

History of the rsspecan Driver for R&S®Spectrum Analyzers

Driver Documentation

Products:

R&S®FSW	R&S®FSP
R&S®FSV	R&S®FSU
R&S®FSVR	R&S®FSQ
	R&S®FMU
	R&S®FSG

Driver history for LabVIEW,
LabWindows/CVI and VXIplug&play
Instrument Driver for C#, C/C++, Visual
Basic .NET, VEE, etc.

Table of Contents

1	Preamble	3
2	Supported Instruments and Options	4
3	LabVIEW.....	7
3.1	Getting Started.....	7
3.2	Driver History.....	7
4	LabWindows/CVI	13
4.1	Getting Started.....	13
4.2	Driver History.....	13

1 Preamble

The R&S attribute based Spectrum Analyzer instrument driver (rssipecan) gives great flexibility and ease of use by combining low level access to nearly every SCPI command via attribute and well balanced high level functions and VIs, combining several attributes. For those who don't want to learn new attribute concept, complete functionality of instrument is covered by high level commands. In other words, you may use attributes, but you don't have to. Of course it is possible to combine both low level attributes and high level functions together exactly according to needs of every specific application.

The rssipecan instrument driver version 2.x is not backward compatible to the following instruments:

- R&S® ESL
- R&S® FSH4/8
- R&S® FSC
- R&S® FSUP
- R&S® FSMR
- R&S® ZVH

These instruments have maintenance support in rssipecan instrument driver version 1.x.x. If you are using one of these instruments please do not upgrade to rssipecan instrument driver version 2.x.x or later.

2 Supported Instruments and Options

In the following tables the supported R&S instruments and firmware versions, as well as the supported options, are listed:

Which instruments are supported?		
Current revision of instrument driver supports these instruments and firmware versions:		
Instrument	Supported Firmware	Remarks
FSW	1.30	
FSV	1.70	
FSVR	1.63	
FSP	4.50	
FSU	4.71	
FSQ	4.75	SP3
FMU	4.78	
FSG	4.79	
FSL	2.0	

Which personalities are supported?	
Current revision of instrument driver supports these options:	
Personalities	Version
FS-K5	4.70
FS-K7	4.70
FSL-K7	2.0
FSV-K7S	1.70
FSW-K7	1.30
FS-K8	4.70
FSL-K8	2.0
FS-K9	4.70
FSL-K9	2.0
FS-K10	4.70 SP1
FSV-K10	1.70
FSL-K14	2.0
FSV-K14	1.70
FS-K15	4.70
FSL-K20	2.0

Which personalities are supported?	
Current revision of instrument driver supports these options:	
Personalities	Version
FS-K30	4.70
FSL-K30	2.0
FSV-K40	1.70
FS-K40	4.70
K54	1.57
FSQ-K70	4.70
FSV-K70	1.70
FS-K72	4.70
FSL-K72	2.0
FSW-K72	1.30
FS-K73	4.70
FS-K74	4.70 SP1
FSW-K74	1.30
FS-K76	4.70
FS-K77	4.70
FS-K82	4.70
FSL-K82	2.0
K83	
K84	
K85	
FSQ-K90	4.71 SP2
FSP-K90	4.70
FSQ-K91	4.71 SP2
FSL-K91	2.0
FSQ-K92	4.70
FSL-K92	2.0
FSQ-K93	4.70
FSP-K93	4.70
FSV-K93	1.70
FSL-K93	2.0
FSQ-K94	4.70
FSQ-K100	4.70

Which personalities are supported?	
Current revision of instrument driver supports these options:	
Personalities	Version
FSV-K100	1.70
FSQ-K101	4.71
FSV-K101	1.70
FSQ-K102	4.71
FSV-K102	1.70
FSQ-K104	4.71
FSV-K104	1.70
FSQ-K105	4.71
FSV-K105	1.70
FSQ-K110	4.70
FS-B2	
FSP-B3	
FS-B5	
FSP-B6	
FS-B9	
FS-B10	
FS-B17	
FS-B21	
FS-B23	
FS-B25	
FS-B27	
FS-B71	

3 LabVIEW

3.1 Getting Started

The LabVIEW drivers can be downloaded from the Rohde & Schwarz website:

<http://www.rohde-schwarz.com/drivers>.

3.2 Driver History

Rsspecan Instrument Driver		
Driver history for LabVIEW		
Revision	Date	Note
2.1.0	04/2012	<p>Modifications:</p> <p>rsspecan_core.lvlib version 2.2.0</p> <p>Support for FSW version 1.30 added</p> <p>Support for FSQ version 4.70 SP3 added</p> <p>Modified:</p> <p>Control Window was changed in all control panels</p> <p>Window range checking was removed in all VIs</p> <p>rsspecan Configure IF Output Source.vi - FSW support</p> <p>rsspecan Store Trace to File.vi - trace range for FSW changed</p> <p>rsspecan Configure IF Power Trigger Parameters.vi - FSW support</p> <p>rsspecan Configure RF Power Trigger.vi - FSW support</p> <p>rsspecan Create Limit Line.vi - Help, Assign to Trace range 1 to 4</p> <p>rsspecan Configure Display Marker Table.vi - FSW support</p> <p>rsspecan Configure Auto Adjust Hysteresis.vi - FSW support</p> <p>rsspecan Configure Auto Adjust Trigger State.vi - FSW support</p> <p>rsspecan Configure Channel Power Noise Correction Auto.vi - FSW support</p> <p>rsspecan Define Noise Limit Line.vi - Result type is not for FSW</p> <p>rsspecan Assign Marker To Trace.vi - range for FSW changed</p> <p>rsspecan Configure Phase Carrier Frequency Offset Table.vi - IQ FFT added</p> <p>rsspecan Configure Phase Preset Settings.vi - IQ FFT added</p> <p>rsspecan Trace IQ Sampling Rate.vi - range for FSQ same as for FMU</p> <p>rsspecan Query GSM K10 Statistic Count.vi - Supports all instruments</p> <p>rsspecan Configure GSM K10 Modulation Transient Spectrum Additional.vi - Supports all instrument</p> <p>rsspecan Configure Wlan Standard.vi - values 6, 7 no longer only for FSV</p> <p>rsspecan Configure WLAN Number Of Antennas.vi - for FSQ only 2 antennas</p> <p>rsspecan Configure WLAN Simultaneous Capture State.vi - Supports all instruments</p> <p>rsspecan Configure WLAN Tracking Pilots.vi - Supports all instruments</p>

Rsspecan Instrument Driver		
Driver history for LabVIEW		
Revision	Date	Note
		<p> rsspecan Add Window.vi - added Window Types for K30, K40 rsspecan Replace Window.vi - added Window Types for K30, K40 rsspecan Configure Display Multiple Zoom.vi - incorrect attribute used rsspecan Configure Noise Frequency Settings.vi - FSW checking added rsspecan Configure Noise Measurement Mode.vi - FSW checking added rsspecan Configure Noise Trace Settings.vi - repeated capability Window added rsspecan Configure Noise Gain Trace Settings.vi - repeated capability Window added rsspecan Enable Noise Limit Check.vi - repeated capability Window added rsspecan Clear Noise Limit Line Results.vi - repeated capability Window added rsspecan Get Noise Limit Check Result.vi - repeated capability Window added rsspecan Configure Phase Spot Noise Settings.vi rsspecan Read Phase Trace Data.vi Added: K6 Pulse Measurement support Channel Subsystem rsspecan Select Window.vi rsspecan Assign Noise Limit Line To Trace.vi rsspecan Query Noise Results.vi rsspecan Configure Sweep Optimization.vi RSSPECAN_ATTR_SWEEP_OPTIMIZATION rsspecan Trace IQ Maximum Bandwidth Extension.vi RSSPECAN_ATTR_IQ_MAX_BANDWIDTH_EXTENSION rsspecan Link Marker To Another Marker.vi RSSPECAN_ATTR_MARKER_LINK_TO_MARKER rsspecan Link Delta Marker To Another Marker.vi RSSPECAN_ATTR_DELTA_MARKER_LINK_TO_MARKER rsspecan Configure IQ Power Trigger.vi RSSPECAN_ATTR_TRIGGER_IQP_LEVEL rsspecan Configure RF Power Trigger Holdoff.vi RSSPECAN_ATTR_TRIGGER_RFP_HOLDOFF rsspecan Configure Display Measurement Window State.vi RSSPECAN_ATTR_DISP_MEAS_WINDOW_STATE rsspecan Query Active Measurement Window.vi RSSPECAN_ATTR_QUERY_ACTIVE_MEASUREMENT_WINDOW rsspecan Noise ENR Table Operations.vi RSSPECAN_ATTR_NOISE_CORR_ENR_TABLE_SELECT RSSPECAN_ATTR_NOISE_CORR_ENR_TABLE_DELETE rsspecan Noise Loss Input Table Operations.vi RSSPECAN_ATTR_NOISE_CORR_LOSS_INPUT_TABLE_SELECT RSSPECAN_ATTR_NOISE_CORR_LOSS_INPUT_TABLE_DELETE rsspecan Noise Loss Output Table Operations.vi </p>

Rsspecan Instrument Driver		
Driver history for LabVIEW		
Revision	Date	Note
		RSSPECAN_ATTR_NOISE_CORR_LOSS_OUTPUT_TABLE_SELECT RSSPECAN_ATTR_NOISE_CORR_LOSS_OUTPUT_TABLE_DELETE rsspecan Configure Noise Limit Line Type.vi RSSPECAN_ATTR_NOISE_LIMIT_LINE_TYPE rsspecan Query Noise Marker Amplitude.vi RSSPECAN_ATTR_NOISE_MARKER_AMPLITUDE rsspecan Configure Phase Display Y Axis Settings.vi RSSPECAN_ATTR_PHASE_Y_AXIS_MANUAL_SCALING RSSPECAN_ATTR_PHASE_DISP_TRACE_Y_RLEV RSSPECAN_ATTR_PHASE_DISP_TRACE_Y_BOTTOM RSSPECAN_ATTR_PHASE_DISP_TRACE_Y RSSPECAN_ATTR_PHASE_DISP_TRACE_Y_AUTO rsspecan Configure Phase Display X Axis Settings.vi RSSPECAN_ATTR_PHASE_X_AXIS_SCOPE RSSPECAN_ATTR_PHASE_X_AXIS_START_FREQUENCY RSSPECAN_ATTR_PHASE_X_AXIS_STOP_FREQUENCY RSSPECAN_ATTR_PHASE_X_AXIS_HALF_DECADE rsspecan Configure Phase Trace Custom Range.vi RSSPECAN_ATTR_PHASE_USER_TRACE rsspecan Configure Phase User Residual Calculations.vi RSSPECAN_ATTR_PHASE_USER_EVALUATE_FROM RSSPECAN_ATTR_PHASE_USER_EVALUATE_TO rsspecan Configure Phase Spot Noise Calculation.vi RSSPECAN_ATTR_PHASE_SPOT_NOISE_CALCULATION rsspecan Configure Phase Spur Settings.vi RSSPECAN_ATTR_PHASE_SPUR_SUPPRESSION RSSPECAN_ATTR_PHASE_SPUR_THRESHOLD rsspecan Configure Phase Signal Verification Failed.vi RSSPECAN_ATTR_PHASE_SIGNAL_VERIFICATION_FAILED rsspecan Configure Phase Global IQ Window Settings.vi RSSPECAN_ATTR_PHASE_IQ_WINDOW_FUNCTION_PARTICULAR_DECADE RSSPECAN_ATTR_PHASE_IQ_WINDOW_FUNCTION_ALL_DECADE rsspecan Configure Phase Noise Limit Settings.vi rsspecan Get Phase Noise Limit Check State.vi rsspecan Get Active Phase Limit Line.vi RSSPECAN_ATTR_LIMIT_LINE_ACTIVE rsspecan Fetch Phase Residual User Results.vi rsspecan Get Phase Decade Spot Noise Result.vi rsspecan Configure C2K Power Display.vi RSSPECAN_ATTR_C2K_CDP_DISPLAY rsspecan Configure WLAN MIMO Payload Length Source.vi

Rsspecan Instrument Driver		
Driver history for LabVIEW		
Revision	Date	Note
		RSSPECAN_ATTR_WLAN_MIMO_PAYLOAD_LENGTH_SOURCE
2.0.0	03/2012	<p>Modifications:</p> <p>* Changed list of supported instruments - see chapter "Supported Instruments and Options"</p> <p>* Support for FSV version 1.70 added</p> <p>* Modified</p> <ul style="list-style-type: none"> - rsspecan_init - added option string "QueryInstrStatus=1" - rsspecan_ConfigureFilterType - added CISP, MIL Std RSSPECAN_ATTR_RESOLUTION_BANDWIDTH_FILTER_TYPE - rsspecan_ConfigureTriggerSource - added GP0 - GP5 RSSPECAN_ATTR_TRIGGER_SOURCE - rsspecan_ConfigureLimitLine - in code, DBPT for FSV added (upper range for FSV units increased) - rsspecan_ConfigureVSAMeasurementSignal - added I/Q Constellation (Rotated) - rsspecan_ConfigureWiMAXTrigger - added in FP, attribute - Falling & Rising Edge RSSPECAN_ATTR_WIMAX_TRIG_MODE - rsspecan_ConfigureWlanStandard - added support for MIMO RSSPECAN_ATTR_WLAN_STAN - rsspecan_ConfigureLTEDownlinkSignalCharacteristics RSSPECAN_ATTR_LTE_DOWNLINK_CHANNEL_BANDWIDTH - 2.5 MHz not supported by FSV - rsspecan_ConfigureLTEUplinkSignalCharacteristics RSSPECAN_ATTR_LTE_UPLINK_CHANNEL_BANDWIDTH - 2.5 MHz not supported by FSV - rsspecan_ConfigureLTEUplinkTrigger - added IF Power for FSV (Different command string) RSSPECAN_ATTR_TRIGGER_MODE - Added *OPC query for these attributes: RSSPECAN_ATTR_FMDEM_MODE RSSPECAN_ATTR_FMS_MODE RSSPECAN_ATTR_BTO_MODE RSSPECAN_ATTR_GSM_K10_MODE RSSPECAN_ATTR_REALTIME_MODE RSSPECAN_ATTR_GSM_K10_MODE_FSV RSSPECAN_ATTR_AVI_MODE RSSPECAN_ATTR_CATV_MODE RSSPECAN_ATTR_NOISE_MODE RSSPECAN_ATTR_PHASE_MODE RSSPECAN_ATTR_C2K_MODE - rsspecan_WriteInstrData - added status checking <p>* Added</p> <ul style="list-style-type: none"> - rsspecan_ConfigureRemoteLoggingState RSSPECAN_ATTR_REMOTE_LOGGING_STATE - rsspecan_ProbeActivation

Rsspecan Instrument Driver		
Driver history for LabVIEW		
Revision	Date	Note
		RSSPECAN_ATTR_PROBE_ACTIVATION - rsspecan_ProbeMicroButtonAction RSSPECAN_ATTR_PROBE_MICRO_BUTTON_ACTION - rsspecan_GetProbeInformation RSSPECAN_ATTR_PROBE_CONNECTION_STATE RSSPECAN_ATTR_PROBE_NAME RSSPECAN_ATTR_PROBE_NUMBER - rsspecan_ConfigureAutoAdjustHystersis RSSPECAN_ATTR_AUTO_ADJUST_HYSTERISIS - rsspecan_ConfigureAutoAdjustTriggerState RSSPECAN_ATTR_AUTO_ADJUST_TRIGGER_STATE - rsspecan_ReadYTracePrevious - rsspecan_ConfigureChannelPowerNoiseCorrectionAuto RSSPECAN_ATTR_MEAS_POW_NOISE_CORR_AUTO - rsspecan_QueryGSMK10StatisticCount RSSPECAN_ATTR_GSM_K10_STATISTIC_COUNT - rsspecan_ConfigureGSMK10ModulationTransientSpectrumAdditional RSSPECAN_ATTR_GSM_K10_MODULATION_TRANSIENT_SPECTRUM_FILTER_TYPE RSSPECAN_ATTR_GSM_K10_MODULATION_TRANSIENT_SPECTRUM_REF_POWER RSSPECAN_ATTR_GSM_K10_MODULATION_TRANSIENT_SPECTRUM_HIGH_DYNAMIC RSSPECAN_ATTR_GSM_K10_MODULATION_TRANSIENT_SPECTRUM_FREQUENCY_LIST - rsspecan_GSMK10RefreshCapturedData RSSPECAN_ATTR_GSM_K10_REFRESH_CAPTURED_DATA - rsspecan_EMIFinalMeasurementDeltaMarkerPeakSearch RSSPECAN_ATTR_EMI_FMEAS_DELTA_MARKER_PEAK_SEARCH - rsspecan_ConfigureVSAFineSynchronization RSSPECAN_ATTR_VSA_FINE_SYNC_AUTO RSSPECAN_ATTR_VSA_FINE_SYNC_MODE RSSPECAN_VAL_VSA_FINE_SYNC_KDAT - rsspecan_QueryVSAFineSynchronizationResult RSSPECAN_ATTR_VSA_FINE_SYNC_RESULT - rsspecan_ConfigureVSAKnownData RSSPECAN_ATTR_VSA_KNOWN_DATA_STATE RSSPECAN_ATTR_VSA_KNOWN_DATA_FILE_NAME - rsspecan_QueryVSABERResults RSSPECAN_ATTR_VSA_BER_BIT_ERROR_RATE RSSPECAN_ATTR_VSA_BER_NUMBER_OF_ERRORS RSSPECAN_ATTR_VSA_BER_NUMBER_OF_BITS - rsspecan_ConfigureVSAModulationAccuracyAdditional - RSSPECAN_ATTR_VSA_RESULT_FORMAT - added RSUM, BER - rsspecan_ConfigureWLANSimultaneousCaptureState

Rsspecan Instrument Driver		
Driver history for LabVIEW		
Revision	Date	Note
		<p>RSSPECAN_ATTR_WLAN_ANTENNA_SIMULTANEOUS_CAPTURE_STATE</p> <ul style="list-style-type: none">- rsspecan_ConfigureWLANTrackingPilots <p>RSSPECAN_ATTR_WLAN_TRAC_PILOTS</p> <ul style="list-style-type: none">- rsspecan_ConfigureLTEUplinkCodeBitsScrambling <p>RSSPECAN_ATTR_LTE_UPLINK_SCRAMBLING_OF_CODED_BITS</p> <ul style="list-style-type: none">- rsspecan_ConfigureLTEUplinkSoundingReferenceSignalNRRC <p>RSSPECAN_ATTR_LTE_UPLINK_SOUNDING_REFERENCE_SIGNAL_N_RRC</p>

4 LabWindows/CVI

4.1 Getting Started

The LabWindows/CVI and VXIplug&play drivers can be downloaded from the Rohde & Schwarz website:

<http://www.rohde-schwarz.com/drivers>.

4.2 Driver History

Rsspecan Instrument Driver		
History for LabWindows/CVI and VXIplug&play Instrument Driver for C#, C/C++, Visual Basic .NET, VEE, etc.		
Revision	Date	Note
2.1.0	04/2012	<p>Modifications:</p> <ul style="list-style-type: none"> * Support for FSW version 1.30 added * Support for FSQ version 4.70 SP3 added * Modified <ul style="list-style-type: none"> - Control Window was changed in all control panels - Window range checking was removed in all functions - rsspecan_ConfigureIOutputSource - FSW support - rsspecan_StoreTraceToFile - trace range for FSW changed - rsspecan_ConfigureIPowerTriggerParameters - FSW support - rsspecan_ConfigureRFPowerTrigger - FSW support - rsspecan_CreateLimitLine - Help, Assign to Trace range 1 to 4 - rsspecan_ConfigureDisplayMarkerTable - FSW support - rsspecan_ConfigureAutoAdjustHysteresis - FSW support - rsspecan_ConfigureAutoAdjustTriggerState - FSW support - rsspecan_ConfigureChannelPowerNoiseCorrectionAuto - FSW support - rsspecan_DefineNoiseLimitLine - Result type is not for FSW - rsspecan_AssignMarkerToTrace - range for FSW changed - rsspecan_ConfigurePhaseCarrierFrequencyOffsetTable - IQ FFT added - rsspecan_ConfigurePhasePresetSettings - IQ FFT added - rsspecan_TraceIQSamplingRate - range for FSQ same as for FMU - rsspecan_QueryGSMK10StatisticCount - Supports all instruments - rsspecan_ConfigureGSMK10ModulationTransientSpectrumAdditional - Supports all instrument - rsspecan_ConfigureWlanStandard - values 6, 7 no longer only for FSV - rsspecan_ConfigureWLANNumberOfAntennas - for FSQ only 2 antennas - rsspecan_ConfigureWLANSimultaneousCaptureState - Supports all instruments

Rsspecan Instrument Driver		
History for LabWindows/CVI and VXIplug&play Instrument Driver for C#, C/C++, Visual Basic .NET, VEE, etc.		
Revision	Date	Note
		<ul style="list-style-type: none"> - rsspecan_ConfigureWLANTrackingPilots - Supports all instruments - rsspecan_AddWindow - added Window Types for K30, K40 - rsspecan_ReplaceWindow - added Window Types for K30, K40 - rsspecan_ConfigureDisplayMultipleZoom - incorrect attribute used - rsspecan_ConfigureNoiseFrequencySettings - FSW checking added - rsspecan_ConfigureNoiseMeasurementMode - FSW checking added - rsspecan_ConfigureNoiseTraceSettings - repeated capability Window added - rsspecan_ConfigureNoiseGainTraceSettings - repeated capability Window added - rsspecan_EnableNoiseLimitCheck - repeated capability Window modified - rsspecan_ClearNoiseLimitLineResults - repeated capability Window modified - rsspecan_GetNoiseLimitCheckResult - repeated capability Window modified - rsspecan_ConfigurePhaseSpotNoiseSettings - rsspecan_ReadPhaseTraceData <p>* Added</p> <ul style="list-style-type: none"> - K6 Pulse Measurement support - Channel Subsystem - rsspecan_SelectWindow - rsspecan_QueryNoiseResults - rsspecan_AssignNoiseLimitLineToTrace - rsspecan_ConfigureSweepOptimization RSSPECAN_ATTR_SWEEP_OPTIMIZATION - rsspecan_TraceIQMaximumBandwidthExtension RSSPECAN_ATTR_IQ_MAX_BANDWIDTH_EXTENSION - rsspecan_LinkMarkerToAnotherMarker RSSPECAN_ATTR_MARKER_LINK_TO_MARKER - rsspecan_LinkDeltaMarkerToAnotherMarker RSSPECAN_ATTR_DELTA_MARKER_LINK_TO_MARKER - rsspecan_ConfigureIQPowerTrigger RSSPECAN_ATTR_TRIGGER_IQP_LEVEL - rsspecan_ConfigureRFPowerTriggerHoldoff RSSPECAN_ATTR_TRIGGER_RFP_HOLDOFF - rsspecan_ConfigureDisplayMeasurementWindowState RSSPECAN_ATTR_DISP_MEAS_WINDOW_STATE - rsspecan_QueryActiveMeasurementWindow RSSPECAN_ATTR_QUERY_ACTIVE_MEASUREMENT_WINDOW - rsspecan_NoiseENRTableOperations RSSPECAN_ATTR_NOISE_CORR_ENR_TABLE_SELECT RSSPECAN_ATTR_NOISE_CORR_ENR_TABLE_DELETE - rsspecan_NoiseLossInputTableOperations

Rsspecan Instrument Driver		
History for LabWindows/CVI and VXIplug&play Instrument Driver for C#, C/C++, Visual Basic .NET, VEE, etc.		
Revision	Date	Note
		RSSPECAN_ATTR_NOISE_CORR_LOSS_INPUT_TABLE_SELECT RSSPECAN_ATTR_NOISE_CORR_LOSS_INPUT_TABLE_DELETE - rsspecan_NoiseLossOutputTableOperations RSSPECAN_ATTR_NOISE_CORR_LOSS_OUTPUT_TABLE_SELECT RSSPECAN_ATTR_NOISE_CORR_LOSS_OUTPUT_TABLE_DELETE - rsspecan_ConfigureNoiseLimitLineType RSSPECAN_ATTR_NOISE_LIMIT_LINE_TYPE - rsspecan_QueryNoiseMarkerAmplitude RSSPECAN_ATTR_NOISE_MARKER_AMPLITUDE - rsspecan_ConfigurePhaseDisplayYAxisSettings RSSPECAN_ATTR_PHASE_Y_AXIS_MANUAL_SCALING RSSPECAN_ATTR_PHASE_DISP_TRACE_Y_RLEV RSSPECAN_ATTR_PHASE_DISP_TRACE_Y_BOTTOM RSSPECAN_ATTR_PHASE_DISP_TRACE_Y RSSPECAN_ATTR_PHASE_DISP_TRACE_Y_AUTO - rsspecan_ConfigurePhaseDisplayXAxisSettings RSSPECAN_ATTR_PHASE_X_AXIS_SCOPE RSSPECAN_ATTR_PHASE_X_AXIS_START_FREQUENCY RSSPECAN_ATTR_PHASE_X_AXIS_STOP_FREQUENCY RSSPECAN_ATTR_PHASE_X_AXIS_HALF_DECADE - rsspecan_ConfigurePhaseTraceCustomRange RSSPECAN_ATTR_PHASE_USER_TRACE - rsspecan_ConfigurePhaseUserResidualCalculations RSSPECAN_ATTR_PHASE_USER_EVALUATE_FROM RSSPECAN_ATTR_PHASE_USER_EVALUATE_TO - rsspecan_ConfigurePhaseSpotNoiseCalculation RSSPECAN_ATTR_PHASE_SPOT_NOISE_CALCULATION - rsspecan_ConfigurePhaseSpurSettings RSSPECAN_ATTR_PHASE_SPUR_SUPPRESSION RSSPECAN_ATTR_PHASE_SPUR_THRESHOLD - rsspecan_ConfigurePhaseSignalVerificationFailed RSSPECAN_ATTR_PHASE_SIGNAL_VERIFICATION_FAILED - rsspecan_ConfigurePhaseGlobalIQWindowSettings RSSPECAN_ATTR_PHASE_IQ_WINDOW_FUNCTION_PARTICULAR_DECADE RSSPECAN_ATTR_PHASE_IQ_WINDOW_FUNCTION_ALL_DECADE - rsspecan_GetActivePhaseLimitLine RSSPECAN_ATTR_LIMIT_LINE_ACTIVE - rsspecan_ConfigurePhaseNoiseLimitSettings - rsspecan_GetPhaseNoiseLimitCheckState - rsspecan_FetchPhaseResidualUserResults

Rsspecan Instrument Driver		
History for LabWindows/CVI and VXIplug&play Instrument Driver for C#, C/C++, Visual Basic .NET, VEE, etc.		
Revision	Date	Note
		<ul style="list-style-type: none"> - rsspecan_GetPhaseDecadeSpotNoiseResult - rsspecan_ConfigureC2KPowerDisplay RSSPECAN_ATTR_C2K_CDP_DISPLAY - rsspecan_ConfigureWLANMIMOPayloadLengthSource RSSPECAN_ATTR_WLAN_MIMO_PAYLOAD_LENGTH_SOURCE
2.0.1	04/2012	Modifications: <ul style="list-style-type: none"> - rsspecan_ConfigureWlanDemodulation - added MM20, GFM20, MM40, GFM40 RSSPECAN_ATTR_WLAN_BTYP
2.0.0	03/2012	Modifications: <p>* Changed list of supported instruments - see chapter 2.0 "Supported Instruments and Options"</p> Support for FSV version 1.70 added Modified: <ul style="list-style-type: none"> rsspecan Configure Filter Type.vi - added CISP, MIL Std RSSPECAN_ATTR_RESOLUTION_BANDWIDTH_FILTER_TYPE rsspecan Configure Trigger Source.vi - added GP0 - GP5 RSSPECAN_ATTR_TRIGGER_SOURCE rsspecan Configure Limit Line.vi - in code, DBPT for FSV added (upper range for FSV units increased) rsspecan Configure VSA Measurement Signal.vi - added I/Q Constellation (Rotated) rsspecan Configure WiMAX Trigger.vi - added in FP, attribute - Falling & Rising Edge RSSPECAN_ATTR_WIMAX_TRIG_MODE rsspecan Configure Wlan Standard.vi - added support for MIMO RSSPECAN_ATTR_WLAN_STAN rsspecan Configure LTE Downlink Signal Characteristics.vi RSSPECAN_ATTR_LTE_DOWNLINK_CHANNEL_BANDWIDTH - 2.5 MHz not supported by FSV rsspecan Configure LTE Uplink Signal Characteristics.vi RSSPECAN_ATTR_LTE_UPLINK_CHANNEL_BANDWIDTH - 2.5 MHz not supported by FSV rsspecan Configure LTE Uplink Trigger.vi - added IF Power for FSV (Differnt command string) RSSPECAN_ATTR_TRIGGER_MODE Added: <ul style="list-style-type: none"> rsspecan Configure Remote Logging State.vi RSSPECAN_ATTR_REMOTE_LOGGING_STATE rsspecan Probe Activation.vi RSSPECAN_ATTR_PROBE_ACTIVATION rsspecan Probe Micro Button Action.vi RSSPECAN_ATTR_PROBE_MICRO_BUTTON_ACTION rsspecan Get Probe Information.vi RSSPECAN_ATTR_PROBE_CONNECTION_STATE RSSPECAN_ATTR_PROBE_NAME

Rsspecan Instrument Driver		
History for LabWindows/CVI and VXIplug&play Instrument Driver for C#, C/C++, Visual Basic .NET, VEE, etc.		
Revision	Date	Note
		RSSPECAN_ATTR_PROBE_NUMBER rsspecan Configure Auto Adjust Hystersis.vi RSSPECAN_ATTR_AUTO_ADJUST_HYSTERSIS rsspecan Configure Auto Adjust Trigger State.vi RSSPECAN_ATTR_AUTO_ADJUST_TRIGGER_STATE rsspecan Read Y Trace Previous.vi rsspecan Configure Channel Power Noise Correction Auto.vi RSSPECAN_ATTR_MEAS_POW_NOISE_CORR_AUTO rsspecan Query GSM K10S tatistic Count.vi RSSPECAN_ATTR_GSM_K10_STATISTIC_COUNT rsspecan Configure GSM K10 Modulation Transient Spectrum Additional.vi RSSPECAN_ATTR_GSM_K10_MODULATION_TRANSIENT_SPECTRUM_FILTER_TYPE RSSPECAN_ATTR_GSM_K10_MODULATION_TRANSIENT_SPECTRUM_REF_POWER RSSPECAN_ATTR_GSM_K10_MODULATION_TRANSIENT_SPECTRUM_HIGH_DYNAMIC RSSPECAN_ATTR_GSM_K10_MODULATION_TRANSIENT_SPECTRUM_FREQUENCY_LIST rsspecan GSM K10 Refresh Captured Data.vi RSSPECAN_ATTR_GSM_K10_REFRESH_CAPTURED_DATA rsspecan EMI Final Measurement Delta Marker Peak Search.vi RSSPECAN_ATTR_EMI_FMEAS_DELTA_MARKER_PEAK_SEARCH rsspecan Configure VSA Fine Synchronization.vi RSSPECAN_ATTR_VSA_FINE_SYNC_AUTO RSSPECAN_ATTR_VSA_FINE_SYNC_MODE RSSPECAN_VAL_VSA_FINE_SYNC_KDAT rsspecan Query VSA Fine Synchronization Result.vi RSSPECAN_ATTR_VSA_FINE_SYNC_RESULT rsspecan Configure VSA Known Data.vi RSSPECAN_ATTR_VSA_KNOWN_DATA_STATE RSSPECAN_ATTR_VSA_KNOWN_DATA_FILE_NAME rsspecan Query VSA BER Results.vi RSSPECAN_ATTR_VSA_BER_BIT_ERROR_RATE RSSPECAN_ATTR_VSA_BER_NUMBER_OF_ERRORS RSSPECAN_ATTR_VSA_BER_NUMBER_OF_BITS rsspecan_ConfigureVSAModulationAccuracyAdditional RSSPECAN_ATTR_VSA_RESULT_FORMAT - added RSUM, BER rsspecan Configure WLAN Simultaneous Capture State.vi RSSPECAN_ATTR_WLAN_ANTENNA_SIMULTANEOUS_CAPTURE_STATE rsspecan Configure WLAN Tracking Pilots.vi RSSPECAN_ATTR_WLAN_TRAC_PILOTS rsspecan Configure LTE Uplink Code Bits Scrambling.vi RSSPECAN_ATTR_LTE_UPLINK_SCRAMBLING_OF_CODED_BITS

Rsspecan Instrument Driver		
History for LabWindows/CVI and VXIplug&play Instrument Driver for C#, C/C++, Visual Basic .NET, VEE, etc.		
Revision	Date	Note
		rsspecan Configure LTE Uplink Sounding Reference Signal NRRC.vi RSSPECAN_ATTR_LTE_UPLINK_SOUNDING_REFERENCE_SIGNAL_N_RRC

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 75 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

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

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

Rohde & Schwarz GmbH & Co. KG

Mühlhofstraße 15 | D - 81671 München

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

www.rohde-schwarz.com