Get PM Sensitivity.vi RSSMB User Correction Fill Data.vi RSSMB Get User Correction Value.vi RSSMB Set Level Sweep Shape.vi RSSMB Get Level Sweep Shape.vi Modified VIs: RSSMB Initiate.vi.vi (SMC support added) RSSMB Configure PM.vi (SMC support added) RSSMB Configure Pulm Trigger.vi (SMC support added) RSSMB Configure RF Level.vi (SMC support added)
2.05.00	10/2008	Driver update for Firmware version <b>2.05.200.09</b>  - New VIs: rssmb_confStereoModulation rssmb_StereoDirect rssmb_SetStereoExternalInputImpedance rssmb_GetStereoExternalInputImpedance rssmb_SetStereoMaxModulationFrequency rssmb_GetStereoMaxModulationFrequency rssmb_SetStereoFMDeviation rssmb_GetStereoFMDeviation rssmb_SetStereoSource



rssmb Instrument Driver		
Driver history for LabVIEW		
Revision	Date	Note
		rssmb_GetStereoSource rssmb_SetStereoState rssmb_GetStereoState rssmb_confStereoARI rssmb_SetStereoARIBKCode rssmb_GetStereoARIBKCode rssmb_SetStereoARIDeviation rssmb_GetStereoARIDeviation rssmb_SetStereoARISate rssmb_GetStereoARISate rssmb_SetStereoARIType rssmb_GetStereoARIType rssmb_confStereoAudio rssmb_SetStereoAudioFrequency rssmb_GetStereoAudioFrequency rssmb_SetStereoAudioMode rssmb_GetStereoAudioMode rssmb_SetStereoAudioPreemphasis rssmb_GetStereoAudioPreemphasis rssmb_SetStereoAudioPreemphasisState rssmb_GetStereoAudioPreemphasisState rssmb_confStereoPilot rssmb_SetStereoPilotState rssmb_GetStereoPilotState rssmb_SetStereoPilotDeviation rssmb_GetStereoPilotDeviation rssmb_SetStereoPilotPhase rssmb_GetStereoPilotPhase rssmb_confStereoRDS rssmb_StereoRDSPrGIdentification rssmb_StereoRDSPrGName rssmb_SetStereoRDSDataSet rssmb_GetStereoRDSDataSet rssmb_SetStereoRDSDeviation rssmb_GetStereoRDSDeviation rssmb_SetStereoRDSState rssmb_GetStereoRDSState rssmb_SetStereoRDSTrafficAnnouncementState rssmb_GetStereoRDSTrafficAnnouncementState rssmb_SetStereoRDSTrafficProgramState rssmb_GetStereoRDSTrafficProgramState

rssmb Instrument Driver		
Driver history for LabVIEW		
Revision	Date	Note
		rssmb_SetFrequencySweepShape rssmb_GetFrequencySweepShape rssmb_PowerFilter rssmb_SetPowerSenseFilterMode rssmb_GetPowerSenseFilterMode rssmb_SetPowerFilterFixedNoiseContent rssmb_GetPowerFilterFixedNoiseContent rssmb_SetPowerFilterFixedNoiseTimeout rssmb_GetPowerFilterFixedNoiseTimeout rssmb_CALibrationClockSynthesis rssmb_SetImageFileName rssmb_GetImageFileName rssmb_SetImageFormat rssmb_GetImageFormat rssmb_GetImageSnapshot rssmb_PresetSignalPath rssmb_GetSYSTEMStartupStatus rssmb_SetAngleUnits rssmb_GetAngleUnits rssmb_SetPowerUnits rssmb_GetPowerUnits rssmb_SetVelocityUnits rssmb_GetVelocityUnits rssmb_DevicePreset Modified VIs: rssmb_init (USB support added) rssmb_CALibrationLevel rssmb_readToFile rssmb_revision_query
2.04.0	07/2007	Driver created

### **About Rohde & Schwarz**

Rohde & Schwarz is an independent group of companies specializing in electronics. It is a leading supplier of solutions in the fields of test and measurement, broadcasting, radiomonitoring and radiolocation, as well as secure communications. Established more than 80 years ago, Rohde & Schwarz has a global presence and a dedicated service network in over 70 countries. Company headquarters are in Munich, Germany.

### **Environmental commitment**

- Energy-efficient products
- Continuous improvement in environmental sustainability
- ISO 14001-certified environmental management system



### **Regional contact**

Europe, Africa, Middle East

+49 89 4129 12345

[customersupport@rohde-schwarz.com](mailto:customersupport@rohde-schwarz.com)

North America

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

[customer.support@rsa.rohde-schwarz.com](mailto:customer.support@rsa.rohde-schwarz.com)

Latin America

+1-410-910-7988

[customersupport.la@rohde-schwarz.com](mailto:customersupport.la@rohde-schwarz.com)

Asia/Pacific

+65 65 13 04 88

[customersupport.asia@rohde-schwarz.com](mailto:customersupport.asia@rohde-schwarz.com)

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**Rohde & Schwarz GmbH & Co. KG**

Mühlhofstraße 15 | D - 81671 München

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

[www.rohde-schwarz.com](http://www.rohde-schwarz.com)