

# LabWindows/CVI, VxiPnp driver history for the R&S® MXO Oscilloscopes

## [MXO4](#)



## [MXO5](#)



---

# Contents

<b>1</b>	<b>Supported Instruments</b> .....	<b>3</b>
<b>2</b>	<b>Revision History</b> .....	<b>3</b>
2.1	Version 1.4.1 / 11 – 2023 .....	3
2.2	Version 1.4.0 / 09 – 2023 .....	3
2.3	Version 1.3.2 / 05 – 2023 .....	5
2.4	Version 1.2.0 / 04 – 2023 .....	6
2.5	Version 1.1.0 / 11 – 2022 .....	20
<b>3</b>	<b>Getting Started</b> .....	<b>20</b>
3.1	LabWindows/CVI driver .....	20
3.2	VXIplug&play driver in C/C++, LabWindows/CVI .....	20
3.3	VXIplug&play driver in MATLAB .....	21
3.4	Linux and Mac OS X .....	21
3.5	Additional Help .....	21
<b>4</b>	<b>Customer support</b> .....	<b>22</b>

# 1 Supported Instruments

In the following table, the supported R&S instruments and firmware versions are listed:

Which instruments are supported?		
Instrument	Supported Firmware	Remarks
MXO4	1.4.2.2	
MXO5	2.0	

## 2 Revision History

### 2.1 Version 1.4.1 / 11 – 2023

- \* Added support for MXO5
- \* New Core 4.6.0
- \* Simplified OPC-Sync mechanism for queries.
  
- \* New:
  - rsmxo\_SetOpcSyncQueryMechanism

### 2.2 Version 1.4.0 / 09 – 2023

- \* New Core 4.5.0
- \* Added support for MXO4 FW 1.4.x
- \* Extended number of channels from 4 to 8
  
- \* New:
  - Filter (Class)
  - LIN (Class)
  - Trigger (Class)
  - Results (Class)
  - rsmxo\_IsMeasurementComplete
  - rsmxo\_IsWaitingForTrigger
  - rsmxo\_WaitForMeasurementComplete
  - rsmxo\_WaitForWaitingForTrigger
  - rsmxo\_ConfigureTriggerStateDigitalStateOperator
  - rsmxo\_ConfigureTriggerStateDigitalChannelState
  - rsmxo\_ConfigureTriggerPatternStateSource
  - rsmxo\_ConfigureTriggerPatternDigitalStateOperator
  - rsmxo\_ConfigureTriggerPatternDigitalChannelState
  - rsmxo\_ConfigureProtocolI2CShowSymbols
  - rsmxo\_ConfigureProtocolI2CSymbolListFile
  - rsmxo\_ConfigureProtocolUARTBitOrder
  - rsmxo\_QueryProtocolUARTResultsWordEnd
  - rsmxo\_ConfigureProtocolCANTranceiverMode
  - rsmxo\_ConfigureProtocolCANSICSettings
  - rsmxo\_ConfigureProtocolCANFASTSettings
  - rsmxo\_ConfigureProtocolCANShowSymbols

- rsmxo\_ConfigureProtocolCANSymbolListFile
- rsmxo\_EnableProtocolCANFilter
- rsmxo\_EnableProtocolCANFilterFrame
- rsmxo\_EnableProtocolCANFilterFrameField
- rsmxo\_EnableProtocolCANFilterError
- rsmxo\_ConfigureProtocolCANFilterFieldOperator
- rsmxo\_ConfigureProtocolCANFilterFieldData
- rsmxo\_ConfigureProtocolCANFilterFieldIndex
- rsmxo\_QueryProtocolCANResultsFrameSymbol
- rsmxo\_ConfigureProtocolLINStandard
- rsmxo\_ConfigureProtocolLINSource
- rsmxo\_ConfigureProtocolLINSettings
- rsmxo\_ConfigureProtocolLINPolarity
- rsmxo\_ConfigureProtocolLINBitRate
- rsmxo\_EnableProtocolLINFilter
- rsmxo\_EnableProtocolLINFilterFrame
- rsmxo\_EnableProtocolLINFilterField
- rsmxo\_EnableProtocolLINFilterError
- rsmxo\_ConfigureProtocolLINFilterFieldOperator
- rsmxo\_ConfigureProtocolLINFilterFieldData
- rsmxo\_ConfigureProtocolLINFilterFieldIndex
- rsmxo\_ConfigureProtocolLINTriggerType
- rsmxo\_ConfigureProtocolLINTriggerErrorTypes
- rsmxo\_ConfigureProtocolLINTriggerDataOperator
- rsmxo\_ConfigureProtocolLINTriggerDataPattern
- rsmxo\_ConfigureProtocolLINTriggerDataPosition
- rsmxo\_ConfigureProtocolLINTriggerIdentifier
- rsmxo\_QueryProtocolLINResultsFrameCount
- rsmxo\_QueryProtocolLINResultsFrameState
- rsmxo\_QueryProtocolLINResultsFrameBounds
- rsmxo\_QueryProtocolLINResultsFrameData
- rsmxo\_QueryProtocolLINResultsFrameBitrate
- rsmxo\_QueryProtocolLINResultsFrameChecksum
- rsmxo\_QueryProtocolLINResultsFrameIdentifier
- rsmxo\_QueryProtocolLINResultsFrameByteCount
- rsmxo\_QueryProtocolLINResultsFrameByte
- rsmxo\_QueryProtocolLINResultsFrameByteFormattedValue
- rsmxo\_QueryProtocolLINResultsFrameByteLabel
- rsmxo\_AbortReferenceWaveform
- rsmxo\_EnableGeneratorModulation
- rsmxo\_AbortWaveformSave
- rsmxo\_ConfigureDisplayBacklightBrightness
- rsmxo\_ConfigureDisplayBacklightDimmOnUserInactivity
- rsmxo\_DisplayClearResults
- rsmxo\_ConfigureStatusRegisterTriggerActionEnabled
- rsmxo\_ConfigureStatusRegisterTriggerActionTransition
- rsmxo\_QueryStatusRegisterTriggerAction
- rsmxo\_ConfigureStatusRegisterTriggerEdgeEnabled
- rsmxo\_ConfigureStatusRegisterTriggerEdgeTransition
- rsmxo\_QueryStatusRegisterTriggerEdge
- rsmxo\_OPCCSyncWriteEnable
- rsmxo\_OPCCSyncQueryEnable

\* Updated:

- rsmxo\_ConfigureProtocolType - Added LIN
- rsmxo\_QueryProtocolI2CResultsDecodeTable - State data types added
- rsmxo\_QueryProtocolCANResultsFrame - Added frame type values
- rsmxo\_QueryProtocolCANResultsBRS - Field attribute fixed
- rsmxo\_QueryProtocolCANResultsESI - Field attribute fixed

- rsmxo\_QueryProtocolCANXLResultsAcceptance - Field attribute fixed
- rsmxo\_QueryProtocolCANXLResultsPCRC - Field attribute fixed
- rsmxo\_QueryProtocolCANXLResultsSBC - Field attribute fixed
- rsmxo\_QueryProtocolCANXLResultsServiceDataUnit - Field attribute fixed
- rsmxo\_QueryProtocolCANXLResultsSEC - Field attribute fixed
- rsmxo\_QueryProtocolCANXLResultsVCID - Field attribute fixed

\* Deleted:

- rsmxo\_ConfigureScreenshotFilename - use rsmxo\_ConfigureScreenshotFilePath instead

## 2.3 Version 1.3.2 / 05 – 2023

\* Added support for MXO44 FW 1.3.2

\* New:

- Status Reporting (Class)
- rsmxo\_ConfigureHorizontalRoll
- rsmxo\_QueryHorizontalRollStatus
- rsmxo\_ConfigureAcquisitionRollModeOffScreenCapture
- rsmxo\_QueryAcquisitionRollModePoints
- rsmxo\_MeasurementFitToScreen
- rsmxo\_ConfigureMeasurementAutoscale
- rsmxo\_ConfigureMeasurementTrack
- rsmxo\_QuerySpectrumPeakListCurrent
- rsmxo\_QuerySpectrumPeakListCount
- rsmxo\_ConfigureSpectrumPeakListLabels
- rsmxo\_ConfigureSpectrumPeakListSort
- rsmxo\_ConfigureSpectrumPeakListDisplayPeaks
- rsmxo\_QueryProtocolCANDecodedFrames
- rsmxo\_ConfigureProtocolCANXLBitrate
- rsmxo\_ConfigureProtocolCANXLSamplePoint
- rsmxo\_ConfigureProtocolCANXLTriggerSEC
- rsmxo\_ConfigureProtocolCANXLTriggerAF
- rsmxo\_ConfigureProtocolCANXLTriggerSDT
- rsmxo\_ConfigureProtocolCANXLTriggerVCID
- rsmxo\_QueryProtocolCANResultsBRS
- rsmxo\_QueryProtocolCANResultsESI
- rsmxo\_QueryProtocolCANXLResultsAcceptance
- rsmxo\_QueryProtocolCANXLResultsPCRC
- rsmxo\_QueryProtocolCANXLResultsSBC
- rsmxo\_QueryProtocolCANXLResultsServiceDataUnit
- rsmxo\_QueryProtocolCANXLResultsSEC
- rsmxo\_QueryProtocolCANXLResultsVCID
- rsmxo\_ConfigureLogicPosition
- rsmxo\_ConfigureLogicSizeOfTheDisplay
- rsmxo\_ConfigureLogicDigitalChannelVerticalPosition
- rsmxo\_ConfigureLogicDigitalChannelSizeOfTheDisplay
- rsmxo\_ConfigureFrequencyResponseAnalysisAutoscale
- rsmxo\_FrequencyResponseAnalysisCalibrationStart
- rsmxo\_QueryFrequencyResponseAnalysisCalibrationResult
- rsmxo\_ConfigureFrequencyResponseAnalysisCalibrationState
- rsmxo\_GeneratorSave
- rsmxo\_GeneratorRecall
- rsmxo\_GeneratorArbitraryWaveformRunSingle
- rsmxo\_ConfigureStatusRegisterGeneratorTemperatureEnabled
- rsmxo\_ConfigureStatusRegisterGeneratorTemperatureTransition

- rsmxo\_QueryStatusRegisterGeneratorTemperature
- rsmxo\_ConfigureStatusRegisterGeneratorGOverloadEnabled
- rsmxo\_ConfigureStatusRegisterGeneratorGOverloadTransition
- rsmxo\_QueryStatusRegisterGeneratorGOverload
- rsmxo\_LoadWaveformGeneratorSettings
- rsmxo\_StoreWaveformGeneratorSettings
- rsmxo\_ConfigureScreenshotFilename
- rsmxo\_ConfigureResultsExportFRA
- rsmxo\_FetchMeasurementTrackDataHeader
- rsmxo\_FetchMeasurementTrackData
- rsmxo\_ReadMeasurementTrackData
- rsmxo\_ConfigureStatusRegisterChannelWarnOverloadEnabled
- rsmxo\_ConfigureStatusRegisterChannelWarnOverloadTransition
- rsmxo\_QueryStatusRegisterChannelWarnOverload
- rsmxo\_ConfigureStatusRegisterChannelPPSEnabled
- rsmxo\_ConfigureStatusRegisterChannelPPSTransition
- rsmxo\_QueryStatusRegisterChannelPPS

\* Updated:

- rsmxo\_ClearMeasurementStatisticsResults - help fixed
- rsmxo\_ConfigureSpectrumScaleMagnitudeUnit - Magnitude Unit values updated
- rsmxo\_QueryProtocolI2CResultsDecodeTable - State values updated
- rsmxo\_ConfigureProtocolCANTriggerFrameType - Type values updated
- rsmxo\_ConfigureProtocolCANTriggerData - Data Pattern values updated
- rsmxo\_QueryProtocolCANResultsFrame - State, Type values updated
- rsmxo\_ConfigureScreenshotColorSettings - removed Printer Color Set, control is reserved
- rsmxo\_ConfigureScreenshotFilePath - changed attribute from RSMXO\_ATTR\_SCREENSHOT\_DESTINATION to RSMXO\_ATTR\_SCREENSHOT\_FILENAME

\* Deleted:

- rsmxo\_MeasurementClear
- rsmxo\_ConfigureProtocolCANTriggerStandard
- rsmxo\_ConfigureProtocolCANTriggerByteOrder
- rsmxo\_QueryProtocolCANResultsSymbolicLabel
- rsmxo\_QueryProtocolCANResultsStandard

## 2.4 Version 1.2.0 / 04 – 2023

\* New Core 4.4.0

- \* Added support for MXO44 FW 1.2.x
- \* Added support for CAN Protocol (K520)
- \* Added support for Frequency Response Analysis (K36)

\* New:

- Vertical > Probe > Probe Information (Class)
- Vertical > Probe > Active Voltage Probes (Class)
- Vertical > Probe > Current Probes (Class)
- Trigger > Sequence (Class)
- Trigger > State (Class)
- Trigger > Pattern (Class)
- Gate (Class)
- Protocol > CAN (Class)
- Frequency Response Analysis (Class)
- Save/Recall > File Management (Class)
- Save/Recall > Directory Management (Class)
- Save/Recall > Results (Class)
- Status Reporting (Class)

- rsmxo\_ConfigureVerticalRange
- rsmxo\_ConfigureProbePredefinedType
- rsmxo\_QueryProbeImpedance
- rsmxo\_QueryProbeCapacitance
- rsmxo\_QueryProbePartNumber
- rsmxo\_QueryProbeProductionDate
- rsmxo\_QueryProbeSerialNumber
- rsmxo\_QueryProbeSoftwareVersion
- rsmxo\_ConfigureProbeCMOffset
- rsmxo\_ConfigureProbeRTZA15AttenuatorEnabled
- rsmxo\_ConfigureProbeDisplay
- rsmxo\_ConfigureProbeSoundEnabled
- rsmxo\_ConfigureProbeBandwidthLimitEnabled
- rsmxo\_ConfigureProbeVoltageRange
- rsmxo\_ConfigureProbeMeterEnabled
- rsmxo\_ProbeMeterSetToOffset
- rsmxo\_ConfigureProbeACCouplingEnabled
- rsmxo\_ConfigureProbeManualGain
- rsmxo\_QueryProbePredefinedGain
- rsmxo\_ConfigureProbeZeroAdjust
- rsmxo\_ProbeDeGauss
- rsmxo\_ProbeSaveToProbe
- rsmxo\_QueryProbeResultsPositive
- rsmxo\_QueryProbeResultsNegative
- rsmxo\_ConfigureTriggerSequenceType
- rsmxo\_ConfigureTriggerSequenceDelay
- rsmxo\_ConfigureTriggerSequenceBEventCount
- rsmxo\_ConfigureTriggerSequenceResetSettings
- rsmxo\_ConfigureTriggerStateSlope
- rsmxo\_ConfigureTriggerStateOperator
- rsmxo\_ConfigureTriggerStateChannel
- rsmxo\_ConfigureTriggerPatternOperator
- rsmxo\_ConfigureTriggerPatternChannel
- rsmxo\_ConfigureTriggerEdgeLevel
- rsmxo\_QueryAcquisitionCurrent
- rsmxo\_QueryAcquisitionAverage
- rsmxo\_QueryMeasurementCount
- rsmxo\_ConfigureMeasurementSource1
- rsmxo\_ConfigureMeasurementSource2
- rsmxo\_ConfigureMeasurementGate
- rsmxo\_ConfigureMeasurementEnvelope
- rsmxo\_MeasurementClear
- rsmxo\_EnableMeasurementStatisticsAllEvents
- rsmxo\_ConfigureMeasurementStatisticsMaximumEvents
- rsmxo\_ConfigureMeasurementAmplitudeTimeEdgesSlope
- rsmxo\_ConfigureMeasurementAmplitudeTimeDelayToTrigger
- rsmxo\_QueryResultsEventCount
- rsmxo\_GetResultsEventStart
- rsmxo\_GetResultsEventStop
- rsmxo\_GetResultsEventValue
- rsmxo\_ConfigureGateEnabled
- rsmxo\_ConfigureGateDisplay
- rsmxo\_ConfigureGateCouplingMode
- rsmxo\_ConfigureGateMode
- rsmxo\_ConfigureGateAbsoluteBounds
- rsmxo\_ConfigureGateRelativeBounds
- rsmxo\_ConfigureGateCursor
- rsmxo\_ConfigureGateZoomDiagram
- rsmxo\_CursorDisableAll

- rsmxo\_QueryCursorCount
- rsmxo\_ConfigureCursorEnvelope
- rsmxo\_ConfigureCursorEnvelope2
- rsmxo\_ConfigureCursorPeakSearchThreshold
- rsmxo\_ConfigureCursorPeakSearchExcursion
- rsmxo\_ConfigureMathVerticalScaleMode
- rsmxo\_QueryMathSignalType
- rsmxo\_ConfigureMathEnvelopeWaveformSelection
- rsmxo\_ConfigureProtocolCANSource
- rsmxo\_ConfigureProtocolCANType
- rsmxo\_ConfigureProtocolCANSettings
- rsmxo\_ConfigureProtocolCANNominalBitRate
- rsmxo\_ConfigureProtocolCANFDSettings
- rsmxo\_ConfigureProtocolCANTriggerType
- rsmxo\_ConfigureProtocolCANTriggerFrameType
- rsmxo\_ConfigureProtocolCANTriggerIdentifierType
- rsmxo\_ConfigureProtocolCANTriggerIdentifier
- rsmxo\_ConfigureProtocolCANTriggerData
- rsmxo\_ConfigureProtocolCANTriggerDataPosition
- rsmxo\_ConfigureProtocolCANTriggerErrorCondition
- rsmxo\_ConfigureProtocolCANTriggerStuffCountErrorEnabled
- rsmxo\_ConfigureProtocolCANTriggerStandard
- rsmxo\_ConfigureProtocolCANTriggerCANFDSettings
- rsmxo\_ConfigureProtocolCANTriggerByteOrder
- rsmxo\_QueryProtocolCANResultsFrame
- rsmxo\_QueryProtocolCANResultsIdentifier
- rsmxo\_QueryProtocolCANResultsACKState
- rsmxo\_QueryProtocolCANResultsACKValue
- rsmxo\_QueryProtocolCANResultsByteState
- rsmxo\_QueryProtocolCANResultsByteValue
- rsmxo\_QueryProtocolCANResultsCRCState
- rsmxo\_QueryProtocolCANResultsCRCValue
- rsmxo\_QueryProtocolCANResultsDLCState
- rsmxo\_QueryProtocolCANResultsDLCValue
- rsmxo\_QueryProtocolCANResultsBitStuffingErrorPosition
- rsmxo\_QueryProtocolCANResultsFormError
- rsmxo\_QueryProtocolCANResultsDataBytesNumber
- rsmxo\_QueryProtocolCANResultsData
- rsmxo\_QueryProtocolCANResultsPatternData
- rsmxo\_QueryProtocolCANResultsSymbolicData
- rsmxo\_QueryProtocolCANResultsSymbolicDataExport
- rsmxo\_QueryProtocolCANResultsSymbolicLabel
- rsmxo\_QueryProtocolCANResultsStuffCountField
- rsmxo\_QueryProtocolCANResultsStandard
- rsmxo\_EnableFrequencyResponseAnalysis
- rsmxo\_ConfigureFrequencyResponseAnalysisSettings
- rsmxo\_ConfigureFrequencyResponseAnalysisSweepBounds
- rsmxo\_ConfigureFrequencyResponseAnalysisPointsMode
- rsmxo\_ConfigureFrequencyResponseAnalysisPointsTotal
- rsmxo\_ConfigureFrequencyResponseAnalysisPointsLogarithmic
- rsmxo\_ConfigureFrequencyResponseAnalysisUserLoad
- rsmxo\_ConfigureFrequencyResponseAnalysisAmplitudeMode
- rsmxo\_ConfigureFrequencyResponseAnalysisAmplitude
- rsmxo\_ConfigureFrequencyResponseAnalysisRepeat
- rsmxo\_ResetFrequencyResponseAnalysis
- rsmxo\_RunFrequencyResponseAnalysis
- rsmxo\_ConfigureFrequencyResponseAnalysisDisplaySettings
- rsmxo\_ConfigureFrequencyResponseAnalysisMaximumPhase
- rsmxo\_ConfigureFrequencyResponseAnalysisMeasurementDelay



- rsmxo\_ConfigureFrequencyResponseAnalysisRBW
- rsmxo\_ConfigureFrequencyResponseAnalysisAmplitudeProfilePoint
- rsmxo\_QueryFrequencyResponseAnalysisAmplitudeProfilePointCount
- rsmxo\_ConfigureFrequencyResponseAnalysisAmplitudeProfileVoltageChange
- rsmxo\_SortFrequencyResponseAnalysisAmplitudeProfile
- rsmxo\_AddFrequencyResponseAnalysisAmplitudeProfilePoint
- rsmxo\_DeleteFrequencyResponseAnalysisAmplitudeProfilePoint
- rsmxo\_ConfigureFrequencyResponseAnalysisGainEnabled
- rsmxo\_ConfigureFrequencyResponseAnalysisGainVerticalSettings
- rsmxo\_ConfigureFrequencyResponseAnalysisPhaseEnabled
- rsmxo\_ConfigureFrequencyResponseAnalysisPhaseSettings
- rsmxo\_ConfigureFrequencyResponseAnalysisAmplitudeEnabled
- rsmxo\_ConfigureFrequencyResponseAnalysisAmplitudeSettings
- rsmxo\_QueryFrequencyResponseAnalysisGainMargin
- rsmxo\_QueryFrequencyResponseAnalysisPhaseMargin
- rsmxo\_QueryFrequencyResponseAnalysisGainData
- rsmxo\_QueryFrequencyResponseAnalysisPhaseData
- rsmxo\_QueryFrequencyResponseAnalysisFrequencyData
- rsmxo\_QueryFrequencyResponseAnalysisMarkerResults
- rsmxo\_ConfigureReferenceWaveformVerticalOffset
- rsmxo\_SaveInstrumentSettingsFile
- rsmxo\_LoadInstrumentSettingsFile
- rsmxo\_QueryDrivesCatalog
- rsmxo\_QueryMemoryCatalogSize
- rsmxo\_QueryMemoryCatalog
- rsmxo\_DeleteFile
- rsmxo\_CopyFile
- rsmxo\_MoveFile
- rsmxo\_ConfigureFileAttribute
- rsmxo\_ConfigureDefaultDirectory
- rsmxo\_CreateDirectory
- rsmxo\_DeleteDirectory
- rsmxo\_QueryDirectoryCatalogSize
- rsmxo\_QueryDirectoryCatalog
- rsmxo\_ConfigureResultsExportSettings
- rsmxo\_ConfigureResultsExportFileName
- rsmxo\_ResultsExportSaveToFile
- rsmxo\_ConfigureSystemDate
- rsmxo\_QuerySystemDate
- rsmxo\_ConfigureSystemTime
- rsmxo\_QuerySystemTime
- rsmxo\_AddSmartGridLayout
- rsmxo\_QuerySmartGridLayoutCount
- rsmxo\_ConfigureSmartGridLayoutActive
- rsmxo\_AddSmartGridDiagram
- rsmxo\_QuerySmartGridDiagramCount
- rsmxo\_ConfigureSmartGridDiagramSource
- rsmxo\_EnableAutoPowerUp
- rsmxo\_ConfigureAutosaveSettings
- rsmxo\_StatusRegisterReset
- rsmxo\_ConfigureStatusRegisterChannelNegativeClippingEnabled
- rsmxo\_ConfigureStatusRegisterChannelNegativeClippingTransition
- rsmxo\_QueryStatusRegisterChannelNegativeClipping
- rsmxo\_ConfigureStatusRegisterChannelPositiveClippingEnabled
- rsmxo\_ConfigureStatusRegisterChannelPositiveClippingTransition
- rsmxo\_QueryStatusRegisterChannelPositiveClipping
- rsmxo\_ConfigureStatusRegisterChannelOverloadEnabled
- rsmxo\_ConfigureStatusRegisterChannelOverloadTransition
- rsmxo\_QueryStatusRegisterChannelOverload

- rsmxo\_QueryStatusRegisterChannelWarnOverloadEvent
- rsmxo\_ConfigureStatusRegisterMeasurementImpreciseEnabled
- rsmxo\_ConfigureStatusRegisterMeasurementImpreciseTransition
- rsmxo\_QueryStatusRegisterMeasurementImprecise
- rsmxo\_ConfigureStatusRegisterMeasurementLimitEnabled
- rsmxo\_ConfigureStatusRegisterMeasurementLimitTransition
- rsmxo\_QueryStatusRegisterMeasurementLimit
- rsmxo\_ConfigureStatusRegisterMeasurementMarginEnabled
- rsmxo\_ConfigureStatusRegisterMeasurementMarginTransition
- rsmxo\_QueryStatusRegisterMeasurementMargin
- rsmxo\_RunSingleAcquisitionNoWait

\* Deleted:

- Save/Recall > Report (Class)
- rsmxo\_ConfigureCursorResultDialogDefault
- rsmxo\_ConfigureGeneratorSource
- rsmxo\_ConfigureProbeMeterVisibility
- rsmxo\_ConfigureScreenshotOrientation
- rsmxo\_ConfigureSpectrumScaleVerticalOffset
- rsmxo\_DetermineProtocolThreshold
- rsmxo\_ExecuteSelfTest
- rsmxo\_TriggerEdgeGround
- rsmxo\_QuerySelfTestState
- rsmxo\_UseHorizontalReferenceClockExternal
- rsmxo\_QueryWithOPCSync

\* Updated:

- Protocol > SPI > Trigger (Class) - Trigger repcap removed, breaking change
- Protocol > I2C > Trigger (Class) - Trigger repcap removed, breaking change
- Protocol > UART > Trigger (Class) - Trigger repcap removed, breaking change
- rsmxo\_ConfigureVerticalBandwidth - Values added
- rsmxo\_EnableHorizontalReferenceClock10MHzOutput - Long command updated
- rsmxo\_ConfigureTriggerSource - Source values updated
- rsmxo\_ConfigureTriggerSetupAndHoldClockSource - Source values updated
- rsmxo\_ConfigureMeasurementSource - Source values updated
- rsmxo\_ClearMeasurementStatisticsResults - Repcap removed, breaking change
- rsmxo\_ConfigureMeasurementAmplitudeTimeDelaySlope - Command updated, repcap added
- rsmxo\_ConfigureCursorSource - Source values updated
- rsmxo\_ConfigureCursorSecondarySource - Source values updated
- rsmxo\_ConfigureSpectrumSource - Source control updated
- rsmxo\_ConfigureMathVerticalAxis - Scale parameter long command updated
- rsmxo\_ConfigureProtocolType - CAN protocol added
- rsmxo\_ConfigureProtocolDisplaySettings - Formats added
- rsmxo\_ConfigureProtocolI2CSDASource - Source values updated
- rsmxo\_ConfigureProtocolI2CSCLSource - Source values updated
- rsmxo\_ConfigureProtocolI2CFilterCondition - Condition parameter updated
- rsmxo\_ConfigureProtocolI2CFilterIndex - Index updated
- rsmxo\_ConfigureProtocolI2CTriggerAddressSettings - Address type parameter updated
- rsmxo\_ConfigureProtocolI2CTriggerData - Data parameter updated
- rsmxo\_ConfigureProtocolSPIMOSISource - Source values updated
- rsmxo\_ConfigureProtocolSPIMISOSource - Source values updated
- rsmxo\_ConfigureProtocolSPISCLKSource - Source values updated
- rsmxo\_ConfigureProtocolSPICSSource - Source values updated
- rsmxo\_ConfigureProtocolSPIFilterIndex - Index parameter updated
- rsmxo\_ConfigureProtocolSPIFilterCondition - Condition parameter updated
- rsmxo\_ConfigureProtocolSPITriggerData - Data parameter removed
- rsmxo\_ConfigureProtocolUARTTXSource - Source values updated
- rsmxo\_ConfigureProtocolUARTRXSource - Source values updated
- rsmxo\_ConfigureProtocolUARTFilterIndex - Index parameter updated

- rsmxo\_ConfigureProtocolUARTFilterCondition - Condition parameter updated
- rsmxo\_ConfigureProtocolUARTTriggerData - Data parameter updated
- rsmxo\_ConfigureProtocolUARTTriggerOperator - Operator parameter updated
- rsmxo\_ConfigureLogicBusDataFormat - Data format values added
- rsmxo\_ConfigureReferenceWaveformSetup - Source values updated
- rsmxo\_ConfigureGeneratorModulationSetup - State parameter removed, breaking change
- rsmxo\_ConfigureScreenshotColorSettings - Display Color, Hardcopy Output parameters removed, breaking change
- rsmxo\_ConfigureScreenshotFilePath - Hardcopy Output parameter removed, breaking change
- rsmxo\_SaveScreenshot - Hardcopy Output parameter removed, breaking change
- rsmxo\_SaveScreenshotNext - Hardcopy Output parameter removed, breaking change
- rsmxo\_ConfigureWaveformExportSettings - Source values updated
- rsmxo\_ConfigureBitpatternFormat - Format values added
- rsmxo\_ConfigureResultsMaximumCount - Measurement types fixed
- rsmxo\_ShowResultsLabels - Measurement types fixed
- rsmxo\_ShowResultsFrequency - Measurement types fixed
- rsmxo\_FetchMeasurementReliability - Measurement types fixed
- rsmxo\_ConfigureGeneratorArbitrarySignalSource - Generator rep cap removed, breaking change
- rsmxo\_ConfigureGeneratorArbitraryWaveformSource - Generator rep cap removed, breaking change
- rsmxo\_RunSingleAcquisition - added MaximumTimeMs parameter, breaking change
- rsmxo\_SetOPCTimeout - Timeout parameter data type changed from ViUInt32 to Vilnt32
- rsmxo\_GetOPCTimeout - Timeout parameter data type changed from ViUInt32 to Vilnt32
- rsmxo\_SetVISATimeout - Timeout parameter data type changed from ViUInt32 to Vilnt32
- rsmxo\_GetVISATimeout - Timeout parameter data type changed from ViUInt32 to Vilnt32
- rsmxo\_WriteCommandWithOPCSync - Timeout parameter data type changed from ViUInt32 to Vilnt32
- rsmxo\_ExecuteAlignment - added MaximumTimeMs parameter, breaking change

\* Modified attributes:

- RSMXO\_ATTR\_PROTOCOL\_I2C\_TRIGGER\_ADDRESS - Trigger repcap removed
- RSMXO\_ATTR\_PROTOCOL\_I2C\_TRIGGER\_ADDRESS\_MAX - Trigger repcap removed
- RSMXO\_ATTR\_PROTOCOL\_I2C\_TRIGGER\_ADDRESS\_MIN - Trigger repcap removed
- RSMXO\_ATTR\_PROTOCOL\_I2C\_TRIGGER\_ADDRESS\_NACK - Trigger repcap removed
- RSMXO\_ATTR\_PROTOCOL\_I2C\_TRIGGER\_ADDRESS\_TYPE - Trigger repcap removed
- RSMXO\_ATTR\_PROTOCOL\_I2C\_TRIGGER\_DATA - Trigger repcap removed
- RSMXO\_ATTR\_PROTOCOL\_I2C\_TRIGGER\_DATA\_MIN - Trigger repcap removed
- RSMXO\_ATTR\_PROTOCOL\_I2C\_TRIGGER\_DATA\_POSITION - Trigger repcap removed
- RSMXO\_ATTR\_PROTOCOL\_I2C\_TRIGGER\_DATA\_READ\_NACK - Trigger repcap removed
- RSMXO\_ATTR\_PROTOCOL\_I2C\_TRIGGER\_DATA\_WRITE\_NACK - Trigger repcap removed
- RSMXO\_ATTR\_PROTOCOL\_I2C\_TRIGGER\_R\_W\_BIT - Trigger repcap removed
- RSMXO\_ATTR\_PROTOCOL\_I2C\_TRIGGER\_TYPE - Trigger repcap removed
- RSMXO\_ATTR\_PROTOCOL\_UART\_TRIGGER\_DATA - Trigger repcap removed, range table updated
- RSMXO\_ATTR\_PROTOCOL\_UART\_TRIGGER\_DATA\_POSITION - Trigger repcap removed
- RSMXO\_ATTR\_PROTOCOL\_UART\_TRIGGER\_OPERATOR - Trigger repcap removed, range table updated
- RSMXO\_ATTR\_PROTOCOL\_UART\_TRIGGER\_PATTERN - Trigger repcap removed
- RSMXO\_ATTR\_PROTOCOL\_UART\_TRIGGER\_SOURCE - Trigger repcap removed
- RSMXO\_ATTR\_PROTOCOL\_UART\_TRIGGER\_TYPE - Trigger repcap removed
- RSMXO\_ATTR\_PROTOCOL\_SPI\_TRIGGER\_DATA - Trigger repcap removed
- RSMXO\_ATTR\_PROTOCOL\_SPI\_TRIGGER\_DATA\_PATTERN - Trigger repcap removed
- RSMXO\_ATTR\_PROTOCOL\_SPI\_TRIGGER\_DATA\_POSITION - Trigger repcap removed
- RSMXO\_ATTR\_PROTOCOL\_SPI\_TRIGGER\_SEARCH\_MODE - Trigger repcap removed
- RSMXO\_ATTR\_PROTOCOL\_SPI\_TRIGGER\_TYPE - Trigger repcap removed
- RSMXO\_ATTR\_GENERATOR\_ARBITRARY\_WAVEFORM\_SOURCE - Repcap removed
- RSMXO\_ATTR\_GENERATOR\_ARBITRARY\_SIGNAL\_SOURCE - Repcap removed
- RSMXO\_ATTR\_MEASUREMENT\_STATISTICS\_CLEAR\_RESULTS - Repcap removed
- RSMXO\_ATTR\_MEASUREMENT\_AMPLITUDE\_TIME\_DELAY\_SLOPE - Command updated, repcap added

- RSMXO\_ATTR\_HORIZONTAL\_REFERENCE\_CLOCK\_OUTPUT\_10\_MHZ\_ENABLED - Command updated, added OPC-sync
- RSMXO\_ATTR\_VERTICAL\_BANDWIDTH - 2 GHz value added
- RSMXO\_ATTR\_MATH\_VERTICAL\_SCALE - Long command updated
- RSMXO\_ATTR\_TRIGGER\_SOURCE - Added new source value
- RSMXO\_ATTR\_TRIGGER\_SETUP\_AND\_HOLD\_CLOCK\_SOURCE - Added new source value
- RSMXO\_ATTR\_CURSOR\_SOURCE - Source range table updated
- RSMXO\_ATTR\_CURSOR\_SOURCE\_2 - Source range table updated
- RSMXO\_ATTR\_SPECTRUM\_SOURCE - Source range table updated
- RSMXO\_ATTR\_REFERENCE\_WAVEFORM\_SOURCE - Source range table updated
- RSMXO\_ATTR\_WAVEFORM\_EXPORT\_SOURCE - Source range table updated
- RSMXO\_ATTR\_PROTOCOL\_I2C\_SCL\_SOURCE - Source range table updated
- RSMXO\_ATTR\_PROTOCOL\_I2C\_SDA\_SOURCE - Source range table updated
- RSMXO\_ATTR\_PROTOCOL\_SPI\_MISO\_SOURCE - Source range table updated
- RSMXO\_ATTR\_PROTOCOL\_SPI\_MOSI\_SOURCE - Source range table updated
- RSMXO\_ATTR\_PROTOCOL\_SPI\_SCLK\_SOURCE - Source range table updated
- RSMXO\_ATTR\_PROTOCOL\_SPI\_CS\_SOURCE - Source range table updated
- RSMXO\_ATTR\_PROTOCOL\_UART\_RX\_SOURCE - Source range table updated
- RSMXO\_ATTR\_PROTOCOL\_UART\_TX\_SOURCE - Source range table updated
- RSMXO\_ATTR\_PROTOCOL\_SPI\_FILTER\_CONDITION - Range table fixed
- RSMXO\_ATTR\_PROTOCOL\_UART\_FILTER\_CONDITION - Range table fixed
- RSMXO\_ATTR\_PROTOCOL\_I2C\_FILTER\_CONDITION - Range table fixed
- RSMXO\_ATTR\_PROTOCOL\_SPI\_FILTER\_INDEX - Value added to the range table
- RSMXO\_ATTR\_PROTOCOL\_I2C\_FILTER\_INDEX - Value added to the range table
- RSMXO\_ATTR\_PROTOCOL\_UART\_FILTER\_INDEX - Value added to the range table
- RSMXO\_ATTR\_PROTOCOL\_TYPE - CAN protocol added
- RSMXO\_ATTR\_PROTOCOL\_DATA\_FORMAT - Formats added
- RSMXO\_ATTR\_REMOTE\_BITPATTERN\_FORMAT - Formats added
- RSMXO\_ATTR\_LOGIC\_BUS\_DATA\_FORMAT - Formats added
- RSMXO\_ATTR\_MEASUREMENT\_TYPE - Measurement types fixed
- RSMXO\_ATTR\_TRIGGER\_HYSTERESIS\_MODE - OPC-sync added
- RSMXO\_ATTR\_TRIGGER\_HYSTERESIS\_SIZE\_MODE - OPC-sync added
- RSMXO\_ATTR\_VERTICAL\_SHOW\_CHANNEL (Vertical Show Channel) - Added OPC-sync
- RSMXO\_ATTR\_VERTICAL\_SCALE (Vertical Scale) - Removed range table
- RSMXO\_ATTR\_VERTICAL\_OFFSET (Vertical Offset) - Removed range table
- RSMXO\_ATTR\_VERTICAL\_SKEW (Vertical Skew) - Removed range table
- RSMXO\_ATTR\_VERTICAL\_POSITION (Vertical Position) - Removed range table
- RSMXO\_ATTR\_VERTICAL\_COUPLING (Vertical Coupling) - Added OPC-sync
- RSMXO\_ATTR\_VERTICAL\_INVERT\_CHANNEL (Vertical Invert Channel) - Added OPC-sync
- RSMXO\_ATTR\_VERTICAL\_BANDWIDTH (Vertical Bandwidth) - Added OPC-sync
- RSMXO\_ATTR\_VERTICAL\_EXTERNAL\_ATTENUATION\_SCALE (Vertical External Attenuation Scale) - Added OPC-sync
- RSMXO\_ATTR\_VERTICAL\_EXTERNAL\_ATTENUATION (Vertical External Attenuation) - Removed range table, added OPC-sync
- RSMXO\_ATTR\_VERTICAL\_POWER\_CALCULATION\_IMPEDANCE (Vertical Power Calculation Impedance) - Removed range table
- RSMXO\_ATTR\_PROBE\_VERTICAL\_UNIT (Probe Vertical Unit) - Added OPC-sync
- RSMXO\_ATTR\_PROBE\_AUTO\_ATTENUATION (Probe Auto Attenuation) - Removed range table
- RSMXO\_ATTR\_PROBE\_MANUAL\_ATTENUATION (Probe Manual Attenuation) - Removed range table
- RSMXO\_ATTR\_PROBE\_SET\_OFFSET\_TO\_MEAN (Probe Set Offset To Mean) - Added OPC-sync
- RSMXO\_ATTR\_PROBE\_AUTO\_ZERO (Probe Auto Zero) - Added OPC-sync
- RSMXO\_ATTR\_HORIZONTAL\_TIME\_SCALE (Horizontal Time Scale) - Removed range table, added OPC-sync
- RSMXO\_ATTR\_HORIZONTAL\_TIMEBASE\_RANGE (Horizontal Timebase Range) - Added OPC-sync
- RSMXO\_ATTR\_ZOOM\_STATE (Zoom State) - Added OPC-sync
- RSMXO\_ATTR\_TRIGGER\_GLITCH\_WIDTH (Trigger Glitch Width) - Removed range table
- RSMXO\_ATTR\_TRIGGER\_WIDTH\_WIDTH (Trigger Width Width) - Removed range table

- RSMXO\_ATTR\_TRIGGER\_RUNT\_WIDTH (Trigger Runt Width) - Removed range table
- RSMXO\_ATTR\_TRIGGER\_WINDOW\_WIDTH (Trigger Window Width) - Removed range table
- RSMXO\_ATTR\_TRIGGER\_INTERVAL\_WIDTH (Trigger Interval Width) - Removed range table
- RSMXO\_ATTR\_TRIGGER\_SETUP\_AND\_HOLD\_HOLD\_TIME (Trigger Setup And Hold Hold Time) - Removed range table
- RSMXO\_ATTR\_TRIGGER\_SETUP\_AND\_HOLD\_SETUPTIME (Trigger Setup And Hold SetupTime) - Removed range table
- RSMXO\_ATTR\_TRIGGER\_HOLDOFF\_EVENTS (Trigger Holdoff Events) - Removed range table
- RSMXO\_ATTR\_TRIGGER\_HOLDOFF\_MINIMUM\_TIME (Trigger Holdoff Minimum Time) - Removed range table
- RSMXO\_ATTR\_TRIGGER\_HOLDOFF\_MAXIMUM\_TIME (Trigger Holdoff Maximum Time) - Removed range table
- RSMXO\_ATTR\_TRIGGER\_FILTER\_RF\_REJECT\_BW (Trigger Filter RF Reject BW) - Removed range table
- RSMXO\_ATTR\_TRIGGER\_ACTION\_DELAY (Trigger Action Delay) - Removed range table
- RSMXO\_ATTR\_ACQUISITION\_HIGH\_DEFINITION\_BANDWIDTH (Acquisition High Definition Bandwidth) - Removed range table
- RSMXO\_ATTR\_ACQUISITION\_HISTORY\_DISPLAY\_TIME (Acquisition History Display Time) - Removed range table
- RSMXO\_ATTR\_MEASUREMENT\_ENABLED (Measurement Enabled) - Added OPC-sync
- RSMXO\_ATTR\_MEASUREMENT\_TYPE (Measurement Type) - Added OPC-sync
- RSMXO\_ATTR\_MEASUREMENT\_STATISTICS\_ENABLED (Measurement Statistics Enabled) - Added OPC-sync
- RSMXO\_ATTR\_MEASUREMENT\_STATISTICS\_CLEAR\_RESULTS (Measurement Statistics Clear Results) - Added OPC-sync
- RSMXO\_ATTR\_REFERENCE\_LEVEL\_MODE (Reference Level Mode) - Added OPC-sync
- RSMXO\_ATTR\_REFERENCE\_LEVEL\_ABSOLUTE\_LOWER (Reference Level Absolute Lower) - Removed range table
- RSMXO\_ATTR\_REFERENCE\_LEVEL\_ABSOLUTE\_MIDDLE (Reference Level Absolute Middle) - Removed range table
- RSMXO\_ATTR\_REFERENCE\_LEVEL\_ABSOLUTE\_UPPER (Reference Level Absolute Upper) - Removed range table
- RSMXO\_ATTR\_MEASUREMENT\_RESULTS\_STATISTICS\_CURRENT (Measurement Results Statistics Current) - Added OPC-sync
- RSMXO\_ATTR\_MEASUREMENT\_RESULTS\_STATISTICS\_MAX (Measurement Results Statistics Max) - Added OPC-sync
- RSMXO\_ATTR\_MEASUREMENT\_RESULTS\_STATISTICS\_MIN (Measurement Results Statistics Min) - Added OPC-sync
- RSMXO\_ATTR\_MEASUREMENT\_RESULTS\_STATISTICS\_MEAN (Measurement Results Statistics Mean) - Added OPC-sync
- RSMXO\_ATTR\_MEASUREMENT\_RESULTS\_STATISTICS\_RMS (Measurement Results Statistics RMS) - Added OPC-sync
- RSMXO\_ATTR\_MEASUREMENT\_RESULTS\_STATISTICS\_STANDARD\_DEVIATION (Measurement Results Statistics Standard Deviation) - Added OPC-sync
- RSMXO\_ATTR\_CURSOR\_SHOW (Cursor Show) - Added OPC-sync
- RSMXO\_ATTR\_CURSOR\_STYLE (Cursor Style) - Added OPC-sync
- RSMXO\_ATTR\_CURSOR\_SOURCE (Cursor Source) - Added OPC-sync
- RSMXO\_ATTR\_CURSOR\_SOURCE\_2\_ENABLED (Cursor Source 2 Enabled) - Added OPC-sync
- RSMXO\_ATTR\_CURSOR\_SOURCE\_2 (Cursor Source 2) - Added OPC-sync
- RSMXO\_ATTR\_CURSOR\_X1\_POSITION (Cursor X1 Position) - Added OPC-sync
- RSMXO\_ATTR\_CURSOR\_X2\_POSITION (Cursor X2 Position) - Added OPC-sync
- RSMXO\_ATTR\_CURSOR\_Y1\_POSITION (Cursor Y1 Position) - Added OPC-sync
- RSMXO\_ATTR\_CURSOR\_Y2\_POSITION (Cursor Y2 Position) - Added OPC-sync
- RSMXO\_ATTR\_CURSOR\_TRACK\_WAVEFORM (Cursor Track Waveform) - Added OPC-sync
- RSMXO\_ATTR\_CURSOR\_ADVANCED\_X\_COUPLING (Cursor Advanced X Coupling) - Added OPC-sync
- RSMXO\_ATTR\_CURSOR\_ADVANCED\_Y\_COUPLING (Cursor Advanced Y Coupling) - Added OPC-sync

- RSMXO\_ATTR\_CURSOR\_ADVANCED\_SHOW\_IN\_ALL\_DIAGRAMS (Cursor Advanced Show In All Diagrams) - Added OPC-sync
- RSMXO\_ATTR\_CURSOR\_ADVANCED\_RESULT\_DIALOG\_DEFAULT (Cursor Advanced Result Dialog Default) - Added OPC-sync
- RSMXO\_ATTR\_CURSOR\_ADVANCED\_SHOW\_LABEL (Cursor Advanced Show Label) - Added OPC-sync
- RSMXO\_ATTR\_CURSOR\_PEAK\_SEARCH\_CENTER\_FREQUENCY (Cursor Peak Search Center Frequency) - Added OPC-sync
- RSMXO\_ATTR\_CURSOR\_PEAK\_SEARCH\_ABSOLUTE\_PEAK (Cursor Peak Search Absolute Peak) - Added OPC-sync
- RSMXO\_ATTR\_CURSOR\_PEAK\_SEARCH\_NEXT (Cursor Peak Search Next) - Added OPC-sync
- RSMXO\_ATTR\_CURSOR\_PEAK\_SEARCH\_NEXT\_PEAK\_LEFT (Cursor Peak Search Next Peak Left) - Added OPC-sync
- RSMXO\_ATTR\_CURSOR\_PEAK\_SEARCH\_NEXT\_PEAK\_RIGHT (Cursor Peak Search Next Peak Right) - Added OPC-sync
- RSMXO\_ATTR\_CURSOR\_PEAK\_SEARCH\_SET\_CENTER\_TO\_CURSOR (Cursor Peak Search Set Center To Cursor) - Added OPC-sync
- RSMXO\_ATTR\_CURSOR\_RESULTS\_DELTA\_Y\_INVERSE (Cursor Results Delta Y Inverse) - Added OPC-sync
- RSMXO\_ATTR\_SPECTRUM\_DISPLAY (Spectrum Display Enabled) - Added OPC-sync
- RSMXO\_ATTR\_SPECTRUM\_SOURCE (Spectrum Source) - Added OPC-sync
- RSMXO\_ATTR\_SPECTRUM\_RBW (Spectrum RBW) - Removed range table
- RSMXO\_ATTR\_SPECTRUM\_SPAN\_RBW\_RATIO (Spectrum Span RBW Ratio) - Removed range table
- RSMXO\_ATTR\_SPECTRUM\_TRACES\_NORMAL\_ENABLED (Spectrum Traces Normal Enabled) - Added OPC-sync
- RSMXO\_ATTR\_SPECTRUM\_TRACES\_MIN\_HOLD\_ENABLED (Spectrum Traces Min Hold Enabled) - Added OPC-sync
- RSMXO\_ATTR\_SPECTRUM\_TRACES\_MAX\_HOLD\_ENABLED (Spectrum Traces Max Hold Enabled) - Added OPC-sync
- RSMXO\_ATTR\_SPECTRUM\_TRACES\_AVERAGE\_ENABLED (Spectrum Traces Average Enabled) - Added OPC-sync
- RSMXO\_ATTR\_SPECTRUM\_PRESET (Spectrum Preset) - Added OPC-sync
- RSMXO\_ATTR\_SPECTRUM\_WINDOW\_TYPE (Spectrum Window Type) - Added OPC-sync
- RSMXO\_ATTR\_SPECTRUM\_SCALE\_VERTICAL\_RANGE (Spectrum Scale Vertical Range) - Removed range table
- RSMXO\_ATTR\_SPECTRUM\_SCALE\_VERTICAL\_MAXIMUM (Spectrum Scale Vertical Maximum) - Removed range table
- RSMXO\_ATTR\_SPECTRUM\_SCALE\_VERTICAL\_SCALE (Spectrum Scale Vertical Scale) - Removed range table, added OPC-sync
- RSMXO\_ATTR\_SPECTRUM\_SCALE\_VERTICAL\_OFFSET (Spectrum Scale Vertical Offset) - Removed range table, added OPC-sync
- RSMXO\_ATTR\_SPECTRUM\_GATE\_START (Spectrum Gate Start) - Removed range table
- RSMXO\_ATTR\_SPECTRUM\_GATE\_STOP (Spectrum Gate Stop) - Removed range table
- RSMXO\_ATTR\_SPECTRUM\_GATE\_POSITION (Spectrum Gate Position) - Removed range table
- RSMXO\_ATTR\_SPECTRUM\_GATE\_WIDTH (Spectrum Gate Width) - Removed range table
- RSMXO\_ATTR\_SPECTRUM\_PEAK\_LIST\_SHOW\_TABLE (Spectrum Peak List Show Table) - Added OPC-sync
- RSMXO\_ATTR\_SPECTRUM\_PEAK\_LIST\_FRAME\_TYPE (Spectrum Peak List Frame Type) - Added OPC-sync
- RSMXO\_ATTR\_SPECTRUM\_PEAK\_LIST\_THRESHOLD (Spectrum Peak List Threshold) - Added OPC-sync
- RSMXO\_ATTR\_SPECTRUM\_PEAK\_LIST\_PEAK\_EXCURSION (Spectrum Peak List Peak Excursion) - Added OPC-sync
- RSMXO\_ATTR\_SPECTRUM\_PEAK\_LIST\_MAX\_RESULTS (Spectrum Peak List Max Results) - Added OPC-sync
- RSMXO\_ATTR\_SPECTRUM\_PEAK\_LIST\_RESULT\_MODE (Spectrum Peak List Result Mode) - Added OPC-sync

- RSMXO\_ATTR\_SPECTRUM\_PEAK\_LIST\_SOURCE (Spectrum Peak List Source) - Added OPC-sync
- RSMXO\_ATTR\_MATH\_DISPLAY (Math Display) - Added OPC-sync
- RSMXO\_ATTR\_MATH\_EXPRESSION (Math Expression) - Added OPC-sync
- RSMXO\_ATTR\_MATH\_VERTICAL\_SCALE (Math Vertical Scale) - Removed range table, added OPC-sync
- RSMXO\_ATTR\_MATH\_VERTICAL\_OFFSET (Math Vertical Offset) - Removed range table, added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_SERIAL\_BUS\_ENABLED (Protocol Serial Bus Enabled) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_TYPE (Protocol Type) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_SHOW\_DECODE\_TABLE (Protocol Show Decode Table) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_DATA\_FORMAT (Protocol Data Format) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_ZOOM\_COUPLING (Protocol Zoom Coupling) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_SHOW\_THRESHOLD\_LINES (Protocol Show Threshold Lines) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_DETERMINE\_THRESHOLD (Protocol Determine Threshold) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_SET\_REFERENCE\_LEVELS (Protocol Set Reference Levels) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_I2C\_SDA\_SOURCE (Protocol I2C SDA Source) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_I2C\_SCL\_SOURCE (Protocol I2C SCL Source) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_I2C\_FILTER\_ENABLED (Protocol I2C Filter Enabled) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_I2C\_FILTER\_FRAME\_ENABLED (Protocol I2C Filter Frame Enabled) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_I2C\_FILTER\_FIELD\_ENABLED (Protocol I2C Filter Field Enabled) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_I2C\_TRIGGER\_TYPE (Protocol I2C Trigger Type) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_I2C\_TRIGGER\_ADDRESS\_TYPE (Protocol I2C Trigger Address Type) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_SPI\_MOSI\_SOURCE (Protocol SPI MOSI Source) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_SPI\_MISO\_SOURCE (Protocol SPI MISO Source) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_SPI\_SCLK\_SOURCE (Protocol SPI SCLK Source) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_SPI\_CS\_SOURCE (Protocol SPI CS Source) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_SPI\_TIMEOUT (Protocol SPI Timeout) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_SPI\_FILTER\_ENABLED (Protocol SPI Filter Enabled) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_SPI\_FILTER\_FRAME\_ENABLED (Protocol SPI Filter Frame Enabled) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_SPI\_FILTER\_FIELD\_ENABLED (Protocol SPI Filter Field Enabled) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_SPI\_TRIGGER\_TYPE (Protocol SPI Trigger Type) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_UART\_POLARITY (Protocol UART Polarity) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_UART\_RX\_SOURCE (Protocol UART RX Source) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_UART\_TX\_SOURCE (Protocol UART TX Source) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_UART\_TIMEOUT (Protocol UART Timeout) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_UART\_FILTER\_ENABLED (Protocol UART Filter Enabled) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_UART\_FILTER\_FRAME\_ENABLED (Protocol UART Filter Frame Enabled) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_UART\_FILTER\_FIELD\_ENABLED (Protocol UART Filter Field Enabled) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_UART\_FILTER\_ERROR\_ENABLED (Protocol UART Filter Error Enabled) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_UART\_TRIGGER\_TYPE (Protocol UART Trigger Type) - Added OPC-sync

- RSMXO\_ATTR\_PROTOCOL\_UART\_TRIGGER\_SOURCE (Protocol UART Trigger Source) - Added OPC-sync
- RSMXO\_ATTR\_PROTOCOL\_EXPORT\_SAVE (Protocol Export Save) - Added OPC-sync
- RSMXO\_ATTR\_LOGIC\_STATE (Logic State) - Added OPC-sync
- RSMXO\_ATTR\_LOGIC\_SHOW\_DIGITAL\_SIGNALS (Logic Show Digital Signals) - Added OPC-sync
- RSMXO\_ATTR\_LOGIC\_TECHNOLOGY (Logic Technology) - Added OPC-sync
- RSMXO\_ATTR\_LOGIC\_LEVEL\_COUPLING (Logic Level Coupling) - Added OPC-sync
- RSMXO\_ATTR\_LOGIC\_SKEW (Logic Skew) - Added OPC-sync
- RSMXO\_ATTR\_LOGIC\_CLEAR (Logic Clear) - Added OPC-sync
- RSMXO\_ATTR\_LOGIC\_BUS\_SHOW (Logic Bus Show) - Added OPC-sync
- RSMXO\_ATTR\_LOGIC\_BUS\_DATA\_FORMAT (Logic Bus Data Format) - Added OPC-sync
- RSMXO\_ATTR\_LOGIC\_BIT\_STATE (Logic Bit State) - Added OPC-sync
- RSMXO\_ATTR\_LOGIC\_BUS\_CLOCKED\_ENABLED (Logic Bus Clocked Enabled) - Added OPC-sync
- RSMXO\_ATTR\_LOGIC\_BUS\_CLOCKED\_SOURCE (Logic Bus Clocked Source) - Added OPC-sync
- RSMXO\_ATTR\_DIGITAL\_CHANNEL\_STATE (Digital Channel State) - Added OPC-sync
- RSMXO\_ATTR\_REFERENCE\_WAVEFORM\_SHOW (Reference Waveform Show) - Added OPC-sync
- RSMXO\_ATTR\_REFERENCE\_WAVEFORM\_SOURCE (Reference Waveform Source) - Added OPC-sync
- RSMXO\_ATTR\_REFERENCE\_WAVEFORM\_NAME (Reference Waveform Name) - Added OPC-sync
- RSMXO\_ATTR\_REFERENCE\_WAVEFORM\_CREATE\_UPDATE (Reference Waveform Create/Update) - Added OPC-sync
- RSMXO\_ATTR\_REFERENCE\_WAVEFORM\_RESET (Reference Waveform Reset) - Added OPC-sync
- RSMXO\_ATTR\_REFERENCE\_WAVEFORM\_SAVE (Reference Waveform Save) - Added OPC-sync
- RSMXO\_ATTR\_REFERENCE\_WAVEFORM\_OPEN (Reference Waveform Open) - Added OPC-sync
- RSMXO\_ATTR\_REFERENCE\_WAVEFORM\_CLEAR (Reference Waveform Clear) - Added OPC-sync
- RSMXO\_ATTR\_REFERENCE\_WAVEFORM\_VERTICAL\_MODE (Reference Waveform Vertical Mode) - Added OPC-sync
- RSMXO\_ATTR\_REFERENCE\_WAVEFORM\_VERTICAL\_RESET (Reference Waveform Vertical Reset) - Added OPC-sync
- RSMXO\_ATTR\_REFERENCE\_WAVEFORM\_VERTICAL\_SCALE (Reference Waveform Vertical Scale) - Removed range table
- RSMXO\_ATTR\_REFERENCE\_WAVEFORM\_VERTICAL\_POSITION (Reference Waveform Vertical Position) - Removed range table
- RSMXO\_ATTR\_REFERENCE\_WAVEFORM\_RESCALE\_VERTICAL\_ENABLED (Reference Waveform Rescale Vertical Enabled) - Added OPC-sync
- RSMXO\_ATTR\_REFERENCE\_WAVEFORM\_RESCALE\_VERTICAL\_SCALE\_FACTOR (Reference Waveform Rescale Vertical Scale Factor) - Removed range table
- RSMXO\_ATTR\_REFERENCE\_WAVEFORM\_RESCALE\_VERTICAL\_OFFSET (Reference Waveform Rescale Vertical Offset) - Removed range table
- RSMXO\_ATTR\_REFERENCE\_WAVEFORM\_RESCALE\_HORIZONTAL\_MODE (Reference Waveform Rescale Horizontal Mode) - Added OPC-sync
- RSMXO\_ATTR\_REFERENCE\_WAVEFORM\_RESCALE\_HORIZONTAL\_ENABLE (Reference Waveform Rescale Horizontal Enable) - Added OPC-sync
- RSMXO\_ATTR\_REFERENCE\_WAVEFORM\_RESCALE\_HORIZONTAL\_SCALE\_FACTOR (Reference Waveform Rescale Horizontal Scale Factor) - Removed range table
- RSMXO\_ATTR\_REFERENCE\_WAVEFORM\_RESCALE\_HORIZONTAL\_OFFSET (Reference Waveform Rescale Horizontal Offset) - Removed range table
- RSMXO\_ATTR\_GENERATOR\_STATE (Generator State) - Added OPC-sync
- RSMXO\_ATTR\_GENERATOR\_SOURCE (Generator Source) - Added OPC-sync
- RSMXO\_ATTR\_GENERATOR\_INVERSION\_ENABLED (Generator Inversion Enabled) - Added OPC-sync
- RSMXO\_ATTR\_GENERATOR\_FUNCTION\_TYPE (Generator Function Type) - Added OPC-sync
- RSMXO\_ATTR\_GENERATOR\_FREQUENCY (Generator Frequency) - Added OPC-sync



- RSMXO\_ATTR\_GENERATOR\_AMPLITUDE (Generator Amplitude) - Removed range table, added OPC-sync
- RSMXO\_ATTR\_GENERATOR\_OFFSET (Generator Offset) - Removed range table, added OPC-sync
- RSMXO\_ATTR\_GENERATOR\_SYMMETRY (Generator Symmetry) - Added OPC-sync
- RSMXO\_ATTR\_GENERATOR\_PERIOD (Generator Period) - Removed range table
- RSMXO\_ATTR\_GENERATOR\_PULSE\_WIDTH (Generator Pulse Width) - Removed range table
- RSMXO\_ATTR\_GENERATOR\_NOISE\_DC\_LEVEL (Generator Noise DC Level) - Removed range table
- RSMXO\_ATTR\_GENERATOR\_DC\_LEVEL (Generator DC Level) - Removed range table
- RSMXO\_ATTR\_GENERATOR\_LOW\_VOLTAGE (Generator Low Voltage) - Removed range table
- RSMXO\_ATTR\_GENERATOR\_USER\_LOAD (Generator User Load) - Added OPC-sync
- RSMXO\_ATTR\_GENERATOR\_DEFAULT\_SETUP (Generator Default Setup) - Added OPC-sync
- RSMXO\_ATTR\_GENERATOR\_COPY\_SETTINGS (Generator Copy Settings) - Added OPC-sync
- RSMXO\_ATTR\_GENERATOR\_SWEEP\_STATE (Generator Sweep State) - Added OPC-sync
- RSMXO\_ATTR\_GENERATOR\_SWEEP\_TYPE (Generator Sweep Type) - Added OPC-sync
- RSMXO\_ATTR\_GENERATOR\_SWEEP\_START\_FREQUENCY (Generator Sweep Start Frequency) - Removed range table
- RSMXO\_ATTR\_GENERATOR\_SWEEP\_STOP\_FREQUENCY (Generator Sweep Stop Frequency) - Removed range table
- RSMXO\_ATTR\_GENERATOR\_SWEEP\_TIME (Generator Sweep Time) - Removed range table
- RSMXO\_ATTR\_GENERATOR\_MODULATION\_STATE (Generator Modulation State) - Added OPC-sync
- RSMXO\_ATTR\_GENERATOR\_MODULATION\_TYPE (Generator Modulation Type) - Added OPC-sync
- RSMXO\_ATTR\_GENERATOR\_MODULATION\_CARRIER\_FREQUENCY (Generator Modulation Carrier Frequency) - Removed range table
- RSMXO\_ATTR\_GENERATOR\_MODULATION\_AM\_FREQUENCY (Generator Modulation AM Frequency) - Removed range table
- RSMXO\_ATTR\_GENERATOR\_MODULATION\_AM\_SIGNAL\_TYPE (Generator Modulation AM Signal Type) - Added OPC-sync
- RSMXO\_ATTR\_GENERATOR\_MODULATION\_PWM\_FREQUENCY (Generator Modulation PWM Frequency) - Removed range table
- RSMXO\_ATTR\_GENERATOR\_MODULATION\_PWM\_SIGNAL\_TYPE (Generator Modulation PWM Signal Type) - Added OPC-sync
- RSMXO\_ATTR\_GENERATOR\_MODULATION\_FM\_FREQUENCY (Generator Modulation FM Frequency) - Removed range table
- RSMXO\_ATTR\_GENERATOR\_MODULATION\_FM\_SIGNAL\_TYPE (Generator Modulation FM Signal Type) - Added OPC-sync
- RSMXO\_ATTR\_GENERATOR\_MODULATION\_FSK\_FREQUENCY\_1 (Generator Modulation FSK Frequency 1) - Removed range table
- RSMXO\_ATTR\_GENERATOR\_MODULATION\_FSK\_FREQUENCY\_2 (Generator Modulation FSK Frequency 2) - Removed range table
- RSMXO\_ATTR\_GENERATOR\_MODULATION\_FSK\_RATE (Generator Modulation FSK Rate) - Removed range table
- RSMXO\_ATTR\_GENERATOR\_ARBITRARY\_WAVEFORM\_SOURCE (Generator Arbitrary Waveform Source) - Added OPC-sync
- RSMXO\_ATTR\_GENERATOR\_ARBITRARY\_WAVEFORM\_OPEN (Generator Arbitrary Waveform Open) - Added OPC-sync
- RSMXO\_ATTR\_GENERATOR\_ARBITRARY\_RUN\_MODE (Generator Arbitrary Run Mode) - Added OPC-sync
- RSMXO\_ATTR\_GENERATOR\_ARBITRARY\_SAMPLE\_RATE (Generator Arbitrary Sample Rate) - Removed range table
- RSMXO\_ATTR\_GENERATOR\_ARBITRARY\_SIGNAL\_SOURCE (Generator Arbitrary Signal Source) - Added OPC-sync
- RSMXO\_ATTR\_GENERATOR\_SYNCHRONISATION\_START (Generator Synchronisation Start) - Added OPC-sync
- RSMXO\_ATTR\_GENERATOR\_SYNCHRONISATION\_ENABLE (Generator Synchronisation Enable) - Added OPC-sync

- RSMXO\_ATTR\_GENERATOR\_SYNCHRONISATION\_AMPLITUDE\_PARAMETERS (Generator Synchronisation Amplitude Parameters) - Added OPC-sync
- RSMXO\_ATTR\_GENERATOR\_SYNCHRONISATION\_FREQUENCY\_PARAMETERS (Generator Synchronisation Frequency Parameters) - Added OPC-sync
- RSMXO\_ATTR\_GENERATOR\_SYNCHRONIZE\_PHASE\_SHIFT (Generator Synchronisation Phase Shift) - Added OPC-sync
- RSMXO\_ATTR\_SAVESET\_INCLUDE\_PREVIEW\_IMAGE (Saveset Include Preview Image) - Added OPC-sync
- RSMXO\_ATTR\_REPORT\_SAVE (Report Save) - Added OPC-sync
- RSMXO\_ATTR\_SCREENSHOT\_SAVE (Screenshot Save) - Added OPC-sync
- RSMXO\_ATTR\_SCREENSHOT\_SAVE\_NEXT (Screenshot Save Next) - Added OPC-sync
- RSMXO\_ATTR\_WAVEFORM\_EXPORT\_SOURCE (Waveform Export Source) - Added OPC-sync
- RSMXO\_ATTR\_WAVEFORM\_EXPORT\_MODE (Waveform Export Mode) - Added OPC-sync
- RSMXO\_ATTR\_WAVEFORM\_EXPORT\_MANUAL\_START (Waveform Export Manual Start) - Removed range table, added OPC-sync
- RSMXO\_ATTR\_WAVEFORM\_EXPORT\_MANUAL\_STOP (Waveform Export Manual Stop) - Removed range table, added OPC-sync
- RSMXO\_ATTR\_WAVEFORM\_EXPORT\_SAVE\_TO\_FILE (Waveform Export Save To File) - Added OPC-sync
- RSMXO\_ATTR\_REMOTE\_DISPLAY\_UPDATE\_ENABLED (Remote Display Update Enabled) - Added OPC-sync
- RSMXO\_ATTR\_REMOTE\_DISPLAY\_MESSAGE\_ENABLED (Remote Display Message Enabled) - Added OPC-sync
- RSMXO\_ATTR\_GRID\_SHOW (Grid Show) - Added OPC-sync
- RSMXO\_ATTR\_DISPLAY\_SIGNAL\_STYLE (Display Signal Style) - Added OPC-sync
- RSMXO\_ATTR\_VERTICAL\_RANGE (Vertical Range) - Range table removed
- RSMXO\_ATTR\_TRIGGER\_SEQUENCE\_B\_EVENT\_COUNT (Trigger Sequence B Event Count) - Range table removed
- RSMXO\_ATTR\_TRIGGER\_EVENT\_LEVEL (Trigger Event Level) - Range table removed
- RSMXO\_ATTR\_TRIGGER\_WIDTH\_DELTA (Trigger Width Delta) - Range table removed
- RSMXO\_ATTR\_TRIGGER\_RUNT\_DELTA (Trigger Runt Delta) - Range table removed
- RSMXO\_ATTR\_TRIGGER\_RUNT\_LOWER\_LIMIT (Trigger Runt Lower Limit) - Range table removed
- RSMXO\_ATTR\_TRIGGER\_RUNT\_UPPER\_LIMIT (Trigger Runt Upper Limit) - Range table removed
- RSMXO\_ATTR\_TRIGGER\_WINDOW\_DELTA (Trigger Window Delta) - Range table removed
- RSMXO\_ATTR\_TRIGGER\_WINDOW\_LOWER\_LIMIT (Trigger Window Lower Limit) - Range table removed
- RSMXO\_ATTR\_TRIGGER\_WINDOW\_UPPER\_LIMIT (Trigger Window Upper Limit) - Range table removed
- RSMXO\_ATTR\_TRIGGER\_INTERVAL\_DELTA (Trigger Interval Delta) - Range table removed
- RSMXO\_ATTR\_TRIGGER\_SLEW\_RATE\_DELTA (Trigger Slew Rate Delta) - Range table removed
- RSMXO\_ATTR\_TRIGGER\_SLEW\_RATE\_LOWER\_LIMIT (Trigger Slew Rate Lower Limit) - Range table removed
- RSMXO\_ATTR\_TRIGGER\_SLEW\_RATE\_UPPER\_LIMIT (Trigger Slew Rate Upper Limit) - Range table removed
- RSMXO\_ATTR\_TRIGGER\_EDGE\_LEVEL (Trigger Edge Level) - Range table removed
- RSMXO\_ATTR\_TRIGGER\_HOLDOFF\_TIME (Trigger Holdoff Time) - Range table removed
- RSMXO\_ATTR\_TRIGGER\_HYSTERESIS\_ABSOLUTE (Trigger Hysteresis Absolute) - Range table removed
- RSMXO\_ATTR\_TRIGGER\_HYSTERESIS\_RELATIVE\_PERCENTAGE (Trigger Hysteresis Relative Percentage) - Range table removed
- RSMXO\_ATTR\_TRIGGER\_HYSTERESIS\_RELATIVE\_DIVS (Trigger Hysteresis Relative Divs) - Range table removed
- RSMXO\_ATTR\_TRIGGER\_ACTION\_PULSE\_LENGTH (Trigger Action Pulse Length) - Range table removed
- RSMXO\_ATTR\_ACQUISITION\_N\_SINGLE\_AVERAGE\_COUNT (Acquisition N-Single Average Count) - Range table removed
- RSMXO\_ATTR\_REFERENCE\_LEVEL\_RELATIVE\_LOWER (Reference Level Relative Lower) - Range table removed

- RSMXO\_ATTR\_REFERENCE\_LEVEL\_RELATIVE\_MIDDLE (Reference Level Relative Middle) - Range table removed
- RSMXO\_ATTR\_REFERENCE\_LEVEL\_RELATIVE\_UPPER (Reference Level Relative Upper) - Range table removed
- RSMXO\_ATTR\_REFERENCE\_LEVEL\_RELATIVE\_HYSTERESIS (Reference Level Relative Hysteresis) - Range table removed
- RSMXO\_ATTR\_SPECTRUM\_CENTER (Spectrum Center) - Range table removed
- RSMXO\_ATTR\_SPECTRUM\_SPAN (Spectrum Span) - Range table removed
- RSMXO\_ATTR\_SPECTRUM\_START (Spectrum Start) - Range table removed
- RSMXO\_ATTR\_SPECTRUM\_STOP (Spectrum Stop) - Range table removed
- RSMXO\_ATTR\_SPECTRUM\_PEAK\_LIST\_THRESHOLD (Spectrum Peak List Threshold) - Range table removed
- RSMXO\_ATTR\_PROTOCOL\_SPI\_TIMEOUT (Protocol SPI Timeout) - Range table removed
- RSMXO\_ATTR\_PROTOCOL\_UART\_TIMEOUT (Protocol UART Timeout) - Range table removed
- RSMXO\_ATTR\_LOGIC\_SKEW (Logic Skew) - Range table removed
- RSMXO\_ATTR\_LOGIC\_BIT\_SKEW (Logic Bit Skew) - Range table removed
- RSMXO\_ATTR\_DIGITAL\_CHANNEL\_SKEW (Digital Channel Skew) - Range table removed
- RSMXO\_ATTR\_FREQUENCY\_RESPONSE\_ANALYSIS\_START (Frequency Response Analysis Start) - Range table removed
- RSMXO\_ATTR\_FREQUENCY\_RESPONSE\_ANALYSIS\_STOP (Frequency Response Analysis Stop) - Range table removed
- RSMXO\_ATTR\_FREQUENCY\_RESPONSE\_ANALYSIS\_POINTS\_TOTAL (Frequency Response Analysis Points Total) - Range table removed
- RSMXO\_ATTR\_FREQUENCY\_RESPONSE\_ANALYSIS\_POINTS\_LOGARITHMIC (Frequency Response Analysis Points Logarithmic) - Range table removed
- RSMXO\_ATTR\_FREQUENCY\_RESPONSE\_ANALYSIS\_AMPLITUDE (Frequency Response Analysis Amplitude) - Range table removed
- RSMXO\_ATTR\_FREQUENCY\_RESPONSE\_ANALYSIS\_DELAY\_TIME (Frequency Response Analysis Delay Time) - Range table removed
- RSMXO\_ATTR\_FREQUENCY\_RESPONSE\_ANALYSIS\_AMPLITUDE\_PROFILE\_AMPLITUDE (Frequency Response Analysis Amplitude Profile Amplitude) - Range table removed
- RSMXO\_ATTR\_FREQUENCY\_RESPONSE\_ANALYSIS\_GAIN\_VERTICAL\_SCALE (Frequency Response Analysis Gain Vertical Scale) - Range table removed
- RSMXO\_ATTR\_FREQUENCY\_RESPONSE\_ANALYSIS\_GAIN\_VERTICAL\_OFFSET (Frequency Response Analysis Gain Vertical Offset) - Range table removed
- RSMXO\_ATTR\_FREQUENCY\_RESPONSE\_ANALYSIS\_PHASE\_VERTICAL\_OFFSET (Frequency Response Analysis Phase Vertical Offset) - Range table removed
- RSMXO\_ATTR\_FREQUENCY\_RESPONSE\_ANALYSIS\_AMPLITUDE\_VERTICAL\_SCALE (Frequency Response Analysis Amplitude Vertical Scale) - Range table removed
- RSMXO\_ATTR\_FREQUENCY\_RESPONSE\_ANALYSIS\_AMPLITUDE\_VERTICAL\_OFFSET (Frequency Response Analysis Amplitude Vertical Offset) - Range table removed
- RSMXO\_ATTR\_GENERATOR\_MODULATION\_CARRIER\_PERIOD (Generator Modulation Carrier Period) - Range table removed
- RSMXO\_ATTR\_GENERATOR\_MODULATION\_FM\_DEVIATION (Generator Modulation FM Deviation) - Range table removed
- RSMXO\_ATTR\_SCREENSHOT\_INVERT\_COLOR (Screenshot Invert Color) - Removed repeated capability HardcopyOutput
- RSMXO\_ATTR\_SCREENSHOT\_DESTINATION (Screenshot Destination) - Removed repeated capability HardcopyOutput
- RSMXO\_ATTR\_SCREENSHOT\_PRINTER\_COLOR\_SET (Screenshot Printer Color Set) - Removed repeated capability HardcopyOutput
- RSMXO\_ATTR\_SCREENSHOT\_FILE\_EXTENSION (Screenshot File Extension) - Removed repeated capability HardcopyOutput
- RSMXO\_ATTR\_SCREENSHOT\_SAVE (Screenshot Save) - Removed repeated capability HardcopyOutput
- RSMXO\_ATTR\_SCREENSHOT\_SAVE\_NEXT (Screenshot Save Next) - Removed repeated capability HardcopyOutput
- RSMXO\_ATTR\_DISPLAY\_PERSISTENCE\_TIME (Display Persistence Time) - Range table removed

\* Removed attributes:

- RSMXO\_ATTR\_CURSOR\_ADVANCED\_RESULT\_DIALOG\_DEFAULT
- RSMXO\_ATTR\_EXECUTE\_SELF\_TEST
- RSMXO\_ATTR\_GENERATOR\_MODULATION\_STATE
- RSMXO\_ATTR\_GENERATOR\_SOURCE
- RSMXO\_ATTR\_PROBE\_METER\_VISIBILITY
- RSMXO\_ATTR\_PROTOCOL\_DETERMINE\_THRESHOLD
- RSMXO\_ATTR\_REPORT\_COMMENT
- RSMXO\_ATTR\_REPORT\_CUSTOM\_LOGO\_FILE
- RSMXO\_ATTR\_REPORT\_FILE\_NAME
- RSMXO\_ATTR\_REPORT\_LANGUAGE
- RSMXO\_ATTR\_REPORT\_LOGO\_TYPE
- RSMXO\_ATTR\_REPORT\_PAPER\_SIZE
- RSMXO\_ATTR\_REPORT\_SAVE
- RSMXO\_ATTR\_REPORT\_USER\_NAME
- RSMXO\_ATTR\_SCREENSHOT\_DISPLAY\_COLOR
- RSMXO\_ATTR\_SCREENSHOT\_ORIENTATION
- RSMXO\_ATTR\_SELF\_TEST\_STATE
- RSMXO\_ATTR\_SPECTRUM\_SCALE\_VERTICAL\_OFFSET
- RSMXO\_ATTR\_TRIGGER\_EDGE\_GROUND\_ENABLED

## 2.5 Version 1.1.0 / 11 – 2022

\* Support for MXO 1.1.0 FW

\* Initial Release

# 3 Getting Started

## 3.1 LabWindows/CVI driver

The Rohde & Schwarz **rsmxo** 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:

- *rsmxo.c* + *rsmxo.h*
- *rsmxo\_attributes.c* + *rsmxo\_attributes.h*
- *rsmxo\_utility.c* + *rsmxo\_utility.h*
- *rscore.c* + *rscore.h*
- *rsmxo\_callbacks.c*
- *rsmxo.fp* + *rsmxo.sub*

## 3.2 VXIplug&play driver in C/C++, LabWindows/CVI

The compiled source code from LabWindows/CVI driver is used. The compiled ANSI-C libraries exist for Windows 7 64-bit and newer.

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

- C:\Program Files\IVI Foundation\VISA\Win64\Include\rsmxo.h
- C:\Program Files\IVI Foundation\VISA\Win64\Lib\_x64\msc\rsmxo64.lib (static)
- C:\Program Files\IVI Foundation\VISA\Win64\Bin\rsmxo\_64.dll (dynamic)

- C:\Program Files\IVI Foundation\VISA\Win64\rsmxo\rsmxo.fp (in CVI only)
- C:\Program Files\IVI Foundation\VISA\Win64\rsmxo\rsmxo.sub (in CVI only)

### 3.3 VXIplug&play driver in MATLAB

MATLAB instrument driver **rsmxo.mdd** can be found here:

**C:\Program Files\IVI Foundation\VISA\Win64\rsmxo\rsmxo.mdd**

For more, refer to [1MA171 - How to use R&S instrument in MATLAB](#)

### 3.4 Linux and Mac OS X

To be able to use Rohde & Schwarz **rsmxo** Instrument driver in Linux or macOS, the functioning VISA is required. Check out [R&S VISA](#) for Linux or macOS.

### 3.5 Additional Help

LabWindows/CVI and VXIplug&play instrument driver contains the documentation in a compressed HTML format (Windows CHM help file **rsmxo\_vxi.chm**):

**C:\Program Files\IVI Foundation\VISA\Win64\rsmxo\rsmxo\_vxi.chm**

## 4 Customer support

### **Technical support – where and when you need it**

For quick, expert help with any Rohde & Schwarz product, contact our customer support center. A team of highly qualified engineers provides support and works with you to find a solution to your query on any aspect of the operation, programming or applications of Rohde & Schwarz products.

### **Contact information**

Contact our customer support center at [www.rohde-schwarz.com/support](http://www.rohde-schwarz.com/support) or follow this QR code:

