Driver History for R&S®CMW270 and R&S®CMW500

Driver Documentation

Products:

| R&S®CMW270

| R&S®CMW500

Driver History for LabWindows/CVI and
VXPlug&Play drivers for VEE, C++, C#,
Visual Basic, Visual Basic.NET etc.

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Table of Contents

1 CMW270/500: Rscmw Base driver

Rscmw Base driver		
History for LabWindows/CVI and VXIplug&play drivers for VEE, C++, C#, Visual Basic, Visual Basic.NET etc		
Revision	Date	Note

1.0.40	09/2008	- Modified functions/attributes:
		
		  - New rsidr_core version - fixed Rs_SpecificDriverNew
		
		  - Fixed rscmw_RsClose function

1.0	10/2007	Initial revision

2 CMW500: Rscmwc2m driver for CDMA2000 Measurement

Rscmwc2m driver for CDMA2000 Measurement		
History for LabWindows/CVI and VXIplug&play drivers for VEE, C++, C#, Visual Basic, Visual Basic.NET etc		
Revision	Date	Note

1.0.41	09/2008	Release for CMW firmware version 1.0.4
		
		Modified:
		
		- Modified functions/attributes:
		  - New rsidr_core version - fixed Rs_SpecificDriverNew
		  - Removed remote display enable from default instrument setup
		  - Fixed rscmwc2m_RsClose function
		  - Modified rcmwc2m_atof, rscmwc2m_atol

1.0.40	07/2008	Release for CMW firmware version 1.0.4
		
		Modified:
		
		Modified functions/attributes:
		  - RSCMWC2M_ATTR_MULTI_EVAL_MEASUREMENT_TRIGGER_SOURCE - complete redesign
		- RSCMWC2M_ATTR_MULTI_EVAL_MEASUREMENT_TRIGGER_SLOPE –
		changed command
		  - RSCMWC2M_ATTR_MULTI_EVAL_MEASUREMENT_TRIGGER_THRESHOLD - changed command
		  - RSCMWC2M_ATTR_MULTI_EVAL_MEASUREMENT_TRIGGER_TIMEOUT - changed command
		  - rscmwc2m_ConfigureMEvalMeasTrigger - redesign, see above
		  - rscmwc2m_ReadMEvalMeasModulationResults, rscmwc2m_FetchMEvalMeasModulationResults - added Minimum measurement

1.0.30	05/2008	Release for CMW firmware version 1.0.3 Modified: - Firmware 1.0.3.6 features implementation and debug
1.0.2	04/2008	Release for CMW firmware version 1.0.2 Initial revision

3 CMW500: Rscmwgm driver for 1xEVDO Measurement

rscmwevm driver for GSM Measurement		
History for LabWindows/CVI and VXIplug&play drivers for VEE, C++, C#, Visual Basic, Visual Basic.NET etc		
Revision	Date	Note

1.0.42	09/2008	Release for CMW firmware version 1.0.4
		
		- Modified functions/attributes:
		  - New rsidr_core version - fixed Rs_SpecificDriverNew
		  - Removed remote display enable from default instrument setup
		  - Fixed rscmwevm_RsClose function
		  - Modified rcmwevm_atof, rscmwevm_atol

1.0.4	07/2008	Release for CMW firmware version 1.0.4 Initial revision

4 CMW500: Rscmwgm driver for GSM Measurement

Rscmwgm driver for GSM Measurement		
History for LabWindows/CVI and VXIplug&play drivers for VEE, C++, C#, Visual Basic, Visual Basic.NET etc		
Revision	Date	Note

1.0.42	09/2008	Release for CMW firmware version 1.0.4
		
		Modified:
		- Modified functions/attributes:
		  - New rsidr_core version - fixed Rs_SpecificDriverNew
		  - Removed remote display enable from default instrument setup
		  - Fixed rscmwgm_RsClose function
		  - Modified rcmwgm_atof, rscmwgm_atol

1.0.41	08/2008	Release for CMW firmware version 1.0.4 Modified: GPRF Generator subsystem moved to standalone driver

1.0.40	07/2008	Release for CMW firmware version 1.0.4
		
		Modified:
		
		Modified functions/attributes:
		  - RSCMWC2M_ATTR_MULTI_EVAL_MEASUREMENT_TRIGGER_SOURCE - complete redesign
		- RSCMWC2M_ATTR_MULTI_EVAL_MEASUREMENT_TRIGGER_SLOPE –
		changed command
		  - RSCMWC2M_ATTR_MULTI_EVAL_MEASUREMENT_TRIGGER_THRESHOLD - changed command
		  - RSCMWC2M_ATTR_MULTI_EVAL_MEASUREMENT_TRIGGER_TIMEOUT - changed command
		  - rscmwc2m_ConfigureMEvalMeasTrigger - redesign, see above
		  - rscmwc2m_ReadMEvalMeasModulationResults, rscmwc2m_FetchMEvalMeasModulationResults - added Minimum measurement

1.0.2	2/2008	Release for CMW firmware version 1.0.2 Initial revision

5 CMW500: Rscmwgg driver for GSM Generator

Rscmwgg driver for GSM Generator		
History for LabWindows/CVI and VXIplug&play drivers for VEE, C++, C#, Visual Basic, Visual Basic.NET etc		
Revision	Date	Note

1.0.40	09/2008	Release for CMW firmware version 1.0.4
		
		Modified:
		
		- Modified functions/attributes:
		  - New rsidr_core version - fixed Rs_SpecificDriverNew
		  - Removed remote display enable from default instrument setup
		  - Fixed rscmwgg_RsClose function
		  - Modified rcmwgg_atof

1.0.40	08/2008	Release for CMW firmware version 1.0.4 Initial revision

6 CMW500: Rscmwgprf driver for GPRF

Rscmwgprf driver for GPRF		
History for LabWindows/CVI and VXIplug&play drivers for VEE, C++, C#, Visual Basic, Visual Basic.NET etc		
Revision	Date	Note

1.0.41	09/2008	Release for CMW firmware version 1.0.4
		
		Modified:
		- Modified functions/attributes:
		  - New rsidr_core version - fixed Rs_SpecificDriverNew
		  - Removed remote display enable from default instrument setup
		  - Fixed rscmwgprf_RsClose function
		  - Modified rcmwgprf_atof

1.0.40	07/2008	Release for CMW firmware version 1.0.4
		
		Modified:
		
		- Modified functions/attributes:
		  - rscmwgprf_ConfigureGeneratorListMode - removed Dwell Time, added new mode
		  - RSCMWGPRF_ATTR_LIST_MODE - added new mode
		  - rscmwgprf_ConfigureGeneratorList - completly redesigned
		- rscmwgprf_FetchPwrMeasStandardDeviation,
		   rscmwgprf_ReadPwrMeasStandardDeviation,
		rscmwgprf_FetchPwrMeas, rscmwgprf_ReadPwrMeas,
		rscmwgprf_FetchPwrSensor,
		  rscmwgprf_ReadPwrSensor - redesigned for better safety
		- New functions/attributes:
		  - RSCMWGPRF_ATTR_LIST_MODE_SINGLE_CYCLE
		  - rscmwgprf_InitiateListSingleCycle
		  - RSCMWGPRF_ATTR_POWER_MEASUREMENT_TRIGGER_GAP
		  - rscmwgprf_ConfigurePwrMeasTriggerGap
		  - IQ vs Slot measurement subsystem

1.0.3	04/2008	Release for CMW firmware version 1.0.3
		
		- Fixed help - mistypes and incorrect ranges
		- Removed functions/attributes:
		  - rscmwgprf_QueryGeneratorStatus
		  - RSCMWGPRF_ATTR_LIST_MODE_DWELL_TIME
		- Modified functions/attributes:
		- rscmwgprf_ConfigureGeneratorListMode - removed Dwell Time, added new
		    mode
		  - RSCMWGPRF_ATTR_LIST_MODE - added new mode

Rscmwgprf driver for GPRF		
History for LabWindows/CVI and VXIplug&play drivers for VEE, C++, C#, Visual Basic, Visual Basic.NET etc		
Revision	Date	Note
		- rscmwgprf_ConfigureGeneratorList - completly redesigned
		- rscmwgprf_FetchPwrMeasStandardDeviation,
		rscmwgprf_ReadPwrMeasStandardDeviation,
		rscmwgprf_FetchPwrMeas, rscmwgprf_ReadPwrMeas,
		rscmwgprf_FetchPwrSensor,
		rscmwgprf_ReadPwrSensor - redesigned for better safety
		- New functions/attributes:
		- RSCMWGPRF_ATTR_LIST_MODE_START_INDEX
		- RSCMWGPRF_ATTR_LIST_MODE_STOP_INDEX
		- RSCMWGPRF_ATTR_SET_LIST_STEP_DWELL_TIME
		- RSCMWGPRF_ATTR_GET_LIST_STEP_DWELL_TIME
		- RSCMWGPRF_ATTR_SET_LIST_STEP_MODULATION
		- RSCMWGPRF_ATTR_GET_LIST_STEP_MODULATION
1.0.2	02/2008	- Updated functions:
		- rscmwgprf_ConfigureGeneratorList ... List Length range changed to 0 to 1999
		- rscmwgprf_ConfigureGeneratorListCurrentStep ... current index range
		changed
		- rscmwgprf_ConfigureGeneratorListRange .. help updated, range 0 to 1999
		- rscmwgprf_ConfigurePwrMeasFilter ... TDSC filter added
		- rscmwgprf_ConfigurePwrMeasList ... expNomPower range changed
		- rscmwgprf_ConfigurePwrMeasParameters ... default values changed to ms
		instead of us
		- rscmwgprf_ConfigureAnalyzer ... center frequency range changed
		- rscmwgprf_FetchPwrMeas ... bug in help fixed, PEAK:MAX, PEAK:MIN is read, not MIN:MIN and MAX:MAX
		- New functions:
		- rscmwgprf_ConfigurePwrSensorResolution
1.0	10/2007	Initial release

7 CMW500: Rscmwtm driver for TD-SCDMA Measurement

Rscmwtm driver for TD-SCDMA Measurement		
History for LabWindows/CVI and VXIplug&play drivers for VEE, C++, C#, Visual Basic, Visual Basic.NET etc		
Revision	Date	Note

1.0.41	09/2008	Release for CMW firmware version 1.0.4
		
		Modified:
		- Modified functions/attributes:
		  - New rsidr_core version - fixed Rs_SpecificDriverNew
		  - Removed remote display enable from default instrument setup
		  - Fixed rscmwtm_RsClose function
		  - Modified rcmwtm_atof, rscmwtm_atol

1.0.40	07/2008	Release for CMW firmware version 1.0.4
		
		Modified:
		- Removed functions/attributes
		  - rscmwtm_ReadMEvalMeasCodeDomainScalarSlot
		  - rscmwtm_FetchMEvalMeasCodeDomainScalarSlot
		  - rscmwtm_ReadMEvalMeasCodeDomainScalarSlotStandardDeviation
		  - rscmwtm_FetchMEvalMeasCodeDomainScalarSlotStandardDeviation
		- Modified functions/attributes
		  - rscmwtm_ConfigureMEvalMeasResultsAll - swapped order of elements in array
		  - RSCMWTM_ATTR_MULTI_EVAL_MEASUREMENT_TRIGGER_SOURCE - redesigned
		  - rscmwtm_ConfigureMEvalMeasTrigger - redesigned
		  - chanded command in:
		    RSCMWTM_ATTR_UE_SIGNAL_FIRST_ACTIVE_UPLINK_SLOT
		    RSCMWTM_ATTR_UE_SIGNAL_SCRAMBLING_CODE
		    RSCMWTM_ATTR_UE_SIGNAL_CHANNEL_DETECT_THRESHOLD
		    RSCMWTM_ATTR_UE_SIGNAL_SWITCHING_POINT
		    RSCMWTM_ATTR_UE_SIGNAL_USER_NUMBER
		    RSCMWTM_ATTR_MULTI_EVAL_MEASUREMENT_TRIGGER_SLOPE
		    RSCMWTM_ATTR_MULTI_EVAL_MEASUREMENT_TRIGGER_THRESHOLD
		    RSCMWTM_ATTR_MULTI_EVAL_MEASUREMENT_TRIGGER_TIMEOUT
		    RSCMWTM_ATTR_MULTI_EVAL_MEASUREMENT_SCALAR_SLOT
		    RSCMWTM_ATTR_UE_SIGNAL_DPCH_SPREADING_FACTOR
		    RSCMWTM_ATTR_UE_SIGNAL_DPCH_CODE_NUMBER
		    RSCMWTM_ATTR_UE_SIGNAL_SICH_ENABLE
		    RSCMWTM_ATTR_UE_SIGNAL_SICH_CODE_NUMBER
		    RSCMWTM_ATTR_UE_SIGNAL_CHANNEL_INFO_MODE

Rscmwtm driver for TD-SCDMA Measurement		
History for LabWindows/CVI and VXIplug&play drivers for VEE, C++, C#, Visual Basic, Visual Basic.NET etc		
Revision	Date	Note

		RSCMWTM_ATTR_UE_SIGNAL_DPCH_ENABLE
		
		    RSCMWTM_ATTR_UE_SIGNAL_DPCH_ENABLE_ALL
		
		   rscmwtm_ConfigureUESignalInfoAllDPCHs
		
		   rscmwtm_ConfigureMEvalLimitsACLRAbs
		
		   rscmwtm_ConfigureMEvalLimitsACLRRel
		
		   rscmwtm_ConfigureMEvalLimitsspectrumEmissionMaskAbs
		
		   rscmwtm_ConfigureMEvalLimitsspectrumEmissionMaskRel
		
		   rscmwtm_ConfigureMEvalLimitsCarrierFrequencyError
		
		   rscmwtm_ConfigureMEvalLimitsTransportTimeError
		
		   rscmwtm_ConfigureMEvalLimitsPVT
		
		   rscmwtm_ConfigureMEvalLimitsWaveformQuality
		
		   rscmwtm_ReadMEvalMeasCodeDomainMultiSlotTrace
		
		   rscmwtm_FetchMEvalMeasCodeDomainMultiSlotTrace
		
		   rscmwtm_ReadMEvalMeasEVMvsSlotTrace
		
		   rscmwtm_FetchMEvalMeasEVMvsSlotTrace
		
		   rscmwtm_ReadMEvalMeasMagnErrVsSlotTrace
		
		   rscmwtm_FetchMEvalMeasMagnErrVsSlotTrace
		
		   rscmwtm_ReadMEvalMeasMagnErrStandardDeviationTrace
		
		   rscmwtm_FetchMEvalMeasMagnErrStandardDeviationTrace
		
		   rscmwtm_ReadMEvalMeasPhaseErrVsSlotTrace
		
		   rscmwtm_FetchMEvalMeasPhaseErrVsSlotTrace
		
		   rscmwtm_ReadMEvalMeasPhaseErrStandardDeviationTrace
		
		   rscmwtm_FetchMEvalMeasPhaseErrStandardDeviationTrace
		
		 - New functions/attributes
		
		  - RSCMWTM_ATTR_UE_SIGNAL_MODULATION_TYPE
		
		  - rscmwtm_ConfigureMEvalLimitsPVTBorders

1.0.30	05/2008	Release for CMW firmware version 1.0.3 Modified: - Firmware 1.0.3.6 features implementation and debug
1.0.2	04/2008	Release for CMW firmware version 1.0.2 Initial revision

8 CMW500: Rscmwwm driver for WCDMA Measurement

Rscmwwm driver for WCDMA Measurement		
History for LabWindows/CVI and VXIplug&play drivers for VEE, C++, C#, Visual Basic, Visual Basic.NET etc		
Revision	**Date**	**Note**

1.0.42	09/2008	Release for CMW firmware version 1.0.4
		
		Modified:
		
		- Modified functions/attributes:
		  - New rsidr_core version - fixed Rs_SpecificDriverNew
		  - Removed remote display enable from default instrument setup
		  - Fixed rscmwwm_RsClose function
		  - Modified rcmwwm_atof, rscmwwm_atol

1.0.41	08/2008	Release for CMW firmware version 1.0.4
		
		Modified:
		WCDMA generator moved to standalone driver rscmwwg
		  Modified functions/attributes:
		  - RSCMWWM_ATTR_MULTI_EVAL_MEASUREMENT_TRIGGER_SOURCE - complete redesign
		  - RSCMWWM_ATTR_MULTI_EVAL_MEASUREMENT_TRIGGER_SLOPE - changed command
		  - RSCMWWM_ATTR_MULTI_EVAL_MEASUREMENT_TRIGGER_THRESHOLD - changed command
		  - RSCMWWM_ATTR_MULTI_EVAL_MEASUREMENT_TRIGGER_TIMEOUT - changed command
		  - rscmwwm_ConfigureMEvalMeasTrigger - redesign, see above
		
		 New functions/attributes:
		  - RSCMWWM_ATTR_ANALYZER_BAND_CLASS
		  - RSCMWWM_ATTR_ANALYZER_CHANNEL
		  - rscmwwm_ConfigureAnalyzerChannel
		  - rscmwwm_QueryMEvalMeasTriggerSourceCatalog

1.0.40	07/2008	Release for CMW firmware version 1.0.4
		
		Modified:
		
		- Removed functions/attributes
		  - RSCMWWM_ATTR_UE_SIGNAL_ACTIVE_CHANNEL_TYPE
		- Modified functions/attributes
		  - Complete redesign for better safety:
		   rscmwwm_ReadMEvalMeasModulationResults
		   rscmwwm_FetchMEvalMeasModulationResults
		   rscmwwm_ReadMEvalMeasModulationStandardDeviation
		   rscmwwm_FetchMEvalMeasModulationStandardDeviation
		   rscmwwm_ReadMEvalMeasCodeDomainSlotResults
		   rscmwwm_FetchMEvalMeasCodeDomainSlotResults
		   rscmwwm_ReadMEvalMeasCodeDomainSlotStandardDeviation
		   rscmwwm_FetchMEvalMeasCodeDomainSlotStandardDeviation
		- New functions/attributes
		  - WCDMA Generator

1.0.30	05/2008	Release for CMW firmware version 1.0.3 Modified: - Firmware 1.0.3.6 features implementation and debug

Rscmwwm driver for WCDMA Measurement		
History for LabWindows/CVI and VXIplug&play drivers for VEE, C++, C#, Visual Basic, Visual Basic.NET etc		
Revision	**Date**	**Note**
1.0.2	02/2008	Release for CMW firmware version 1.0.2
		Initial revision

9 CMW500: Rscmwwg driver for WCDMA Generator

Rscmwwg driver for WCDMA Generator		
History for LabWindows/CVI and VXIplug&play drivers for VEE, C++, C#, Visual Basic, Visual Basic.NET etc		
Revision	**Date**	**Note**

1.0.41	09/2008	Release for CMW firmware version 1.0.4
		
		Modified:
		
		- Modified functions/attributes:
		  - New rsidr_core version - fixed Rs_SpecificDriverNew
		  - Removed remote display enable from default instrument setup
		  - Fixed rscmwwg_RsClose function
		  - Modified rcmwwg_atof, rscmwwg_atol

1.0.40	08/2008	Release for CMW firmware version 1.0.4 Initial revision

10 CMW270/500: Rscmwwxm driver for WiMAX Measurement

Rscmwwxm driver for WiMAX Measurement		
History for LabWindows/CVI and VXIplug&play drivers for VEE, C++, C#, Visual Basic, Visual Basic.NET etc		
Revision	**Date**	**Note**

1.0.41	,09/2008	Release for CMW firmware version 1.0.4
		
		- Modified functions/attributes:
		  - New rsidr_core version - fixed Rs_SpecificDriverNew
		  - Removed remote display enable from default instrument setup
		  - Fixed rscmwwxm_RsClose function
		  - Modified rcmwwxm_atof, rscmwwxm_atol

1.0.40	07/2008	Release for CMW firmware version 1.0.4
		
		- Removed functions/attributes
		- rscmwwxm_ReadMEvalMeasSpectralFlatness,
		  rscmwwxm_FetchMEvalMeasSpectralFlatness - to obtain spectral flatness
		  results please use rscmwwxm_ReadMEvalMeasEVM respectively
		  rscmwwxm_FetchMEvalMeasEVM
		   -
		- Modified functions/attributes
		  - rscmwwxm_ConfigureMEvalMeasZone - added control region length
		  - Redesigned for better safety:
		    rscmwwxm_ReadMEvalMeasEVM, rscmwwxm_FetchMEvalMeasEVM
		   -
		- New functions/attributes
		  - RSCMWWXM_ATTR_MULTI_EVAL_MEASUREMENT_CONTROL_REGION_LENGTH
		  - rscmwwxm_ConfigureMEvalMeasInbandMeasurement
		  - RSCMWWXM_ATTR_MULTI_EVAL_MEASUREMENT_INBAND_MEASUREMENT
		  - rscmwwxm_ReadMEvalMeasACPAndSEM
		- rscmwwxm_FetchMEvalMeasACPAndSEM

1.0.30	05/2008	Release for CMW firmware version 1.0.3
		
		Modified Functions:
		  rscmwwxm_ConfigureMEvalMeasZone (zone length range changed, removed PRBS ID)
		  rscmwwxm_ConfigureMEvalMeasBurstsMap (removed Rect. Symbol Offset)

1.0.20	04/2008	Release for CMW firmware version 1.0.2 Modified Functions: rscmwwxm_ConfigureAnalyzer (expected nominal power, center frequency

Rscmwwxm driver for WiMAX Measurement		
History for LabWindows/CVI and VXIplug&play drivers for VEE, C++, C#, Visual Basic, Visual Basic.NET etc		
Revision	**Date**	**Note**
		range changed)
		rscmwwxm_ConfigureMEvalMeasParameters (downlink added, removed
		Number of Symbols)
		rscmwwxm_ConfigureMEvalMeasZone (zone length range changed,
		removed number of bursts)
		rscmwwxm_ConfigureMEvalMeasBurstsMap (complete reimplementation)
		rscmwwxm_ReadMEvalMeasEVM, FetchMEvalMeasEVM (
		added EVM All Carriers result readout)

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 75 years ago, Rohde & Schwarz has a global presence and a dedicated service network in over 70 countries. Company headquarters are in Munich, Germany.

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