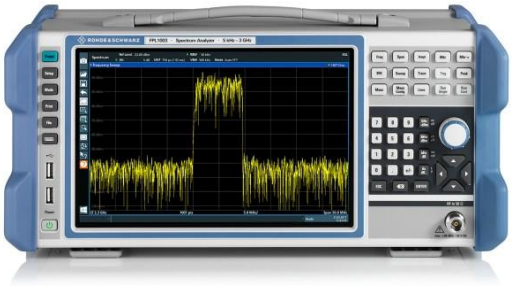
# LabWindows/CVI, VXIpnp driver history for the R&S® FPL1000 Spectrum Analyzer

**Products:**

- R&S®FPL1000



- R&S®ZNL (Option B1)

Driver history for LabWindows/CVI and VXIplug&play Instrument Driver for C/C++, VEE, etc.

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August 25, 2022

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** |
| FPL1000 | 1.90 | |
| ZNL (Option B1) | 1.35 | |

# 2 Getting Started

## 2.1 LabWindows/CVI driver

The Rohde & Schwarz **rsfpl** 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:

- *rsfpl.c + rsfpl.h*
- *rsfpl_attributes.c + rsfpl_attributes.h*
- *rsfpl_utility.c + rsfpl_utility.h*
- *rsidr_core.c + rsidr_core.h*
- *rsfpl_callbacks.c*
- *rsfpl.fp + rsfpl.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\rsfpl.h
- C:\Program Files (x86)\IVI Foundation\VISA\WinNT\lib\msc\rsfpl.lib (static)
- C:\Program Files (x86)\IVI Foundation\VISA\WinNT\Bin\rsfpl_32.dll (dynamic)
- C:\Program Files (x86)\IVI Foundation\VISA\WinNT\rsfpl\rsfpl.fp (in CVI only)
- C:\Program Files (x86)\IVI Foundation\VISA\WinNT\rsfpl\rsfpl.sub (in CVI only)

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

- C:\Program Files\IVI Foundation\VISA\Win64\Include\rsfpl.h
- C:\Program Files\IVI Foundation\VISA\Win64\Lib_x64\msc\rsfpl64.lib (static)
- C:\Program Files\IVI Foundation\VISA\Win64\Bin\rsfpl_64.dll (dynamic)
- C:\Program Files\IVI Foundation\VISA\Win64\rsfpl\rsfpl.fp (in CVI only)
- C:\Program Files\IVI Foundation\VISA\Win64\rsfpl\rsfpl.sub (in CVI only)

## 2.3 VXIplug&play driver in MATLAB

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

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

64-bit driver
**C:\Program Files\IVI Foundation\VISA\Win64\rsfpl\rsfpl.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 **rsfpl** 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 **rsfpl_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\rsfpl\rsfpl_vxi.chm**

64-bit driver
**C:\Program Files\IVI Foundation\VISA\Win64\rsfpl\rsfpl_vxi.chm**

# 3 LabWindows/CVI and VXIplug&play driver history

| rsfpl Instrument Driver | | |
|---|---|---|
| **Driver history for LabWindows/CVI and VXIplug&play Instrument Driver for C/C++, VEE, etc.** | | |
| Revision | Date | Note |
| 1.90.0 | 08/2022 | * Support for FPL FW 1.90<br>* RsCore updated to 4.3.0. The core is incompatible with the Cores 3.x. If you work with drivers that use both core 4.x and 3.x, please contact our customer support, we will update your Core 3.x drivers to the newest version.<br><br>* New:<br>- RF Filter (Class)<br>- rsfpl_ConfigureFrequencyAnnotationMode<br>- rsfpl_ConfigureSweepTypeMode<br>- rsfpl_QuerySweepFFTSubspan<br>- rsfpl_LinkToAnotherDeltaMarker<br>- rsfpl_DeltaMarkerLinkToAnotherDeltaMarker<br>- rsfpl_ConfigureLayoutWindowType<br>- rsfpl_ConfigureItemsToStoreInstrumentSourceCalibrationData<br>- rsfpl_ConfigureItemsToStoreChannelSourceCalibrationData<br>- rsfpl_ConfigureNoiseCalibrationSmartSerialNumber<br>- rsfpl_ConfigureNoiseMeasurementSmartSerialNumber<br>- rsfpl_QueryNoiseData<br>- rsfpl_ConfigureADEMZeroPhaseReferencePositionMode<br>- rsfpl_ConfigureADEMRFInputYIGFilter<br>- rsfpl_ConfigureADEMRangeResultType<br>- rsfpl_QueryADEMTraceResultDistortion<br><br>* Updated:<br>- rsfpl_ConfigureMarkerDemodulation - Demodulation Mode<br>- rsfpl_ConfigureTraceAverageMode - deleted some values<br>- rsfpl_ConfigureLimitLine - Units<br>- rsfpl_HcopyFileFormat - removed WMF and EWMF values<br>- rsfpl_ConfigureADEMTrace - added evaluation method<br>- rsfpl_ReadADEMTrace - added evaluation method<br><br>* Updated - changed API - added Subwindow parameter:<br>- rsfpl_ConfigureYAxisRange<br>- rsfpl_ConfigureYAxisGridSpacing<br>- rsfpl_ConfigureYAxisReferenceLevelPosition<br>- rsfpl_ConfigureTrace<br>- rsfpl_ConfigurePhaseNoiseTraceYAxisScaling |

| rsfpl Instrument Driver | | |
|---|---|---|
| **Driver history for LabWindows/CVI and VXIplug&play Instrument Driver for C/C++, VEE, etc.** | | |
| Revision | Date | Note |
| | | - rsfpl_PhaseNoiseTraceYAxisAutoScaleOnce<br><br>* Deleted:<br>- rsfpl_ConfigureTriggerRepetitionInterval<br>- rsfpl_ConfigureNoiseDUTFixedIFFrequency<br>- rsfpl_QueryADEMResultFMCarrierOffset<br>- rsfpl_SetAttributeRawString - use rsfpl_SetAttributeViString<br>- rsfpl_GetAttributeRawString - use rsfpl_GetAttributeViString<br>- rsfpl_SetAttributeViSession<br>- rsfpl_GetAttributeViSession<br>- rsfpl_CheckAttributeViInt32<br>- rsfpl_CheckAttributeViReal64<br>- rsfpl_CheckAttributeViString<br>- rsfpl_CheckAttributeViBoolean<br>- rsfpl_CheckAttributeViSession |
| 1.70.0 | 03/2021 | * RsCore updated to 3.13.0<br>* Improved help for rsfpl_init(), rsfpl_InitWithOptions()<br>* Optimized help texts for status codes<br><br>* New:<br>- Added Phase Noise subsystem<br>- rsfpl_ConfigurePowerSensorSensorLevelOffset<br>- rsfpl_ConfigureInternalGeneratorState<br>- rsfpl_ConfigureInternalGeneratorUsage<br>- rsfpl_ConfigureInternalGeneratorIndependentCWSource<br>- rsfpl_ConfigureInternalGeneratorTrackingGenerator<br>- rsfpl_ConfigureInternalGeneratorPowerSweep<br>- rsfpl_ConfigureInternalGeneratorFrequencyOffset<br>- rsfpl_InternalGeneratorCalibrateTransmission<br>- rsfpl_InternalGeneratorCalibrateReflection<br>- rsfpl_InternalGeneratorRecallCalibrationSettings<br>- rsfpl_InternalGeneratorSaveCalibrationSettings<br>- rsfpl_InternalGeneratorQueryCalibrationSaveFilePath<br>- rsfpl_InternalGeneratorSaveAsTransducerFactor<br>- rsfpl_OutputLoudspeakerMute<br>- rsfpl_ConfigureSubwindowYAxisReferenceValue<br>- rsfpl_ConfigureMarkerZoomFactor<br>- rsfpl_ApplyWindowPresetTraces<br>- rsfpl_ApplySubwindowPresetTraces<br>- rsfpl_WindowSetFocus<br>- rsfpl_SubwindowSetFocus |

| rsfpl Instrument Driver | | |
|---|---|---|
| **Driver history for LabWindows/CVI and VXIplug&play Instrument Driver for C/C++, VEE, etc.** | | |
| Revision | Date | Note |
| | | - rsfpl_ConfigurePowerDisplayLine<br>- rsfpl_ConfigureDataXValueDistribution<br>- rsfpl_HcopyMode<br>- rsfpl_ConfigureTestReportTemplateGeneralSettings<br>- rsfpl_ConfigureTestReportTemplateRawDataStorage<br>- rsfpl_ConfigureTestReportTemplateTitlePageLine<br>- rsfpl_ConfigureTestReportTemplateLogo<br>- rsfpl_ConfigureTestReportTemplateSelectedItems<br>- rsfpl_ConfigureTestReportTemplateSelectedItemsString<br>- rsfpl_QueryTestReportTemplateCatalogue<br>- rsfpl_SaveTestReportTemplate<br>- rsfpl_LoadTestReportTemplate<br>- rsfpl_DeleteTestReportTemplate<br>- rsfpl_TestReportRestoreDefaults<br>- rsfpl_TestReportNew<br>- rsfpl_TestReportAppend<br>- rsfpl_TestReportRemoveSet<br>- rsfpl_TestReportRemoveAllSets<br>- rsfpl_ConfigureTestReportTitlePage<br>- rsfpl_ConfigureTestReportIncludeUserDefinedInformation<br>- rsfpl_QueryTestReportItemList<br>- rsfpl_TestReportSave<br>- rsfpl_ConfigureSystemDateTime<br>- rsfpl_QuerySystemDateTime<br>- rsfpl_CalibrateAll<br>- rsfpl_RecallCalibration<br>- rsfpl_SaveCalibration<br>- rsfpl_QueryCalibrationSaveFilePath<br>- rsfpl_ConfigureCompressionPointMeasurementEnabled<br>- rsfpl_ConfigureCompressionPointMeasurementReference<br>- rsfpl_ConfigureCompressionPointMeasurementSelectCompressionPoints<br>- rsfpl_QueryCompressionPointMeasurement1dBResult<br>- rsfpl_QueryCompressionPointMeasurement3dBResult<br>- rsfpl_QueryCompressionPointMeasurementNdBResult<br>- rsfpl_ConfigureSweepListSymmetricalSetupEnabled<br>- rsfpl_QueryThirdOrderInterceptResultMaximum<br>- rsfpl_QueryThirdOrderInterceptResultMinimum<br>- rsfpl_ConfigureAndInitiateListEvaluationMeasurementElectronic<br>- rsfpl_ConfigureAndInitiateListEvaluationMeasurementElectronicSynchronized<br>- rsfpl_SelectIQDataFile<br>- rsfpl_QueryNoiseFrequencyTableData |

| rsfpl Instrument Driver | | |
|---|---|---|
| **Driver history for LabWindows/CVI and VXIplug&play Instrument Driver for C/C++, VEE, etc.** | | |
| Revision | Date | Note |
| | | - rsfpl_ConfigureNoiseFigureUncertaintySource<br>- rsfpl_ConfigureNoiseFigureUncertaintyResistorTempUncertainty<br>- rsfpl_ConfigureNoiseFigureUncertaintyCalibrationSource<br>- rsfpl_ConfigureNoiseFigureUncertaintyCalibrationResistorTempUncertainty<br>- rsfpl_ConfigureNoiseFigureUncertaintyDUTInputMatch<br>- rsfpl_ConfigureNoiseFigureUncertaintyDUTOutputMatch<br>- rsfpl_ConfigureNoiseFigureUncertaintyDUTCharacteristics<br>- rsfpl_ConfigureNoiseFigureUncertaintyPreampCharacteristics<br>- rsfpl_QueryNoiseFigureUncertaintyAnalyzerCharacteristics<br>- rsfpl_QueryNoiseFigureUncertaintyResult<br>- rsfpl_ConfigureVSAFrameAPSKNState<br>- rsfpl_ConfigureVSAFrameASKNState<br>- rsfpl_QueryVSAMeasurementDirty<br>- rsfpl_QueryVSABitErrorRateResults<br>- rsfpl_VSADSPMarkerToStartOfSelectedResultRange<br>- rsfpl_VSADSPDeltaMarkerToStartOfSelectedResultRange<br>- rsfpl_QueryVSADSPCaptureNumberOfBursts<br>- rsfpl_QueryVSADSPCaptureNumberOfPatterns<br>- rsfpl_QueryVSADSPCurrentRangeBurstLength<br>- rsfpl_QueryVSADSPCurrentRangeBurstPresent<br>- rsfpl_QueryVSADSPCurrentRangeBurstStart<br>- rsfpl_QueryVSADSPCurrentRangePatternConfidence<br>- rsfpl_QueryVSADSPCurrentRangePatternCorrect<br>- rsfpl_QueryVSADSPCurrentRangePatternPresent<br>- rsfpl_QueryVSADSPCurrentRangePatternStart<br><br>* Updated:<br>- rsfpl_ConfigurePowerSensorAbsolutePowerUnit - Units updated<br>- rsfpl_ConfigureAdjustLengthOfMeasurement - Help updated<br>- rsfpl_ConfigureTriggerRepetitionInterval - Range updated<br>- rsfpl_ConfigureMarkerPeakList - No of peaks range updated<br>- rsfpl_ConfigureAndInitiateListEvaluationMeasurement - No longer synchronized<br>- rsfpl_ConfigureAndInitiatePulsePowerMeasurement - Trigger sources updated<br>- rsfpl_ConfigureAndInitiatePulsePowerMeasurementSynchronized - Trigger sources updated<br>- rsfpl_ConfigureAndReadPulsePowerMeasurement - Trigger sources updated<br>- rsfpl_ConfigureIQAnalyzerSettings - Triggers updated<br>- rsfpl_ConfigureNoiseCalibrationNoiseSource - Smart noise source added<br>- rsfpl_ConfigureNoiseMeasurementNoiseSource - Smart noise source added<br>- rsfpl_ConfigureNoiseFrequencyTableData - Help updated<br>- rsfpl_ConfigureADEMDemodulator - Trigger sources updated<br>- rsfpl_ConfigureEMILISNVNetwork - Network types updated |

| rsfpl Instrument Driver | | |
|---|---|---|
| **Driver history for LabWindows/CVI and VXIplug&play Instrument Driver for C/C++, VEE, etc.** | | |
| Revision | Date | Note |
| | | - rsfpl_ConfigureVSAStandardPreset - Help updated<br>- rsfpl_ConfigureVSAModulationFSK - FP and function fixed<br>- rsfpl_ConfigureVSASignalStructureBurst - Helps and ranges updated<br>- rsfpl_ConfigureVSASymbolNumberAtReference - Range updated<br><br>* Deleted:<br>- rsfpl_GetVSAPatternFound<br>- rsfpl_QueryVSAResultsBERFormat |
| 1.30.0 | 08/2019 | * RsCore updated to 3.6.1<br>* Updated:<br>- rsfpl_ConfigureChannelPowerAdjacentChannel - Updated range for Spacing parameter<br>- rsfpl_ConfigureChannelPowerAlternateChannel - Updated range for Spacing parameter<br>- rsfpl_HcopyFileFormat - WMF, EWMF, DPF, SG, DOC and RTF added<br>- rsfpl_ConfigureRBWFilterType - 5-pole, RRC, CISPR, and MIL Std filters added<br>- rsfpl_ConfigureTriggerSource - Baseband Power added<br>- rsfpl_ConfigureAndInitiateListEvaluationMeasurement - Range table added to Filter Type parameter<br>- rsfpl_SetStatusRegister - Added 'CORRection' commands<br>- rsfpl_GetStatusRegister - Added 'CORRection' commands<br>- rsfpl_ConfigureMarkerAutoPeakSearch - Bug preventing min search setting fixed<br>- rsfpl_ConfigureAndInitiateListEvaluationMeasurement,<br>- rsfpl_ConfigureAndInitiateListEvaluationMeasurementSynchronized,<br>- rsfpl_QueryListEvaluationResults - Improved error elaboration for some invalid parameters.<br>- rsfpl_ReadListEvaluationMeasurement - Bug preventing successful execution fixed.<br>- rsfp_FetchIQData, rsfpl_ReadIQData - API changed - I,Q parameters - data type to ViReal64<br>- rsfpl_viWrite renamed to rsfpl_WriteCommand<br>* New:<br>- Added VSA subsystem<br>- rsfpl_ConfigureMultiThreadLocking<br>- rsfpl_ConfigureAutoSystemErrQuery<br>- rsfpl_SelectMeasurementChannelByType<br>- RSFPL_ATTR_RF_INPUT_SELECT<br>- rsfpl_ConfigureSubwindowHorizontalScale<br>RSFPL_ATTR_SUBWINDOW_HORIZONTAL_SCALE<br>- rsfpl_ConfigureRFInputSAWFilter<br>RSFPL_ATTR_RF_INPUT_SAW_FILTER<br>- rsfpl_ConfigureSubwindowYAxisScaling<br>RSFPL_ATTR_SUBWINDOW_Y_AXIS_SCALING<br>RSFPL_ATTR_SUBWINDOW_Y_AXIS_SCALING_MODE<br>- rsfpl_ConfigureWindowSweepPoints<br>RSFPL_ATTR_WINDOW_SWEEP_POINTS<br>- rsfpl_ConfigureExternalTriggerLevel |

| rsfpl Instrument Driver | | |
|---|---|---|
| **Driver history for LabWindows/CVI and VXIplug&play Instrument Driver for C/C++, VEE, etc.** | | |
| Revision | Date | Note |
| | | RSFPL_ATTR_EXTERNAL_TRIGGER_LEVEL<br>- rsfpl_ConfigureMarkerLinking<br>RSFPL_ATTR_MARKER_LINKING<br>- rsfpl_QueryMarkerAmplitude<br>RSFPL_ATTR_MARKER_AMPLITUDE<br>- rsfpl_ConfigureMarkerProbability<br>RSFPL_ATTR_MARKER_PROBABILITY<br>- rsfpl_NoiseMeasurementMarkerAllOff<br>RSFPL_ATTR_NOISE_MEASUREMENT_MARKER_ALL_OFF<br>- rsfpl_BandPowerMarkerAllOff<br>RSFPL_ATTR_BAND_POWER_MARKER_ALL_OFF<br>- rsfpl_ConfigureSpuriousEmissionsBreakMeasurementEnabled<br>RSFPL_ATTR_SPURIOUS_EMISSIONS_BREAK_MEASUREMENT_ENABLED<br>- rsfpl_AdjustSpuriousEmissionsXAxis<br>RSFPL_ATTR_SPURIOUS_EMISSIONS_ADJUST_X_AXIS<br>- rsfpl_ConfigureStatisticalMeasurement<br>RSFPL_ATTR_SIGNAL_STATISTIC_APD_ENABLED<br>RSFPL_ATTR_SIGNAL_STATISTIC_CCDF_ENABLED<br>RSFPL_ATTR_SIGNAL_STATISTIC_NUMBER_OF_SAMPLES<br>- rsfpl_ConfigureSignalStatisticScaling<br>RSFPL_ATTR_SIGNAL_STATISTIC_SCALING_X_REF_LEVEL<br>RSFPL_ATTR_SIGNAL_STATISTIC_SCALING_X_RANGE<br>RSFPL_ATTR_SIGNAL_STATISTIC_SCALING_Y_UNIT<br>RSFPL_ATTR_SIGNAL_STATISTIC_SCALING_Y_MINIMUM<br>RSFPL_ATTR_SIGNAL_STATISTIC_SCALING_Y_MAXIMUM<br>- rsfpl_SetSignalStatisticScalingSettings<br>RSFPL_ATTR_SIGNAL_STATISTIC_DEFAULT_SETTING<br>RSFPL_ATTR_SIGNAL_STATISTIC_ADJUST_SETTINGS<br>- rsfpl_QueryStatisticalMeasurementResults<br>- rsfpl_QueryStatisticalMeasurementCCDFLevel<br>- rsfpl_ConfigureSignalStatisticGatePeriod<br>RSFPL_ATTR_SIGNAL_STATISTIC_GATE_PERIOD<br>- rsfpl_ConfigureSignalStatisticGateComment<br>RSFPL_ATTR_SIGNAL_STATISTIC_GATE_COMMENT<br>- rsfpl_ConfigureSignalStatisticGateRange<br>RSFPL_ATTR_SIGNAL_STATISTIC_GATE_RANGE_ENABLED<br>RSFPL_ATTR_SIGNAL_STATISTIC_GATE_RANGE_START<br>RSFPL_ATTR_SIGNAL_STATISTIC_GATE_RANGE_STOP<br>- rsfpl_ConfigureDisplayFormat<br>RSFPL_ATTR_DISPLAY_FORMAT<br>- rsfpl_ConfigureSubwindowDisplaySingleZoomEnabled |

| rsfpl Instrument Driver | | |
|---|---|---|
| **Driver history for LabWindows/CVI and VXIplug&play Instrument Driver for C/C++, VEE, etc.** | | |
| Revision | Date | Note |
| | | RSFPL_ATTR_SUBWINDOW_DISPLAY_SINGLE_ZOOM_ENABLED<br>- rsfpl_ConfigureSubwindowSingleZoom<br>- rsfpl_ConfigureSubwindowMultipleZoomEnabled<br>RSFPL_ATTR_SUBWINDOW_MULTIPLE_ZOOM_ENABLED<br>- rsfpl_SubwindowMultipleZoom<br>- rsfpl_ConfigureNoiseInputLossTemperature<br>RSFPL_ATTR_NOISE_INPUT_LOSS_TEMPERATURE<br>- rsfpl_QueryNoiseInputLossTableList<br>RSFPL_ATTR_NOISE_INPUT_LOSS_TABLE_LIST<br>- rsfpl_ConfigureNoiseOutputLossTemperature<br>RSFPL_ATTR_NOISE_OUTPUT_LOSS_TEMPERATURE<br>- rsfpl_QueryNoiseOutputLossTableList<br>RSFPL_ATTR_NOISE_OUTPUT_LOSS_TABLE_LIST<br>- rsfpl_ConfigureNoiseCalibrationLossMode<br>RSFPL_ATTR_NOISE_CALIBRATION_LOSS_MODE<br>- rsfpl_ConfigureNoiseCalibrationLossConstant<br>RSFPL_ATTR_NOISE_CALIBRATION_LOSS_CONSTANT<br>- rsfpl_ConfigureNoiseCalibrationLossTemperature<br>RSFPL_ATTR_NOISE_CALIBRATION_LOSS_TEMPERATURE<br>- rsfpl_SelectNoiseCalibrationTable<br>RSFPL_ATTR_NOISE_CALIBRATION_LOSS_SELECTED_TABLE<br>- rsfpl_DefineNoiseCalibrationLossTable<br>RSFPL_FUNC_DEFINE_NOISE_CALIBRATION_LOSS_TABLE<br>- rsfpl_DeleteNoiseCalibrationLossTable<br>RSFPL_ATTR_NOISE_CALIBRATION_LOSS_DELETE_TABLE<br>- rsfpl_QueryNoiseCalibrationLossTableList<br>RSFPL_ATTR_NOISE_CALIBRATION_LOSS_TABLE_LIST<br>- rsfpl_ConfigureNoiseDUTLOType<br>RSFPL_ATTR_NOISE_DUT_LO_TYPE<br>- rsfpl_ConfigureNoiseDUTFixedIFFrequency<br>RSFPL_ATTR_NOISE_DUT_FIXED_IF_FREQUENCY<br>- rsfpl_ConfigureNoiseMeasurementPoints<br>RSFPL_ATTR_NOISE_MEASUREMENT_POINTS<br>- rsfpl_QueryNoiseMarkerResults<br>- rsfpl_QueryNoiseDeltaMarkerResults<br>- rsfpl_QueryADEMTraceResultModulationFrequency<br>RSFPL_ATTR_ADEM_TRACE_RESULT_MODULATION_FREQUENCY<br>- rsfpl_QueryADEMTraceResultCarrierPower<br>RSFPL_ATTR_ADEM_TRACE_RESULT_CARRIER_POWER<br>- rsfpl_ConfigureEMIMeasurement<br>RSFPL_ATTR_EMI_MEASUREMENT_ENABLED | |

| rsfpl Instrument Driver | | |
|---|---|---|
| **Driver history for LabWindows/CVI and VXIplug&play Instrument Driver for C/C++, VEE, etc.** | | |
| Revision | Date | Note |
| | | RSFPL_ATTR_EMI_MEASUREMENT_DWELL_TIME<br>- rsfpl_ConfigureEMILISNVNetwork<br>RSFPL_ATTR_EMI_LISN_V_NETWORK_TYPE<br>RSFPL_ATTR_EMI_LISN_V_NETWORK_PHASE<br>RSFPL_ATTR_EMI_LISN_V_NETWORK_HIGH_PASS_FILTER<br>- rsfpl_EMIMeasurementMarkerPeakSearch<br>RSFPL_ATTR_EMI_MEASUREMENT_MARKER_PEAK_SEARCH<br>- rsfpl_ConfigureEMIMeasurementMarkerDetector<br>RSFPL_ATTR_EMI_MEASUREMENT_MARKER_DETECTOR<br>- rsfpl_QueryEMIMeasurementMarkerResult<br>RSFPL_ATTR_EMI_MEASUREMENT_MARKER_RESULT<br>- rsfpl_QueryEMIMeasurementMarkerLimitCondition<br>RSFPL_ATTR_EMI_MEASUREMENT_MARKER_LIMIT_CONDITION<br>- rsfpl_QueryEMIMeasurementMarkerLimitVerticalDistance<br>RSFPL_ATTR_EMI_MEASUREMENT_MARKER_LIMIT_VERTICAL_DISTANCE<br>- rsfpl_EMIMeasurementDeltaMarkerPeakSearch<br>RSFPL_ATTR_EMI_MEASUREMENT_DELTA_MARKER_PEAK_SEARCH<br>- rsfpl_ConfigureEMIMeasurementDeltaMarkerDetector<br>RSFPL_ATTR_EMI_MEASUREMENT_DELTA_MARKER_DETECTOR<br>- rsfpl_QueryEMIMeasurementDeltaMarkerResult<br>RSFPL_ATTR_EMI_MEASUREMENT_DELTA_MARKER_RESULT<br>- rsfpl_QueryEMIMeasurementDeltaMarkerLimitCondition<br>RSFPL_ATTR_EMI_MEASUREMENT_DELTA_MARKER_LIMIT_CONDITION<br>- rsfpl_QueryEMIMeasurementDeltaMarkerLimitVerticalDistance<br>RSFPL_ATTR_EMI_MEASUREMENT_DELTA_MARKER_LIMIT_VERTICAL_DISTANCE<br>- rsfpl_ConfigureDataInstrumentSettingsRecallMode<br>RSFPL_ATTR_DATA_INSTRUMENT_SETTINGS_RECALL_MODE<br>- rsfpl_DataResultsImportTrace<br>- rsfpl_QueryFactoryDefaultIDN<br>RSFPL_ATTR_GENERAL_GET_IDN_STRING_FACTORY<br>- rsfpl_ConfigureCalibrationSignalFrequency43MHzPlus<br>RSFPL_ATTR_CALIBRATION_SIGNAL_FREQUENCY_43_MHZ_PLUS<br>- rsfpl_ConfigureCalibrationSignalFrequency7GHzPlus<br>RSFPL_ATTR_CALIBRATION_SIGNAL_FREQUENCY_7_GHZ_PLUS<br>- rsfpl_ConfigureCalibrationSignalWidebandFrequency<br>RSFPL_ATTR_CALIBRATION_SIGNAL_WIDEBAND_FREQUENCY<br>- rsfpl_ConfigureCalibrationSignalPeakDistance<br>RSFPL_ATTR_CALIBRATION_SIGNAL_PEAK_DISTANCE<br>- rsfpl_ErrorList<br>RSFPL_ATTR_SYSTEM_ERROR_LIST<br>- rsfpl_ErrorListSpecificType |

| rsfpl Instrument Driver | | |
|---|---|---|
| **Driver history for LabWindows/CVI and VXIplug&play Instrument Driver for C/C++, VEE, etc.** | | |
| Revision | Date | Note |
| | | - rsfpl_ClearInstrumentErrors<br>RSFPL_ATTR_SYSTEM_CLEAR_ERRORS<br>- rsfpl_ClearRemoteErrors<br>RSFPL_ATTR_SYSTEM_CLEAR_REMOTE_ERRORS_TABLE<br>- rsfpl_QueryRemoteErrors<br>- rsfpl_QuerySystemBatteryLevel<br>RSFPL_ATTR_SYSTEM_BATTERY_LEVEL<br>* Removed:<br>- rsfpl_viRead |
| 1.20.0 | 07/2018 | - Added Noise Figure measurement<br>- Added Analog Demodulation measurement |
| 1.1.0 | 07/2018 | Added IQ Analyzer |
| 1.0.0 | 06/2018 | Initial Release |

**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.

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

Certified Quality System
ISO 9001

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