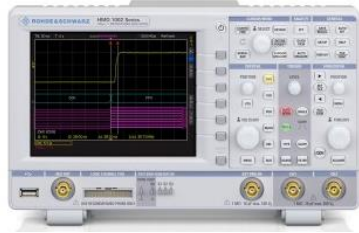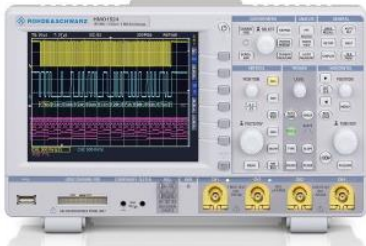# LabVIEW driver history for the R&S® HMO Digital Oscilloscopes

Products:

| R&S®HMO1002
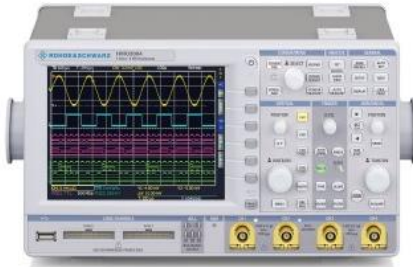
| R&S®HMO Compact

| R&S®RTC1000

| R&S®HMO3000

Driver history for LabVIEW

Miloslav Macko
April 30, 2019

ROHDE & SCHWARZ

Table of Contents

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**
HMO Compact Series	5.886	
HMO300	5.886	
HMO1002	5.886	
RTC1000	6.020	

2 Installation of the LabVIEW driver

Before you start the installer, please close your LabVIEW application.

2.1 Installation on a Windows machine

The driver is distributed as a WinZip self-extracting executable file. Installer supported operation systems: WinXP, Win7, Win8, Win10.

Preconditions:
- LabVIEW 2010 or newer installed
- Any VISA installed – R&S VISA 5.5.4 or newer / NI VISA 5.4 or newer

When you start the driver WinZip installer, the following steps are being performed:

1. Unpacking of the driver's **instr.lib** and **user.lib** directories content as well as the **Installer.vi** into a temporary folder: **C:\temp\hmo-lv-5.92.0**
    The driver is compiled in LabVIEW 2010 32-bit. From there you can copy to another location or run the **Installer.vi** manually later. The content of the temporary folder is not deleted after the installation is finished. Starting the same installation again will overwrite the data in this temporary folder.

2. After unpacking, the **Installer.vi** is automatically started in the last opened version of LabVIEW.
    In case you have more than one version of LabVIEW installed on your machine, make sure that the last opened LabVIEW version is the one in which you want to use the driver. If that's not the case, cancel the installation at this point, open and close your desired LabVIEW version and run the installer again. You can have the driver installed parallel for more LabVIEW versions by repeating the installation process for each desired version.

3. On the installer options page you have a choice to uncheck the **Mass-compiling** option (**not recommended, because of the driver's performance penalty as well as VIs opening times**) and also you can change the location of the **instr.lib** part of the driver. **user.lib** part must be placed in the default location, otherwise the Express VI configuration will not function.
    On this page you also see the actual LabVIEW version.
    Hitting **Next** button will first delete the old driver (if it existed), copy the new driver and mass-compile it.

4. The LabVIEW is closed and after starting it again the driver is ready for use.

2.2 Installation on a non-Windows machine

In case you would like to install the driver on a non-Windows machine, use a Windows machine to start the driver's WinZip self-extracting executable file. **This machine doesn't need to have LabVIEW installed.**

After the **Step 1** from the previous chapter is finished, copy the content of the temporary folder to your target machine and start the **Installer.vi** manually.
From that point onwards, the installation process is the same as described in the previous chapter Steps 2, 3, and 4.

3 LabVIEW driver history

hmo Instrument Driver		
Driver history for LabVIEW		
Revision	Date	Note
5.92.0	04/2019	- Fixed USB-VCP connection bug
5.91.0	02/2018	- Added support for RTC instrument * New VIs: - hmo Range Checking.vi - hmo Instrument Status Checking.vi - new Help file format * Modified VIs: - hmo Configure Measurement Source.vi
5.90.1	06/2017	- Fixed Digital Voltmeter measurement type SCPI commands to work with the latest instrument firmware 5.886
5.90.0	02/2017	- Exchanged Driver Core 6.7.0 that enables Simulation mode and Logging - Cleaned up all Front Panels and Block Diagrams - All Express VI instances changed to new format with new context help - Changed Palette Icon and ExpressVI icon, Corrected Palette names - Added new action "Single and Wait" to hmo Initiate Acquisition.vi - Corrected Acquisition starting in hmo Read Waveform.vi and in hmo Read Main Waveform Measurement.vi - Several Bug-fixes * New VIs: - hmo Intialize with Options.vi - hmo Query with OPC sync.vi - hmo Write Command with OPC sync.vi - hmo Write Command.vi
5.86.1	11/2016	* Fixed missing Help tags * Cosmetic changes in all VIs * Fixed hmo Bin Data From File To Instrument.vi
5.86.0	10/2016	* Support for firmware version 5.860 * New functions: - hmo Configure Waveform Acquisition Type.vi - hmo Configure Record Length.vi - hmo Query Averaging Status.vi - hmo Configure Peak Detection.vi - hmo Configure High Resolution.vi - hmo Configure Roll Mode.vi - hmo Configure Segmentation.vi - hmo Query Probe Characteristics.vi - hmo Configure Probe Attenuation.vi

hmo Instrument Driver		
Driver history for LabVIEW		
Revision	Date	Note
		- hmo Find Channel Threshold Level.vi
		- hmo Configure Channel Threshold Hysteresis.vi
		- hmo Configure Trigger Holdoff Time.vi
		- hmo Configure Runt Trigger.vi
		- hmo Configure Time Trigger.vi
		- hmo Configure Time Trigger Level.vi
		- hmo Configure Output Trigger.vi
		- hmo Configure Waveform Samples Range.vi
		- hmo Fetch Math Envelope Waveform.vi
		- hmo Fetch Math Envelope WaveformHeader.vi
		- hmo Fetch Mask Data Waveform.vi
		- hmo Fetch Mask Data Waveform Header.vi
		- hmo Fetch Math Envelope Waveform Conversion Data.vi
		- hmo Set Cursor Position.vi
		- hmo Set FFT Analysis Cursor To Peak.vi
		- hmo Query FFT Sample Rate.vi
		- hmo Configure FFT Time Base.vi
		- hmo Display Language Catalog.vi
		- hmo Configure Display Dialog.vi
		- hmo Configure History.vi
		- hmo Query History Date Time.vi
		- hmo Query History Acquisitions Count.vi
		- hmo Configure Mask Actions.vi
		- hmo Mask Reset Test Counter.vi
		- hmo Configure CAN Search Condition.vi
		- hmo Configure CAN Search Frame.vi
		- hmo Configure CAN Search Error Conditions.vi
		- hmo Configure CAN Search ID.vi
		- hmo Configure CAN Search Data.vi
		- hmo Configure LIN Search Condition.vi
		- hmo Configure LIN Search Frame.vi
		- hmo Configure LIN Search Error Conditions.vi
		- hmo Configure LIN Search ID.vi
		- hmo Configure LIN Search Data.vi
		- hmo Query Parallel Bus Frame Count.vi
		- hmo Query Parallel Bus Frame Status.vi
		- hmo Query Parallel Bus Frame All Data.vi
		- hmo Configure Parallel Clocked Data Line.vi
		- hmo Configure Parallel Clocked Clock Line.vi
		- hmo Configure Parallel Clocked Chip Select Line.vi
		- hmo Configure Parallel Clocked Analyzed Lines.vi

hmo Instrument Driver		
Driver history for LabVIEW		
Revision	Date	Note
		- hmo Configure Data2Clock Trigger Search.vi
		- hmo Configure Pattern Trigger Search.vi
		- hmo Query Max Number Of Storable Results.vi
		- hmo Configure Pod Type.vi
		- hmo Query Pod Value State.vi
		- hmo Configure Digital Voltmeter.vi
		- hmo Query Digital Voltmeter Result.vi
		- hmo Configure Function Generator.vi
		- hmo Configure Pattern Generator.vi
		- hmo Configure Pattern Generator Settings.vi
		- hmo Configure Pattern Generator Burst.vi
		- hmo Configure Pattern Generator Trigger.vi
		- hmo Send Pattern Generator Trigger.vi
		- hmo Configure Pattern Generator Arbitrary Data.vi
		- hmo Configure Pattern Generator Append Arbitrary Data.vi
		- hmo Configure Pattern Generator Counter.vi
		- hmo Configure Pattern Generator Square Wave.vi
		- hmo Configure Pattern Generator Pin State.vi
		- hmo Configure Hardcopy Command Set.vi
		- hmo Fetch Math Envelope Waveform.vi
		- hmo Fetch Math Envelope Waveform Header.vi
		- hmo Fetch Math Envelope Waveform Conversion Data.vi
		- hmo Fetch Mask Data Waveform.vi
		- hmo Fetch Mask Data Waveform Header.vi
		- hmo Fetch Mask Data Waveform Conversion Data.vi
		- hmo Configure Sound.vi
		- hmo Generate Sound.vi
		- hmo Clear Status.vi
		- hmo ID Query Response.vi
		- hmo Process All Previous Commands.vi
		- hmo Query OPC.vi
		* Modified:
		- hmo Configure I2C Source.vi - using new attributes
		- hmo Configure Waveform Acquisition Rate.vi - added 'Manual' to 'Waveform Rate'
		- hmo Configure TimeBase.vi - range changed at 'Reference Point'
		- hmo Configure Channel.vi - added 'Ground' to 'Vertical Coupling'
		- hmo Read Main Waveform Measurement.vi - added 'Waveform Mean', 'Waveform RMS', 'Waveform Standard Deviation', 'Cycle Standard Deviation', 'Bandwidth', 'Crest Factor' to 'Measurement Function'
		- hmo Fetch Main Waveform Measurement.vi - added 'Waveform Mean', 'Waveform RMS', 'Waveform Standard Deviation', 'Cycle Standard Deviation', 'Bandwidth', 'Crest Factor' to 'Measurement Function'
		- hmo Configure Amplitude Time Main Measurement.vi - added 'Waveform Mean', 'Waveform RMS', 'Waveform Standard Deviation', 'Cycle Standard Deviation', 'Bandwidth', 'Crest Factor' to 'Measurement

hmo Instrument Driver		
Driver history for LabVIEW		
Revision	Date	Note
		Function'
		- hmo Configure Search Condition.vi - added 'Data to Clock', 'Pattern', 'Protocol' to 'Action'
		- hmo Configure Protocol Display.vi - added 'Octal' to 'Format'
		- hmo Configure SPI Trigger Data.vi - Offset uses ViInt32 data type
		- hmo Configure Display Language.vi - added 'Russian', 'Japanese', 'Korean' to 'Language'
		- hmo Display Add Language.vi - added 'Russian', 'Japanese', 'Korean' to 'Language'
		- hmo Display Remove Language.vi - added 'Russian', 'Japanese', 'Korean' to 'Language'
		- hmo Configure Hardcopy File.vi - added 'GDI' to 'Format'
		- hmo Configure Hardcopy Printer.vi - added 'Legal', 'Letter' to 'Size'
		- hmo Send Software Trigger.vi - added *OPC to SCPI command
		- hmo Query Search Result.vi - Result Type updated
		- hmo Query All Search Results.vi - Result Type updated
		- hmo Query UART Frame Data.vi - Status updated
		- hmo Read To File From Instrument.vi - data handling for big files
		- hmo Write From File To Instrument.vi - data handling for big files
		* New attributes:
		- Waveform Acquisition Type (HMO_ATTR_WAVEFORM_ACQUISITION_TYPE)
		- Averaging Status (HMO_ATTR_AVERAGING_STATUS)
		- Horizontal Record Length (HMO_ATTR_HORIZONTAL_RECORD_LENGTH)
		- Peak Detection (HMO_ATTR_PEAK_DETECTION)
		- High Resolution (HMO_ATTR_HIGH_RESOLUTION)
		- Roll Mode (HMO_ATTR_ROLL_MODE)
		- Segmentation State (HMO_ATTR_SEGMENTATION_STATE)
		- Segmentation Maximum Acquisition Count (HMO_ATTR_SEGMENTATION_MAXIMUM_ACQUISITION_COUNT)
		- Probe Type (HMO_ATTR_PROBE_TYPE)
		- Probe Attenuation Unit (HMO_ATTR_PROBE_ATTENUATION_UNIT)
		- Probe Manual Attenuation (HMO_ATTR_PROBE_MANUAL_ATTENUATION)
		- Probe Attenuation (HMO_ATTR_PROBE_ATTENUATION)
		- Channel Threshold Find Level (HMO_ATTR_CHANNEL_THRESHOLD_FIND_LEVEL)
		- Channel Threshold Hysteresis (HMO_ATTR_CHANNEL_THRESHOLD_HYSTERESIS)
		- Trigger Level Upper (HMO_ATTR_TRIGGER_LEVEL_UPPER)
		- Trigger Level Lower (HMO_ATTR_TRIGGER_LEVEL_LOWER)
		- Trigger Holdoff Mode (HMO_ATTR_TRIGGER_HOLDOFF_MODE)
		- Trigger Holdoff Time (HMO_ATTR_TRIGGER_HOLDOFF_TIME)
		- Runt Trigger Upper Level (HMO_ATTR_RUNT_TRIGGER_UPPER_LEVEL)
		- Runt Trigger Lower Level (HMO_ATTR_RUNT_TRIGGER_LOWER_LEVEL)
		- Runt Trigger Polarity (HMO_ATTR_RUNT_TRIGGER_POLARITY)
		- Trigger Time Polarity (HMO_ATTR_TRIGGER_TIME_POLARITY)
		- Trigger Time Range (HMO_ATTR_TRIGGER_TIME_RANGE)

hmo Instrument Driver		
Driver history for LabVIEW		
Revision	Date	Note
		- Trigger Time (HMO_ATTR_TRIGGER_TIME)
		- Trigger Time Delta (HMO_ATTR_TRIGGER_TIME_DELTA)
		- Trigger Out Mode (HMO_ATTR_TRIGGER_OUT_MODE)
		- Trigger Out Polarity (HMO_ATTR_TRIGGER_OUT_POLARITY)
		- Trigger Out Pulse Length (HMO_ATTR_TRIGGER_OUT_PULSE_LENGTH)
		- Waveform Sample Range (HMO_ATTR_WAVEFORM_SAMPLE_RANGE)
		- Send SW Trigger And Wait (HMO_ATTR_SEND_SW_TRIGGER_AND_WAIT)
		- Math Envelope Waveform X Start (HMO_ATTR_MATH_ENVELOPE_WAVEFORM_X_START)
		- Math Envelope Waveform X Increment (HMO_ATTR_MATH_ENVELOPE_WAVEFORM_X_INCREMENT)
		- Math Envelope Waveform Y Start (HMO_ATTR_MATH_ENVELOPE_WAVEFORM_Y_START)
		- Math Envelope Waveform Y Increment (HMO_ATTR_MATH_ENVELOPE_WAVEFORM_Y_INCREMENT)
		- Math Envelope Waveform Y Resolution (HMO_ATTR_MATH_ENVELOPE_WAVEFORM_Y_RESOLUTION)
		- Mask Data Conversion X Start (HMO_ATTR_MASK_DATA_CONVERSION_X_START)
		- Mask Data Conversion X Increment (HMO_ATTR_MASK_DATA_CONVERSION_X_INCREMENT)
		- Mask Data Conversion Y Start (HMO_ATTR_MASK_DATA_CONVERSION_Y_START)
		- Mask Data Conversion Y Increment (HMO_ATTR_MASK_DATA_CONVERSION_Y_INCREMENT)
		- Mask Data Conversion Y Resolution (HMO_ATTR_MASK_DATA_CONVERSION_Y_RESOLUTION)
		- Quick Measurements Enable With Status Bit (HMO_ATTR_QUICK_MEASUREMENTS_ENABLE_WITH_STATUS_BIT)
		- Cursor Autoset (HMO_ATTR_CURSOR_AUTOSET)
		- Cursor Reset (HMO_ATTR_CURSOR_RESET)
		- Cursor Peak Right (HMO_ATTR_CURSOR_PEAK_RIGHT)
		- Cursor Peak Left (HMO_ATTR_CURSOR_PEAK_LEFT)
		- FFT Sample Rate (HMO_ATTR_FFT_SAMPLE_RATE)
		- FFT Yt Window Width (HMO_ATTR_FFT_YT_WINDOW_WIDTH)
		- FFT Yt Window Position (HMO_ATTR_FFT_YT_WINDOW_POSITION)
		- Mask Event Mode Sound (HMO_ATTR_MASK_EVENT_MODE_SOUND)
		- Mask Event Mode Stop Acquisition (HMO_ATTR_MASK_EVENT_MODE_STOP_ACQUISITION)
		- Mask Event Count Stop Acquisition (HMO_ATTR_MASK_EVENT_COUNT_STOP_ACQUISITION)
		- Mask Event Mode Screenshot (HMO_ATTR_MASK_EVENT_MODE_SCREENSHOT)
		- Mask Screensaver Destination (HMO_ATTR_MASK_SCREENSAVER_DESTINATION)
		- Mask Event Mode Print (HMO_ATTR_MASK_EVENT_MODE_PRINT)
		- Mask Event Mode Save Waveform Data (HMO_ATTR_MASK_EVENT_MODE_SAVE_WAVEFORM_DATA)
		- Mask Waveform Destination (HMO_ATTR_MASK_WAVEFORM_DESTINATION)
		- Mask Event Mode Impulse (HMO_ATTR_MASK_EVENT_MODE_IMPULSE)
		- Mask Reset Test Counter (HMO_ATTR_MASK_RESET_TEST_COUNTER)
		- Search Trigger Data2Clock Clock Source (HMO_ATTR_SEARCH_TRIGGER_D2C_CLOCK_SOURCE)
		- Search Trigger Data2Clock Clock Level (HMO_ATTR_SEARCH_TRIGGER_D2C_CLOCK_LEVEL)

hmo Instrument Driver		
Driver history for LabVIEW		
Revision	Date	Note
		- Search Trigger Data2Clock Data Level (HMO_ATTR_SEARCH_TRIGGER_D2C_DATA_LEVEL)
		- Search Trigger Data2Clock Clock Hysteresis (HMO_ATTR_SEARCH_TRIGGER_D2C_CLOCK_HYSTERESIS)
		- Search Trigger Data2Clock Data Hysteresis (HMO_ATTR_SEARCH_TRIGGER_D2C_DATA_HYSTERESIS)
		- Search Trigger Data2Clock Polarity (HMO_ATTR_SEARCH_TRIGGER_D2C_POLARITY)
		- Search Trigger Data2Clock Setup Time (HMO_ATTR_SEARCH_TRIGGER_D2C_SETUP_TIME)
		- Search Trigger Data2Clock Hold Time (HMO_ATTR_SEARCH_TRIGGER_D2C_HOLD_TIME)
		- Search Trigger Pattern (HMO_ATTR_SEARCH_TRIGGER_PATTERN)
		- Search Trigger Pattern Combination (HMO_ATTR_SEARCH_TRIGGER_PATTERN_COMBINATION)
		- Search Trigger Pattern Comparison (HMO_ATTR_SEARCH_TRIGGER_PATTERN_COMPARISON)
		- Search Trigger Pattern Width (HMO_ATTR_SEARCH_TRIGGER_PATTERN_WIDTH)
		- Search Trigger Pattern Width Delta (HMO_ATTR_SEARCH_TRIGGER_PATTERN_WIDTH_DELTA)
		- Search Trigger Pattern Level (HMO_ATTR_SEARCH_TRIGGER_PATTERN_LEVEL)
		- Search Trigger Pattern Hysteresis (HMO_ATTR_SEARCH_TRIGGER_PATTERN_HYSTERESIS)
		- Search Maximum Number Of Results (HMO_ATTR_SEARCH_MAXIMUM_NUMBER_OF_RESULTS)
		- Search LIN Condition (HMO_ATTR_SEARCH_LIN_CONDITION)
		- Search LIN Frame (HMO_ATTR_SEARCH_LIN_FRAME)
		- Search LIN Checksum Error (HMO_ATTR_SEARCH_LIN_CHECKSUM_ERROR)
		- Search LIN ID Parity Error (HMO_ATTR_SEARCH_LIN_ID_PARITY_ERROR)
		- Search LIN Sync Error (HMO_ATTR_SEARCH_LIN_SYNC_ERROR)
		- Search LIN ID Condition (HMO_ATTR_SEARCH_LIN_ID_CONDITION)
		- Search LIN Identifier Pattern (HMO_ATTR_SEARCH_LIN_IDENTIFIER_PATTERN)
		- Search LIN Data Length (HMO_ATTR_SEARCH_LIN_DATA_LENGTH)
		- Search LIN Data Condition (HMO_ATTR_SEARCH_LIN_DATA_CONDITION)
		- Search LIN Data (HMO_ATTR_SEARCH_LIN_DATA)
		- Search CAN Condition (HMO_ATTR_SEARCH_CAN_CONDITION)
		- Search CAN Frame (HMO_ATTR_SEARCH_CAN_FRAME)
		- Search CAN CRC Rrror (HMO_ATTR_SEARCH_CAN_CRC_RRROR)
		- Search CAN Acknowledge Error (HMO_ATTR_SEARCH_CAN_ACKNOWLEDGE_ERROR)
		- Search CAN Form Error (HMO_ATTR_SEARCH_CAN_FORM_ERROR)
		- Search CAN Bit Stuffing Error (HMO_ATTR_SEARCH_CAN_BIT_STUFFING_ERROR)
		- Search CAN Frame Type (HMO_ATTR_SEARCH_CAN_FRAME_TYPE)
		- Search CAN ID Type (HMO_ATTR_SEARCH_CAN_ID_TYPE)
		- Search CAN ID Condition (HMO_ATTR_SEARCH_CAN_ID_CONDITION)
		- Search CAN Identifier (HMO_ATTR_SEARCH_CAN_IDENTIFIER)
		- Search CAN Data Length (HMO_ATTR_SEARCH_CAN_DATA_LENGTH)
		- Search CAN Data Condition (HMO_ATTR_SEARCH_CAN_DATA_CONDITION)
		- Search CAN Data (HMO_ATTR_SEARCH_CAN_DATA)
		- Protocol I2C Data Source (HMO_ATTR_PROTOCOL_I2C_DATA_SOURCE)
		- Protocol I2C Clock Source (HMO_ATTR_PROTOCOL_I2C_CLOCK_SOURCE)
		- Protocol I2C 7Bit Address (HMO_ATTR_PROTOCOL_I2C_7_BIT_ADDRESS)

hmo Instrument Driver		
Driver history for LabVIEW		
Revision	Date	Note
		- Parallel Bus Frame Count (HMO_ATTR_PARALLEL_BUS_FRAME_COUNT)
		- Parallel Bus Clocked Data Source (HMO_ATTR_PARALLEL_BUS_CLOCKED_DATA_SOURCE)
		- Parellel Bus Clocked Source (HMO_ATTR_PARELLEL_BUS_CLOCKED_SOURCE)
		- Paraller Bus Clocked Slope (HMO_ATTR_PARALLER_BUS_CLOCKED_SLOPE)
		- Paraller Bus Clocked CS Source (HMO_ATTR_PARALLER_BUS_CLOCKED_CS_SOURCE)
		- Paraller Bus Clocked CS Polarity (HMO_ATTR_PARALLER_BUS_CLOCKED_CS_POLARITY)
		- Paraller Bus Clocked Analyzed Lines (HMO_ATTR_PARALLER_BUS_CLOCKED_ANALYZED_LINES)
		- Pod Type (HMO_ATTR_POD_TYPE)
		- Pod Status Min (HMO_ATTR_POD_STATUS_MIN)
		- Pod Status Max (HMO_ATTR_POD_STATUS_MAX)
		- DVM Enable (HMO_ATTR_DVM_ENABLE)
		- DVM Source (HMO_ATTR_DVM_SOURCE)
		- DVM Type (HMO_ATTR_DVM_TYPE)
		- DVM Position (HMO_ATTR_DVM_POSITION)
		- DVM Result (HMO_ATTR_DVM_RESULT)
		- DVM Result Status (HMO_ATTR_DVM_RESULT_STATUS)
		- Generator Output Enable (HMO_ATTR_GENERATOR_OUTPUT_ENABLE)
		- Generator Function (HMO_ATTR_GENERATOR_FUNCTION)
		- Generator Amplitude (HMO_ATTR_GENERATOR_AMPLITUDE)
		- Generator Offset (HMO_ATTR_GENERATOR_OFFSET)
		- Generator Frequency (HMO_ATTR_GENERATOR_FREQUENCY)
		- Generator Ramp Polarity (HMO_ATTR_GENERATOR_RAMP_POLARITY)
		- Generator Duty Cycles (HMO_ATTR_GENERATOR_DUTY_CYCLES)
		- Pattern Generator Function (HMO_ATTR_PATTERN_GENERATOR_FUNCTION)
		- Pattern Generator State (HMO_ATTR_PATTERN_GENERATOR_STATE)
		- Pattern Generator Sample Time (HMO_ATTR_PATTERN_GENERATOR_SAMPLE_TIME)
		- Pattern Generator Period (HMO_ATTR_PATTERN_GENERATOR_PERIOD)
		- Pattern Generator Frequency (HMO_ATTR_PATTERN_GENERATOR_FREQUENCY)
		- Pattern Generator Idle Time (HMO_ATTR_PATTERN_GENERATOR_IDLE_TIME)
		- Pattern Generator Burst State (HMO_ATTR_PATTERN_GENERATOR_BURST_STATE)
		- Pattern Generator Burst Cycles (HMO_ATTR_PATTERN_GENERATOR_BURST_CYCLES)
		- Pattern Generator Trigger Mode (HMO_ATTR_PATTERN_GENERATOR_TRIGGER_MODE)
		- Pattern Generator Trigger Single (HMO_ATTR_PATTERN_GENERATOR_TRIGGER_SINGLE)
		- Pattern Generator External Slope (HMO_ATTR_PATTERN_GENERATOR_EXTERNAL_SLOPE)
		- Pattern Generator Arbitrary Data (HMO_ATTR_PATTERN_GENERATOR_ARBITRARY_DATA)
		- Pattern Generator Append Data (HMO_ATTR_PATTERN_GENERATOR_APPEND_DATA)
		- Pattern Generator Append Data Binary OR (HMO_ATTR_PATTERN_GENERATOR_APPEND_DATA_BINARY_OR)
		- Pattern Generator Append Data Binary AND (HMO_ATTR_PATTERN_GENERATOR_APPEND_DATA_BINARY_AND)
		- Pattern Generator Append Index (HMO_ATTR_PATTERN_GENERATOR_APPEND_INDEX)

hmo Instrument Driver		
Driver history for LabVIEW		
Revision	Date	Note
		- Pattern Generator Arbitraty Data Length (HMO_ATTR_PATTERN_GENERATOR_ARBITRATY_DATA_LENGTH)
		- Pattern Generator Counter Frequency (HMO_ATTR_PATTERN_GENERATOR_COUNTER_FREQUENCY)
		- Pattern Generator Count Direction (HMO_ATTR_PATTERN_GENERATOR_COUNT_DIRECTION)
		- Pattern Generator Square Wave Polarity (HMO_ATTR_PATTERN_GENERATOR_SQUARE_WAVE_POLARITY)
		- Pattern Generator Square Wave Duty Cycle (HMO_ATTR_PATTERN_GENERATOR_SQUARE_WAVEDUTY_CYCLE)
		- Pattern Generator Pin State (HMO_ATTR_PATTERN_GENERATOR_PIN_STATE)
		- Display Language Catalog (HMO_ATTR_DISPLAY_LANGUAGE_CATALOG)
		- Display Close Dialog (HMO_ATTR_DISPLAY_CLOSE_DIALOG)
		- Display Message Text (HMO_ATTR_DISPLAY_MESSAGE_TEXT)
		- History Channel Current Acquisition (HMO_ATTR_HISTORY_CHANNEL_CURRENT_ACQUISITION)
		- History Channel Player State (HMO_ATTR_HISTORY_CHANNEL_PLAYER_STATE)
		- History Channel Player Speed (HMO_ATTR_HISTORY_CHANNEL_PLAYER_SPEED)
		- History Channel Repeat (HMO_ATTR_HISTORY_CHANNEL_REPEAT)
		- History Channel Acquisition Date (HMO_ATTR_HISTORY_CHANNEL_ACQUISITION_DATE)
		- History Channel Acquisition Relative Time (HMO_ATTR_HISTORY_CHANNEL_ACQUISITION_RELATIVE_TIME)
		- History Channel Acquisition Absolute Time (HMO_ATTR_HISTORY_CHANNEL_ACQUISITION_ABSOLUTE_TIME)
		- History Get Acquisition Count (HMO_ATTR_HISTORY_GET_ACQUISITION_COUNT)
		- Hardcopy Command Set (HMO_ATTR_HARDCOPY_COMMAND_SET)
		- Calibration State (HMO_ATTR_CALIBRATION_STATE)
		- Sound Enabled (HMO_ATTR_SOUND_ENABLED)
		- Sound Error Enabled (HMO_ATTR_SOUND_ERROR_ENABLED)
		- Sound Trigger Enabled (HMO_ATTR_SOUND_TRIGGER_ENABLED)
		- Sound Generate (HMO_ATTR_SOUND_GENERATE)
		* Deleted attributes:
		- Hardcopy Language (HMO_ATTR_HARDCOPY_LANGUAGE) - use attribute HMO_ATTR_HARDCOPY_DEVICE_LANGUAGE_OUTPUT_FORMAT (Hardcopy Device Language Output Format)
		* Modified attributes:
		- Waveform Rate (HMO_ATTR_WAVEFORM_RATE) - Added 'Manual'
		- Horizontal Reference (HMO_ATTR_HORZ_REFERENCE) - Range changed
		- Vertical Coupling (HMO_ATTR_VERTICAL_COUPLING) - Added 'Ground'
		- Main Measurement Result RepCap (HMO_ATTR_MAIN_MEASUREMENT_RESULT) - Repeated capability extended with values for 'Waveform Mean', 'Waveform RMS', 'Waveform Standard Deviation', 'Cycle Standard Deviation', 'Bandwidth', 'Crest Factor'
		- Amplitude Time Main Measurement (HMO_ATTR_AMPT_MAIN_MEASUREMENT) - Added 'Waveform Mean', 'Waveform RMS', 'Waveform Standard Deviation', 'Cycle Standard Deviation',

hmo Instrument Driver		
Driver history for LabVIEW		
Revision	Date	Note
		'Bandwidth', 'Crest Factor'
		- Search Condition (HMO_ATTR_SEARCH_CONDITION) - Added 'Data to Clock', 'Pattern', 'Protocol'
		- Protocol Display Format (HMO_ATTR_PROTOCOL_DISPLAY_FORMAT) - Added 'Octal'
		- Protocol I2C Trigger First Byte Offset (HMO_ATTR_PROTOCOL_I2C_TRIGGER_FIRST_BYTE_OFFSET) - Data type changed from ViReal64 to ViInt32
		- Protocol LIN Trigger Data Length (HMO_ATTR_PROTOCOL_LIN_TRIGGER_DATA_LENGTH) - Range table fix
		- Protocol CAN Trigger Data Length (HMO_ATTR_PROTOCOL_CAN_TRIGGER_DATA_LENGTH) - Range changed
		- Display Language (HMO_ATTR_DISPLAY_LANGUAGE) - Added 'Russian', 'Japanese', 'Korean'
		- Hardcopy Device Language Output Format (HMO_ATTR_HARDCOPY_DEVICE_LANGUAGE_OUTPUT_FORMAT) - Added 'GDI'
		- Hardcopy Page Size (HMO_ATTR_HARDCOPY_PAGE_SIZE) - Added 'Legal', 'Letter'
		* Modified Repeated Capabilities:
		- Math - Identifiers ("M1,M2,M3,M4,M5", "M1,M2,M3,M4")
		- Math - Command Values ("1,2,3,4,5", "1,2,3,4")
		- MeasType - Identifiers ("Frequency,Period,Peak,UPeakValue,LPeakValue,PPCount,NPCount,RECount,FECount,High,Low,Amplitude,Mean,RMS,RTime,FTime,PDCycle,NDCycle,PPWidth,NPWidth,CYCMean,CYCRms,STDDev,TFrequency,TPeriod,PosOver,NegOver,Delay,Phase,WavMean,WavRMS,WavStdDevCycStdDev,BWidth,Crest", "Frequency,Period,Peak,UPeakValue,LPeakValue,PPCount,NPCount,RECount,FECount,High,Low,Amplitude,Mean,RMS,RTime,FTime,PDCycle,NDCycle,PPWidth,NPWidth,CYCMean,CYCRms,STDDev,TFrequency,TPeriod,PosOver,NegOver,Delay,Phase")
		- MeasType - Command Values ("FREQ,PER,PEAK,UPE,LPE,PPC,NPC,REC,FEC,HIGH,LOW,AMPL,MEAN,RMS,RTIM,FTIM,PDCY,NDCY,PPW,NPW,CYCM,CYCR,STDD,TFR,TPER,POV,NOV,DEL,PHAS,WAVM,WAVR,WAVS,CYCS,BWID,CRES", "FREQ,PER,PEAK,UPE,LPE,PPC,NPC,REC,FEC,HIGH,LOW,AMPL,MEAN,RMS,RTIM,FTIM,PDCY,NDCY,PPW,NPW,CYCM,CYCR,STDD,TFR,TPER,POV,NOV,DEL,PHAS")
		* Modified Range Tables:
		- hmo_rngHorzAcquisitionTime - HMO_ATTR_HORZ_TIME_PER_RECORD
		Range changed to <250e-12;500>
		- hmo_rngAcquisitionStartTime - HMO_ATTR_ACQUSITION_START_TIME
		Range changed to <-500.0;500.0>
		- hmo_rngHorzReference - HMO_ATTR_HORZ_REFERENCE
		Range changed to <10.0;90.0>
		- hmo_rngSampleMode.HMO_VAL_REAL_TIME - HMO_ATTR_SAMPLE_MODE
		Enum name changed ("RealTimeMode", "")
		- hmo_rngSampleMode.HMO_VAL_REAL_TIME - HMO_ATTR_SAMPLE_MODE
		Help changed ("At slow time base settings the sampled points of the input signal are used to build the waveform, no waveform points are added. With fast time base settings, the sample rate is higher than the ADC sample rate. Waveform samples are added to the ADC samples with sin(x)/x interpolation.",

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		"Real Time Mode: At slow time base settings the sampled points of the input signal are used to build the waveform, no waveform points are added. With fast time base settings, the sample rate is higher than the ADC sample rate. Waveform samples are added to the ADC samples with sin(x)/x interpolation.")
		- hmo_rngSampleMode.HMO_VAL_EQUIVALENT_TIME - HMO_ATTR_SAMPLE_MODE
		Enum name changed ("EquivalentTime", "")
		- hmo_rngSampleMode.HMO_VAL_EQUIVALENT_TIME - HMO_ATTR_SAMPLE_MODE
		Help changed ("The waveform points are taken from several acquisitions of a repetive signal at a different time in relation to the trigger point.", "Equivalent time: The waveform points are taken from several acquisitions of a repetive signal at a different time in relation to the trigger point.")
		- hmo_rngSampleMode - HMO_ATTR_SAMPLE_MODE
		Changed enum name ("SampleMode", "")
		- hmo_rngWaveformArithmetics.HMO_VAL_OFF - HMO_ATTR_MATH_ACQUISITION_TYPE
		Enum name changed ("Off", "")
		- hmo_rngWaveformArithmetics.HMO_VAL_ENVELOPE - HMO_ATTR_MATH_ACQUISITION_TYPE
		Enum name changed ("Envelope", "")
		- hmo_rngWaveformArithmetics.HMO_VAL_AVERAGE - HMO_ATTR_MATH_ACQUISITION_TYPE
		Enum name changed ("Average", "")
		- hmo_rngWaveformArithmetics - HMO_ATTR_MATH_ACQUISITION_TYPE
		Changed enum name ("WaveformArithmetics", "")
		- hmo_rngVerticalCoupling.HMO_VAL_AC - HMO_ATTR_VERTICAL_COUPLING
		Enum name changed ("AC", "")
		- hmo_rngVerticalCoupling.HMO_VAL_DC - HMO_ATTR_VERTICAL_COUPLING
		Enum name changed ("DC50Ohm", "")
		- hmo_rngVerticalCoupling.HMO_VAL_AC_LIMIT - HMO_ATTR_VERTICAL_COUPLING
		Enum name changed ("AC1MOhm", "")
		- hmo_rngVerticalCoupling.HMO_VAL_DC_LIMIT - HMO_ATTR_VERTICAL_COUPLING
		Enum name changed ("DC1MOhm", "")
		- hmo_rngVerticalCoupling - HMO_ATTR_VERTICAL_COUPLING
		New items: HMO_VAL_DC_GND
		- hmo_rngVerticalCoupling - HMO_ATTR_VERTICAL_COUPLING
		Changed enum name ("VerticalCoupling", "")
		- hmo_rngVerticalScale - HMO_ATTR_VERTICAL_SCALE
		Range changed to <1e-3;10>
		- hmo_rngVerticalRange - HMO_ATTR_VERTICAL_RANGE
		Range changed to <8e-3;80>
		- hmo_rngChannelBWLimit.HMO_VAL_BW_FULL - HMO_ATTR_CHANNEL_BANDWIDTH_LIMIT
		Enum name changed ("Full", "")
		- hmo_rngChannelBWLimit.HMO_VAL_BW_20 - HMO_ATTR_CHANNEL_BANDWIDTH_LIMIT
		Enum name changed ("B20MHz", "")
		- hmo_rngChannelBWLimit - HMO_ATTR_CHANNEL_BANDWIDTH_LIMIT
		Changed enum name ("ChannelBWLimit", "")

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		- hmo_rngTriggerSource.HMO_VAL_NONE - HMO_ATTR_TRIGGER_SOURCE
		Enum name changed ("NoTrigger", "")
		- hmo_rngTriggerSource.HMO_VAL_CHANNEL1 - HMO_ATTR_TRIGGER_SOURCE
		Enum name changed ("Channel1", "")
		- hmo_rngTriggerSource.HMO_VAL_CHANNEL2 - HMO_ATTR_TRIGGER_SOURCE
		Enum name changed ("Channel2", "")
		- hmo_rngTriggerSource.HMO_VAL_CHANNEL3 - HMO_ATTR_TRIGGER_SOURCE
		Enum name changed ("Channel3", "")
		- hmo_rngTriggerSource.HMO_VAL_CHANNEL4 - HMO_ATTR_TRIGGER_SOURCE
		Enum name changed ("Channel4", "")
		- hmo_rngTriggerSource.HMO_VAL_EXTERNAL - HMO_ATTR_TRIGGER_SOURCE
		Enum name changed ("ExternalTriggerInput", "")
		- hmo_rngTriggerSource.HMO_VAL_LINE - HMO_ATTR_TRIGGER_SOURCE
		Enum name changed ("ACLine", "")
		- hmo_rngTriggerSource.HMO_VAL_PATTERN - HMO_ATTR_TRIGGER_SOURCE
		Enum name changed ("Pattern", "")
		- hmo_rngTriggerSource.HMO_VAL_BUS1 - HMO_ATTR_TRIGGER_SOURCE
		Enum name changed ("SerialBus1", "")
		- hmo_rngTriggerSource.HMO_VAL_BUS2 - HMO_ATTR_TRIGGER_SOURCE
		Enum name changed ("SerialBus2", "")
		- hmo_rngTriggerSource.HMO_VAL_D0 - HMO_ATTR_TRIGGER_SOURCE
		Enum name changed ("DigitalChannel0", "")
		- hmo_rngTriggerSource.HMO_VAL_D1 - HMO_ATTR_TRIGGER_SOURCE
		Enum name changed ("DigitalChannel1", "")
		- hmo_rngTriggerSource.HMO_VAL_D2 - HMO_ATTR_TRIGGER_SOURCE
		Enum name changed ("DigitalChannel2", "")
		- hmo_rngTriggerSource.HMO_VAL_D3 - HMO_ATTR_TRIGGER_SOURCE
		Enum name changed ("DigitalChannel3", "")
		- hmo_rngTriggerSource.HMO_VAL_D4 - HMO_ATTR_TRIGGER_SOURCE
		Enum name changed ("DigitalChannel4", "")
		- hmo_rngTriggerSource.HMO_VAL_D5 - HMO_ATTR_TRIGGER_SOURCE
		Enum name changed ("DigitalChannel5", "")
		- hmo_rngTriggerSource.HMO_VAL_D6 - HMO_ATTR_TRIGGER_SOURCE
		Enum name changed ("DigitalChannel6", "")
		- hmo_rngTriggerSource.HMO_VAL_D7 - HMO_ATTR_TRIGGER_SOURCE
		Enum name changed ("DigitalChannel7", "")
		- hmo_rngTriggerSource.HMO_VAL_D8 - HMO_ATTR_TRIGGER_SOURCE
		Enum name changed ("DigitalChannel8", "")
		- hmo_rngTriggerSource.HMO_VAL_D9 - HMO_ATTR_TRIGGER_SOURCE
		Enum name changed ("DigitalChannel9", "")
		- hmo_rngTriggerSource.HMO_VAL_D10 - HMO_ATTR_TRIGGER_SOURCE

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		Enum name changed ("DigitalChannel10", "")
		- hmo_rngTriggerSource.HMO_VAL_D11 - HMO_ATTR_TRIGGER_SOURCE
		Enum name changed ("DigitalChannel11", "")
		- hmo_rngTriggerSource.HMO_VAL_D12 - HMO_ATTR_TRIGGER_SOURCE
		Enum name changed ("DigitalChannel12", "")
		- hmo_rngTriggerSource.HMO_VAL_D13 - HMO_ATTR_TRIGGER_SOURCE
		Enum name changed ("DigitalChannel13", "")
		- hmo_rngTriggerSource.HMO_VAL_D14 - HMO_ATTR_TRIGGER_SOURCE
		Enum name changed ("DigitalChannel14", "")
		- hmo_rngTriggerSource.HMO_VAL_D15 - HMO_ATTR_TRIGGER_SOURCE
		Enum name changed ("DigitalChannel15", "")
		- hmo_rngTriggerSource - HMO_ATTR_TRIGGER_SOURCE
		Changed enum name ("TriggerSource", "")
		- hmo_rngPolarity.HMO_VAL_POSITIVE - HMO_ATTR_TV_TRIGGER_POLARITY, HMO_ATTR_WIDTH_POLARITY, HMO_ATTR_TRIGGER_OUT_POLARITY, HMO_ATTR_SEARCH_TRIGGER_WIDTH_POLARITY, HMO_ATTR_PROTOCOL_SSPI_POLARITY, HMO_ATTR_PROTOCOL_UART_POLARITY, HMO_ATTR_PARALLER_BUS_CLOCKED_CS_POLARITY, HMO_ATTR_GENERATOR_RAMP_POLARITY
		Enum name changed ("Positive", "")
		- hmo_rngPolarity.HMO_VAL_POSITIVE - HMO_ATTR_TV_TRIGGER_POLARITY, HMO_ATTR_WIDTH_POLARITY, HMO_ATTR_TRIGGER_OUT_POLARITY, HMO_ATTR_SEARCH_TRIGGER_WIDTH_POLARITY, HMO_ATTR_PROTOCOL_SSPI_POLARITY, HMO_ATTR_PROTOCOL_UART_POLARITY, HMO_ATTR_PARALLER_BUS_CLOCKED_CS_POLARITY, HMO_ATTR_GENERATOR_RAMP_POLARITY
		Description changed ("Positive", "")
		- hmo_rngPolarity.HMO_VAL_NEGATIVE - HMO_ATTR_TV_TRIGGER_POLARITY, HMO_ATTR_WIDTH_POLARITY, HMO_ATTR_TRIGGER_OUT_POLARITY, HMO_ATTR_SEARCH_TRIGGER_WIDTH_POLARITY, HMO_ATTR_PROTOCOL_SSPI_POLARITY, HMO_ATTR_PROTOCOL_UART_POLARITY, HMO_ATTR_PARALLER_BUS_CLOCKED_CS_POLARITY, HMO_ATTR_GENERATOR_RAMP_POLARITY
		Enum name changed ("Negative", "")
		- hmo_rngPolarity.HMO_VAL_NEGATIVE - HMO_ATTR_TV_TRIGGER_POLARITY, HMO_ATTR_WIDTH_POLARITY, HMO_ATTR_TRIGGER_OUT_POLARITY, HMO_ATTR_SEARCH_TRIGGER_WIDTH_POLARITY, HMO_ATTR_PROTOCOL_SSPI_POLARITY, HMO_ATTR_PROTOCOL_UART_POLARITY, HMO_ATTR_PARALLER_BUS_CLOCKED_CS_POLARITY, HMO_ATTR_GENERATOR_RAMP_POLARITY
		Description changed ("Negative", "")
		- hmo_rngPolarity - HMO_ATTR_TV_TRIGGER_POLARITY, HMO_ATTR_WIDTH_POLARITY, HMO_ATTR_TRIGGER_OUT_POLARITY, HMO_ATTR_SEARCH_TRIGGER_WIDTH_POLARITY, HMO_ATTR_PROTOCOL_SSPI_POLARITY, HMO_ATTR_PROTOCOL_UART_POLARITY, HMO_ATTR_PARALLER_BUS_CLOCKED_CS_POLARITY, HMO_ATTR_GENERATOR_RAMP_POLARITY
		Changed enum name ("Polarity", "")

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		- hmo_rngCursorFunction.HMO_VAL_CURSOR_HORIZONTAL - HMO_ATTR_CURSOR_MEASUREMENT_TYPE
		Enum name changed ("Horizontal", "")
		- hmo_rngCursorFunction.HMO_VAL_CURSOR_VERTICAL - HMO_ATTR_CURSOR_MEASUREMENT_TYPE
		Enum name changed ("Vertical", "")
		- hmo_rngCursorFunction.HMO_VAL_CURSOR_PAIRED - HMO_ATTR_CURSOR_MEASUREMENT_TYPE
		Enum name changed ("Paired", "")
		- hmo_rngCursorFunction.HMO_VAL_CURSOR_HRAT - HMO_ATTR_CURSOR_MEASUREMENT_TYPE
		Enum name changed ("HRatio", "")
		- hmo_rngCursorFunction.HMO_VAL_CURSOR_VRAT - HMO_ATTR_CURSOR_MEASUREMENT_TYPE
		Enum name changed ("VRatio", "")
		- hmo_rngCursorFunction.HMO_VAL_CURSOR_PPC - HMO_ATTR_CURSOR_MEASUREMENT_TYPE
		Enum name changed ("CountPositivePulses", "")
		- hmo_rngCursorFunction.HMO_VAL_CURSOR_NPC - HMO_ATTR_CURSOR_MEASUREMENT_TYPE
		Enum name changed ("CountNegativePulses", "")
		- hmo_rngCursorFunction.HMO_VAL_CURSOR_REC - HMO_ATTR_CURSOR_MEASUREMENT_TYPE
		Enum name changed ("CountRisingEdges", "")
		- hmo_rngCursorFunction.HMO_VAL_CURSOR_FEC - HMO_ATTR_CURSOR_MEASUREMENT_TYPE
		Enum name changed ("CountFallingEdges", "")
		- hmo_rngCursorFunction.HMO_VAL_CURSOR_MEAN - HMO_ATTR_CURSOR_MEASUREMENT_TYPE
		Enum name changed ("MeanValue", "")
		- hmo_rngCursorFunction.HMO_VAL_CURSOR_RMS - HMO_ATTR_CURSOR_MEASUREMENT_TYPE
		Enum name changed ("RMS", "")
		- hmo_rngCursorFunction.HMO_VAL_CURSOR_RTIM - HMO_ATTR_CURSOR_MEASUREMENT_TYPE
		Enum name changed ("RiseTime", "")
		- hmo_rngCursorFunction.HMO_VAL_CURSOR_FTIM - HMO_ATTR_CURSOR_MEASUREMENT_TYPE
		Enum name changed ("FallTime", "")
		- hmo_rngCursorFunction.HMO_VAL_CURSOR_PEAK - HMO_ATTR_CURSOR_MEASUREMENT_TYPE
		Enum name changed ("PeakValue", "")
		- hmo_rngCursorFunction.HMO_VAL_CURSOR_UPE - HMO_ATTR_CURSOR_MEASUREMENT_TYPE
		Enum name changed ("UpperPeakValue", "")

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		- hmo_rngCursorFunction.HMO_VAL_CURSOR_LPE - HMO_ATTR_CURSOR_MEASUREMENT_TYPE
		Enum name changed ("LowerPeakValue", "")
		- hmo_rngCursorFunction.HMO_VAL_CURSOR_STDDEV - HMO_ATTR_CURSOR_MEASUREMENT_TYPE
		Enum name changed ("StandardDeviation", "")
		- hmo_rngCursorFunction.HMO_VAL_CURSOR_PDCYCLE - HMO_ATTR_CURSOR_MEASUREMENT_TYPE
		Enum name changed ("PositiveDutyCycle", "")
		- hmo_rngCursorFunction.HMO_VAL_CURSOR_NDCYCLE - HMO_ATTR_CURSOR_MEASUREMENT_TYPE
		Enum name changed ("NegativeDutyCycle", "")
		- hmo_rngCursorFunction - HMO_ATTR_CURSOR_MEASUREMENT_TYPE
		Changed enum name ("CursorFunction", "")
		- hmo_rngInterpolation.HMO_VAL_SINE_X - HMO_ATTR_INTERPOLATION
		Help changed ("Interpolation by means of a sin(x)/x curve.", "sin(x)/x: Interpolation by means of a sin(x)/x curve.")
		- hmo_rngInterpolation.HMO_VAL_LINEAR - HMO_ATTR_INTERPOLATION
		Help changed ("Linear interpolation between two adjacent sample points", "Linear: Linear interpolation between two adjacent sample points")
		- hmo_rngInterpolation.HMO_VAL_SAMPLE_HOLD - HMO_ATTR_INTERPOLATION
		Help changed ("Causes a histogram-like interpolation", "Sample/Hold: causes a histogram-like interpolation")
		- hmo_rngMeasurementCategory.HMO_VAL_AMPTIME - HMO_ATTR_MEASUREMENT_CATEGORY
		Help changed ("Amplitude and time measurements", "Amplitude And Time: Amplitude and time measurements")
		- hmo_rngFFTWindowType.HMO_VAL_RECTANGULAR - HMO_ATTR_FFT_WINDOW_TYPE
		Help changed ("The rectangular window has the best frequency resolution, but a poor amplitude accuracy and is recommended for separating two tones with almost equal amplitudes and a small frequency distance.", "Rectangular: The rectangular window has the best frequency resolution, but a poor amplitude accuracy and is recommended for separating two tones with almost equal amplitudes and a small frequency distance.")
		- hmo_rngFFTWindowType.HMO_VAL_HAMMING - HMO_ATTR_FFT_WINDOW_TYPE
		Help changed ("The Hamming window is bell shaped and has a good frequency resolution and fair amplitude accuracy. It is recommended for frequency response measurements as well as sine waves, periodic signals and narrow-band noise", "Hamming: The Hamming window is bell shaped and has a good frequency resolution and fair amplitude accuracy. It is recommended for frequency response measurements as well as sine waves, periodic signals and narrow-band noise")
		- hmo_rngFFTWindowType.HMO_VAL_HANN - HMO_ATTR_FFT_WINDOW_TYPE
		Help changed ("The Hann window is bell shaped and has a slightly worse frequency resolution but smaller sidelobe level than the Hamming window. The applications are the same.", "Hann: The Hann window is bell shaped and has a slightly worse frequency resolution but smaller sidelobe level than the Hamming window. The applications are the same.")
		- hmo_rngFFTWindowType.HMO_VAL_BLACKMAN - HMO_ATTR_FFT_WINDOW_TYPE
		Help changed ("The Blackman window is bell shaped and has a poor frequency resolution, but very good amplitude accuracy. It is recommended mainly for signals with single frequencies to detect

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		harmonics.", "Blackman: The Blackman window is bell shaped and has a poor frequency resolution, but very good amplitude accuracy. It is recommended mainly for signals with single frequencies to detect harmonics.")
		- hmo_rngProtocolSPIPolarity.HMO_VAL_ACTLOW - HMO_ATTR_PROTOCOL_SPI_POLARITY
		Enum name changed ("ActiveLow", "")
		- hmo_rngProtocolSPIPolarity.HMO_VAL_ACTLOW - HMO_ATTR_PROTOCOL_SPI_POLARITY
		Description changed ("Active Low", "")
		- hmo_rngProtocolSPIPolarity.HMO_VAL_ACTHIGH - HMO_ATTR_PROTOCOL_SPI_POLARITY
		Enum name changed ("ActiveHigh", "")
		- hmo_rngProtocolSPIPolarity.HMO_VAL_ACTHIGH - HMO_ATTR_PROTOCOL_SPI_POLARITY
		Description changed ("Active High", "")
		- hmo_rngProtocolSPIPolarity - HMO_ATTR_PROTOCOL_SPI_POLARITY
		Changed enum name ("ProtocolSPIPolarity", "")
		- hmo_rngProtocolUARTTriggerType.HMO_VAL_UART_TRIGGER_BURSTSTART - HMO_ATTR_PROTOCOL_UART_TRIGGER_MODE
		Enum name changed ("BurstStart", "")
		- hmo_rngProtocolUARTTriggerType.HMO_VAL_UART_TRIGGER_BURSTSTART - HMO_ATTR_PROTOCOL_UART_TRIGGER_MODE
		Help changed ("Sets the trigger to the begin of a data frame. The frame start is the first start bit after the idle time.", "Burst start")
		- hmo_rngProtocolUARTTriggerType.HMO_VAL_UART_TRIGGER_SBIT - HMO_ATTR_PROTOCOL_UART_TRIGGER_MODE
		Enum name changed ("StartBit", "")
		- hmo_rngProtocolUARTTriggerType.HMO_VAL_UART_TRIGGER_SBIT - HMO_ATTR_PROTOCOL_UART_TRIGGER_MODE
		Help changed ("The start bit is the first low bit after a stop bit.", "Start bit")
		- hmo_rngProtocolUARTTriggerType.HMO_VAL_UART_TRIGGER_NTHS - HMO_ATTR_PROTOCOL_UART_TRIGGER_MODE
		Enum name changed ("NthSymbol", "")
		- hmo_rngProtocolUARTTriggerType.HMO_VAL_UART_TRIGGER_NTHS - HMO_ATTR_PROTOCOL_UART_TRIGGER_MODE
		Help changed ("Sets the trigger to the n-th symbol of a burst.", "N-th symbol")
		- hmo_rngProtocolUARTTriggerType.HMO_VAL_UART_TRIGGER_SYMB - HMO_ATTR_PROTOCOL_UART_TRIGGER_MODE
		Enum name changed ("Symbol", "")
		- hmo_rngProtocolUARTTriggerType.HMO_VAL_UART_TRIGGER_SYMB - HMO_ATTR_PROTOCOL_UART_TRIGGER_MODE
		Help changed ("Triggers if a pattern occurs in a symbol at any position in a burst.", "Symbol")
		- hmo_rngProtocolUARTTriggerType.HMO_VAL_UART_TRIGGER_PATT - HMO_ATTR_PROTOCOL_UART_TRIGGER_MODE
		Enum name changed ("Pattern", "")
		- hmo_rngProtocolUARTTriggerType.HMO_VAL_UART_TRIGGER_PATT - HMO_ATTR_PROTOCOL_UART_TRIGGER_MODE
		Help changed ("Triggers on a serial pattern at a defined position in the burst.", "Pattern")
		- hmo_rngProtocolUARTTriggerType.HMO_VAL_UART_TRIGGER_PERR -

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		HMO_ATTR_PROTOCOL_UART_TRIGGER_MODE
		Enum name changed ("ParityError", "")
		- hmo_rngProtocolUARTTriggerType.HMO_VAL_UART_TRIGGER_PERR - HMO_ATTR_PROTOCOL_UART_TRIGGER_MODE
		Help changed ("Triggers if a bit error occured in transmission.", "Parity error")
		- hmo_rngProtocolUARTTriggerType.HMO_VAL_UART_TRIGGER_FERR - HMO_ATTR_PROTOCOL_UART_TRIGGER_MODE
		Enum name changed ("FrameError", "")
		- hmo_rngProtocolUARTTriggerType.HMO_VAL_UART_TRIGGER_FERR - HMO_ATTR_PROTOCOL_UART_TRIGGER_MODE
		Help changed ("Triggers on frame error.", "Frame error")
		- hmo_rngProtocolUARTTriggerType.HMO_VAL_UART_TRIGGER_BRE - HMO_ATTR_PROTOCOL_UART_TRIGGER_MODE
		Enum name changed ("Break", "")
		- hmo_rngProtocolUARTTriggerType.HMO_VAL_UART_TRIGGER_BRE - HMO_ATTR_PROTOCOL_UART_TRIGGER_MODE
		Help changed ("Triggers if a start bit is not followed by a stop bit within a defined time. During the break the stop bits are at low state.", "Break")
		- hmo_rngProtocolUARTTriggerType - HMO_ATTR_PROTOCOL_UART_TRIGGER_MODE
		Changed enum name ("ProtocolUARTTriggerType", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_CH1 - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("Channel1", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_CH2 - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("Channel2", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_CH3 - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("Channel3", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_CH4 - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("Channel4", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_M1 - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("MathWaveform1", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_M2 - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("MathWaveform2", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_M3 - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("MathWaveform3", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_M4 - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("MathWaveform4", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_M5 - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("MathWaveform5", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_R1 - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("ReferenceWaveform1", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_R2 - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("ReferenceWaveform2", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_R3 - HMO_ATTR_CURSOR_SOURCE

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		Enum name changed ("ReferenceWaveform3", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_R4 - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("ReferenceWaveform4", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_XY1 - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("XYWaveform1", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_XY2 - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("XYWaveform2", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_QMA - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("QuickmathChannel", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_POD1 - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("LogicPOD1", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_POD2 - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("LogicPOD2", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_D0 - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("DigitalChannel0", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_D1 - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("DigitalChannel1", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_D2 - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("DigitalChannel2", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_D3 - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("DigitalChannel3", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_D4 - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("DigitalChannel4", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_D5 - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("DigitalChannel5", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_D6 - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("DigitalChannel6", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_D7 - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("DigitalChannel7", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_D8 - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("DigitalChannel8", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_D9 - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("DigitalChannel9", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_D10 - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("DigitalChannel10", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_D11 - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("DigitalChannel11", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_D12 - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("DigitalChannel12", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_D13 - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("DigitalChannel13", "")

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		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_D14 - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("DigitalChannel14", "")
		- hmo_rngWaveformParameterCursor.HMO_VAL_WAV_D15 - HMO_ATTR_CURSOR_SOURCE
		Enum name changed ("DigitalChannel15", "")
		- hmo_rngWaveformParameterCursor - HMO_ATTR_CURSOR_SOURCE
		Changed enum name ("WaveformParameterCursor", "")
		- hmo_rngWaveformParameter.HMO_VAL_WAV_CH1 - HMO_ATTR_REFERENCE_WAVEFORM_SOURCE
		Enum name changed ("Channel1", "")
		- hmo_rngWaveformParameter.HMO_VAL_WAV_CH2 - HMO_ATTR_REFERENCE_WAVEFORM_SOURCE
		Enum name changed ("Channel2", "")
		- hmo_rngWaveformParameter.HMO_VAL_WAV_CH3 - HMO_ATTR_REFERENCE_WAVEFORM_SOURCE
		Enum name changed ("Channel3", "")
		- hmo_rngWaveformParameter.HMO_VAL_WAV_CH4 - HMO_ATTR_REFERENCE_WAVEFORM_SOURCE
		Enum name changed ("Channel4", "")
		- hmo_rngWaveformParameter.HMO_VAL_WAV_M1 - HMO_ATTR_REFERENCE_WAVEFORM_SOURCE
		Enum name changed ("MathWaveform1", "")
		- hmo_rngWaveformParameter.HMO_VAL_WAV_M2 - HMO_ATTR_REFERENCE_WAVEFORM_SOURCE
		Enum name changed ("MathWaveform2", "")
		- hmo_rngWaveformParameter.HMO_VAL_WAV_M3 - HMO_ATTR_REFERENCE_WAVEFORM_SOURCE
		Enum name changed ("MathWaveform3", "")
		- hmo_rngWaveformParameter.HMO_VAL_WAV_M4 - HMO_ATTR_REFERENCE_WAVEFORM_SOURCE
		Enum name changed ("MathWaveform4", "")
		- hmo_rngWaveformParameter.HMO_VAL_WAV_M5 - HMO_ATTR_REFERENCE_WAVEFORM_SOURCE
		Enum name changed ("MathWaveform5", "")
		- hmo_rngWaveformParameter.HMO_VAL_WAV_R1 - HMO_ATTR_REFERENCE_WAVEFORM_SOURCE
		Enum name changed ("ReferenceWaveform1", "")
		- hmo_rngWaveformParameter.HMO_VAL_WAV_R2 - HMO_ATTR_REFERENCE_WAVEFORM_SOURCE
		Enum name changed ("ReferenceWaveform2", "")
		- hmo_rngWaveformParameter.HMO_VAL_WAV_R3 - HMO_ATTR_REFERENCE_WAVEFORM_SOURCE
		Enum name changed ("ReferenceWaveform3", "")
		- hmo_rngWaveformParameter.HMO_VAL_WAV_R4 - HMO_ATTR_REFERENCE_WAVEFORM_SOURCE

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		Enum name changed ("ReferenceWaveform4", "")
		- hmo_rngWaveformParameter.HMO_VAL_WAV_QMA - HMO_ATTR_REFERENCE_WAVEFORM_SOURCE
		Enum name changed ("QuickmathChannel", "")
		- hmo_rngWaveformParameter.HMO_VAL_WAV_POD1 - HMO_ATTR_REFERENCE_WAVEFORM_SOURCE
		Enum name changed ("LogicPOD1", "")
		- hmo_rngWaveformParameter.HMO_VAL_WAV_POD2 - HMO_ATTR_REFERENCE_WAVEFORM_SOURCE
		Enum name changed ("LogicPOD2", "")
		- hmo_rngWaveformParameter - HMO_ATTR_REFERENCE_WAVEFORM_SOURCE
		Changed enum name ("WaveformParameter", "")
		- hmo_rngSampleRate.HMO_VAL_RATE_MAX_SAM - HMO_ATTR_WAVEFORM_RATE
		Help changed ("The instrument acquires the signal rate and memory depth to acquire at maximum waveform acquisition rate. In connection with persistence, the mode can display rare signal anomalies.", "Maximum sample rate: The instrument acquires the signal rate and memory depth to acquire at maximum waveform acquisition rate. In connection with persistence, the mode can display rare signal anomalies.")
		- hmo_rngSampleRate.HMO_VAL_RATE_MAX_WAV - HMO_ATTR_WAVEFORM_RATE
		Help changed ("The instrument combines sample rate and memory depth to acquire at maximum waveform acquisition rate. In connection with persistence, the mode can display rare signal anomalies.", "Maximum waveform rate: The instrument combines sample rate and memory depth to acquire at maximum waveform acquisition rate. In connection with persistence, the mode can display rare signal anomalies.")
		- hmo_rngSampleRate - HMO_ATTR_WAVEFORM_RATE
		New items: HMO_VAL_RATE_MAX_MAN
		- hmo_rngLanguage.HMO_VAL_DISPLAY_ENGLISH - HMO_ATTR_DISPLAY_LANGUAGE, HMO_ATTR_REMOVE_DISPLAY_LANGUAGE
		Enum name changed ("German", "")
		- hmo_rngLanguage.HMO_VAL_DISPLAY_ENGLISH - HMO_ATTR_DISPLAY_LANGUAGE, HMO_ATTR_REMOVE_DISPLAY_LANGUAGE
		Help changed ("German", "English")
		- hmo_rngLanguage.HMO_VAL_DISPLAY_GERMAN - HMO_ATTR_DISPLAY_LANGUAGE, HMO_ATTR_REMOVE_DISPLAY_LANGUAGE
		Enum name changed ("German", "")
		- hmo_rngLanguage.HMO_VAL_DISPLAY_SPANISH - HMO_ATTR_DISPLAY_LANGUAGE, HMO_ATTR_REMOVE_DISPLAY_LANGUAGE
		Enum name changed ("Spanish", "")
		- hmo_rngLanguage.HMO_VAL_DISPLAY_FRENCH - HMO_ATTR_DISPLAY_LANGUAGE, HMO_ATTR_REMOVE_DISPLAY_LANGUAGE
		Enum name changed ("French", "")
		- hmo_rngLanguage.HMO_VAL_DISPLAY_SCHIN - HMO_ATTR_DISPLAY_LANGUAGE, HMO_ATTR_REMOVE_DISPLAY_LANGUAGE
		Enum name changed ("SimplifiedChinese", "")
		- hmo_rngLanguage.HMO_VAL_DISPLAY_TCHIN - HMO_ATTR_DISPLAY_LANGUAGE, HMO_ATTR_REMOVE_DISPLAY_LANGUAGE

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		Enum name changed ("TraditionalChinese", "")
		- hmo_rngLanguage - HMO_ATTR_DISPLAY_LANGUAGE, HMO_ATTR_REMOVE_DISPLAY_LANGUAGE
		New items: HMO_VAL_DISPLAY_RUSSIAN, HMO_VAL_DISPLAY_JAPANESE, HMO_VAL_DISPLAY_KOREAN
		- hmo_rngLanguage - HMO_ATTR_DISPLAY_LANGUAGE, HMO_ATTR_REMOVE_DISPLAY_LANGUAGE
		Changed enum name ("Language", "")
		- hmo_rngSource.HMO_VAL_SOURCE_CH1 - HMO_ATTR_PROTOCOL_I2C_SOURCE, HMO_ATTR_PROTOCOL_I2C_DATA_SOURCE, HMO_ATTR_PROTOCOL_I2C_CLOCK_SOURCE, HMO_ATTR_PROTOCOL_SPI_SOURCE, HMO_ATTR_PROTOCOL_SSPI_SOURCE, HMO_ATTR_PROTOCOL_UART_SOURCE, HMO_ATTR_PROTOCOL_LIN_SOURCE, HMO_ATTR_PROTOCOL_CAN_SOURCE
		Enum name changed ("Channel1", "")
		- hmo_rngSource.HMO_VAL_SOURCE_CH2 - HMO_ATTR_PROTOCOL_I2C_SOURCE, HMO_ATTR_PROTOCOL_I2C_DATA_SOURCE, HMO_ATTR_PROTOCOL_I2C_CLOCK_SOURCE, HMO_ATTR_PROTOCOL_SPI_SOURCE, HMO_ATTR_PROTOCOL_SSPI_SOURCE, HMO_ATTR_PROTOCOL_UART_SOURCE, HMO_ATTR_PROTOCOL_LIN_SOURCE, HMO_ATTR_PROTOCOL_CAN_SOURCE
		Enum name changed ("Channel2", "")
		- hmo_rngSource.HMO_VAL_SOURCE_CH3 - HMO_ATTR_PROTOCOL_I2C_SOURCE, HMO_ATTR_PROTOCOL_I2C_DATA_SOURCE, HMO_ATTR_PROTOCOL_I2C_CLOCK_SOURCE, HMO_ATTR_PROTOCOL_SPI_SOURCE, HMO_ATTR_PROTOCOL_SSPI_SOURCE, HMO_ATTR_PROTOCOL_UART_SOURCE, HMO_ATTR_PROTOCOL_LIN_SOURCE, HMO_ATTR_PROTOCOL_CAN_SOURCE
		Enum name changed ("Channel3", "")
		- hmo_rngSource.HMO_VAL_SOURCE_CH4 - HMO_ATTR_PROTOCOL_I2C_SOURCE, HMO_ATTR_PROTOCOL_I2C_DATA_SOURCE, HMO_ATTR_PROTOCOL_I2C_CLOCK_SOURCE, HMO_ATTR_PROTOCOL_SPI_SOURCE, HMO_ATTR_PROTOCOL_SSPI_SOURCE, HMO_ATTR_PROTOCOL_UART_SOURCE, HMO_ATTR_PROTOCOL_LIN_SOURCE, HMO_ATTR_PROTOCOL_CAN_SOURCE
		Enum name changed ("Channel4", "")
		- hmo_rngSource.HMO_VAL_SOURCE_D0 - HMO_ATTR_PROTOCOL_I2C_SOURCE, HMO_ATTR_PROTOCOL_I2C_DATA_SOURCE, HMO_ATTR_PROTOCOL_I2C_CLOCK_SOURCE, HMO_ATTR_PROTOCOL_SPI_SOURCE, HMO_ATTR_PROTOCOL_SSPI_SOURCE, HMO_ATTR_PROTOCOL_UART_SOURCE, HMO_ATTR_PROTOCOL_LIN_SOURCE, HMO_ATTR_PROTOCOL_CAN_SOURCE
		Enum name changed ("DigitalChannel0", "")
		- hmo_rngSource.HMO_VAL_SOURCE_D1 - HMO_ATTR_PROTOCOL_I2C_SOURCE, HMO_ATTR_PROTOCOL_I2C_DATA_SOURCE, HMO_ATTR_PROTOCOL_I2C_CLOCK_SOURCE, HMO_ATTR_PROTOCOL_SPI_SOURCE, HMO_ATTR_PROTOCOL_SSPI_SOURCE, HMO_ATTR_PROTOCOL_UART_SOURCE, HMO_ATTR_PROTOCOL_LIN_SOURCE, HMO_ATTR_PROTOCOL_CAN_SOURCE
		Enum name changed ("DigitalChannel1", "")
		- hmo_rngSource.HMO_VAL_SOURCE_D2 - HMO_ATTR_PROTOCOL_I2C_SOURCE, HMO_ATTR_PROTOCOL_I2C_DATA_SOURCE, HMO_ATTR_PROTOCOL_I2C_CLOCK_SOURCE, HMO_ATTR_PROTOCOL_SPI_SOURCE, HMO_ATTR_PROTOCOL_SSPI_SOURCE, HMO_ATTR_PROTOCOL_UART_SOURCE, HMO_ATTR_PROTOCOL_LIN_SOURCE, HMO_ATTR_PROTOCOL_CAN_SOURCE

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		Enum name changed ("DigitalChannel2", "")
		- hmo_rngSource.HMO_VAL_SOURCE_D3 - HMO_ATTR_PROTOCOL_I2C_SOURCE, HMO_ATTR_PROTOCOL_I2C_DATA_SOURCE, HMO_ATTR_PROTOCOL_I2C_CLOCK_SOURCE, HMO_ATTR_PROTOCOL_SPI_SOURCE, HMO_ATTR_PROTOCOL_SSPI_SOURCE, HMO_ATTR_PROTOCOL_UART_SOURCE, HMO_ATTR_PROTOCOL_LIN_SOURCE, HMO_ATTR_PROTOCOL_CAN_SOURCE
		Enum name changed ("DigitalChannel3", "")
		- hmo_rngSource.HMO_VAL_SOURCE_D4 - HMO_ATTR_PROTOCOL_I2C_SOURCE, HMO_ATTR_PROTOCOL_I2C_DATA_SOURCE, HMO_ATTR_PROTOCOL_I2C_CLOCK_SOURCE, HMO_ATTR_PROTOCOL_SPI_SOURCE, HMO_ATTR_PROTOCOL_SSPI_SOURCE, HMO_ATTR_PROTOCOL_UART_SOURCE, HMO_ATTR_PROTOCOL_LIN_SOURCE, HMO_ATTR_PROTOCOL_CAN_SOURCE
		Enum name changed ("DigitalChannel4", "")
		- hmo_rngSource.HMO_VAL_SOURCE_D5 - HMO_ATTR_PROTOCOL_I2C_SOURCE, HMO_ATTR_PROTOCOL_I2C_DATA_SOURCE, HMO_ATTR_PROTOCOL_I2C_CLOCK_SOURCE, HMO_ATTR_PROTOCOL_SPI_SOURCE, HMO_ATTR_PROTOCOL_SSPI_SOURCE, HMO_ATTR_PROTOCOL_UART_SOURCE, HMO_ATTR_PROTOCOL_LIN_SOURCE, HMO_ATTR_PROTOCOL_CAN_SOURCE
		Enum name changed ("DigitalChannel5", "")
		- hmo_rngSource.HMO_VAL_SOURCE_D6 - HMO_ATTR_PROTOCOL_I2C_SOURCE, HMO_ATTR_PROTOCOL_I2C_DATA_SOURCE, HMO_ATTR_PROTOCOL_I2C_CLOCK_SOURCE, HMO_ATTR_PROTOCOL_SPI_SOURCE, HMO_ATTR_PROTOCOL_SSPI_SOURCE, HMO_ATTR_PROTOCOL_UART_SOURCE, HMO_ATTR_PROTOCOL_LIN_SOURCE, HMO_ATTR_PROTOCOL_CAN_SOURCE
		Enum name changed ("DigitalChannel6", "")
		- hmo_rngSource.HMO_VAL_SOURCE_D7 - HMO_ATTR_PROTOCOL_I2C_SOURCE, HMO_ATTR_PROTOCOL_I2C_DATA_SOURCE, HMO_ATTR_PROTOCOL_I2C_CLOCK_SOURCE, HMO_ATTR_PROTOCOL_SPI_SOURCE, HMO_ATTR_PROTOCOL_SSPI_SOURCE, HMO_ATTR_PROTOCOL_UART_SOURCE, HMO_ATTR_PROTOCOL_LIN_SOURCE, HMO_ATTR_PROTOCOL_CAN_SOURCE
		Enum name changed ("DigitalChannel7", "")
		- hmo_rngSource.HMO_VAL_SOURCE_D8 - HMO_ATTR_PROTOCOL_I2C_SOURCE, HMO_ATTR_PROTOCOL_I2C_DATA_SOURCE, HMO_ATTR_PROTOCOL_I2C_CLOCK_SOURCE, HMO_ATTR_PROTOCOL_SPI_SOURCE, HMO_ATTR_PROTOCOL_SSPI_SOURCE, HMO_ATTR_PROTOCOL_UART_SOURCE, HMO_ATTR_PROTOCOL_LIN_SOURCE, HMO_ATTR_PROTOCOL_CAN_SOURCE
		Enum name changed ("DigitalChannel8", "")
		- hmo_rngSource.HMO_VAL_SOURCE_D9 - HMO_ATTR_PROTOCOL_I2C_SOURCE, HMO_ATTR_PROTOCOL_I2C_DATA_SOURCE, HMO_ATTR_PROTOCOL_I2C_CLOCK_SOURCE, HMO_ATTR_PROTOCOL_SPI_SOURCE, HMO_ATTR_PROTOCOL_SSPI_SOURCE, HMO_ATTR_PROTOCOL_UART_SOURCE, HMO_ATTR_PROTOCOL_LIN_SOURCE, HMO_ATTR_PROTOCOL_CAN_SOURCE
		Enum name changed ("DigitalChannel9", "")
		- hmo_rngSource.HMO_VAL_SOURCE_D10 - HMO_ATTR_PROTOCOL_I2C_SOURCE, HMO_ATTR_PROTOCOL_I2C_DATA_SOURCE, HMO_ATTR_PROTOCOL_I2C_CLOCK_SOURCE, HMO_ATTR_PROTOCOL_SPI_SOURCE, HMO_ATTR_PROTOCOL_SSPI_SOURCE, HMO_ATTR_PROTOCOL_UART_SOURCE, HMO_ATTR_PROTOCOL_LIN_SOURCE, HMO_ATTR_PROTOCOL_CAN_SOURCE
		Enum name changed ("DigitalChannel10", "")

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		- hmo_rngSource.HMO_VAL_SOURCE_D11 - HMO_ATTR_PROTOCOL_I2C_SOURCE, HMO_ATTR_PROTOCOL_I2C_DATA_SOURCE, HMO_ATTR_PROTOCOL_I2C_CLOCK_SOURCE, HMO_ATTR_PROTOCOL_SPI_SOURCE, HMO_ATTR_PROTOCOL_SSPI_SOURCE, HMO_ATTR_PROTOCOL_UART_SOURCE, HMO_ATTR_PROTOCOL_LIN_SOURCE, HMO_ATTR_PROTOCOL_CAN_SOURCE
		Enum name changed ("DigitalChannel11", "")
		- hmo_rngSource.HMO_VAL_SOURCE_D12 - HMO_ATTR_PROTOCOL_I2C_SOURCE, HMO_ATTR_PROTOCOL_I2C_DATA_SOURCE, HMO_ATTR_PROTOCOL_I2C_CLOCK_SOURCE, HMO_ATTR_PROTOCOL_SPI_SOURCE, HMO_ATTR_PROTOCOL_SSPI_SOURCE, HMO_ATTR_PROTOCOL_UART_SOURCE, HMO_ATTR_PROTOCOL_LIN_SOURCE, HMO_ATTR_PROTOCOL_CAN_SOURCE
		Enum name changed ("DigitalChannel12", "")
		- hmo_rngSource.HMO_VAL_SOURCE_D13 - HMO_ATTR_PROTOCOL_I2C_SOURCE, HMO_ATTR_PROTOCOL_I2C_DATA_SOURCE, HMO_ATTR_PROTOCOL_I2C_CLOCK_SOURCE, HMO_ATTR_PROTOCOL_SPI_SOURCE, HMO_ATTR_PROTOCOL_SSPI_SOURCE, HMO_ATTR_PROTOCOL_UART_SOURCE, HMO_ATTR_PROTOCOL_LIN_SOURCE, HMO_ATTR_PROTOCOL_CAN_SOURCE
		Enum name changed ("DigitalChannel13", "")
		- hmo_rngSource.HMO_VAL_SOURCE_D14 - HMO_ATTR_PROTOCOL_I2C_SOURCE, HMO_ATTR_PROTOCOL_I2C_DATA_SOURCE, HMO_ATTR_PROTOCOL_I2C_CLOCK_SOURCE, HMO_ATTR_PROTOCOL_SPI_SOURCE, HMO_ATTR_PROTOCOL_SSPI_SOURCE, HMO_ATTR_PROTOCOL_UART_SOURCE, HMO_ATTR_PROTOCOL_LIN_SOURCE, HMO_ATTR_PROTOCOL_CAN_SOURCE
		Enum name changed ("DigitalChannel14", "")
		- hmo_rngSource.HMO_VAL_SOURCE_D15 - HMO_ATTR_PROTOCOL_I2C_SOURCE, HMO_ATTR_PROTOCOL_I2C_DATA_SOURCE, HMO_ATTR_PROTOCOL_I2C_CLOCK_SOURCE, HMO_ATTR_PROTOCOL_SPI_SOURCE, HMO_ATTR_PROTOCOL_SSPI_SOURCE, HMO_ATTR_PROTOCOL_UART_SOURCE, HMO_ATTR_PROTOCOL_LIN_SOURCE, HMO_ATTR_PROTOCOL_CAN_SOURCE
		Enum name changed ("DigitalChannel15", "")
		- hmo_rngSource.HMO_VAL_SOURCE_EXT - HMO_ATTR_PROTOCOL_I2C_SOURCE, HMO_ATTR_PROTOCOL_I2C_DATA_SOURCE, HMO_ATTR_PROTOCOL_I2C_CLOCK_SOURCE, HMO_ATTR_PROTOCOL_SPI_SOURCE, HMO_ATTR_PROTOCOL_SSPI_SOURCE, HMO_ATTR_PROTOCOL_UART_SOURCE, HMO_ATTR_PROTOCOL_LIN_SOURCE, HMO_ATTR_PROTOCOL_CAN_SOURCE
		Enum name changed ("External", "")
		- hmo_rngSource - HMO_ATTR_PROTOCOL_I2C_SOURCE, HMO_ATTR_PROTOCOL_I2C_DATA_SOURCE, HMO_ATTR_PROTOCOL_I2C_CLOCK_SOURCE, HMO_ATTR_PROTOCOL_SPI_SOURCE, HMO_ATTR_PROTOCOL_SSPI_SOURCE, HMO_ATTR_PROTOCOL_UART_SOURCE, HMO_ATTR_PROTOCOL_LIN_SOURCE, HMO_ATTR_PROTOCOL_CAN_SOURCE
		Changed enum name ("Source", "")
		- hmo_rngSourceChannel.HMO_VAL_SOURCE_CH1 - HMO_ATTR_MASK_SOURCE, HMO_ATTR_XY_X_SOURCE, HMO_ATTR_XY_Y_SOURCE, HMO_ATTR_XY_Z_SOURCE
		Enum name changed ("Channel1", "")
		- hmo_rngSourceChannel.HMO_VAL_SOURCE_CH2 - HMO_ATTR_MASK_SOURCE, HMO_ATTR_XY_X_SOURCE, HMO_ATTR_XY_Y_SOURCE, HMO_ATTR_XY_Z_SOURCE
		Enum name changed ("Channel2", "")
		- hmo_rngSourceChannel.HMO_VAL_SOURCE_CH3 - HMO_ATTR_MASK_SOURCE,

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		HMO_ATTR_XY_X_SOURCE, HMO_ATTR_XY_Y_SOURCE, HMO_ATTR_XY_Z_SOURCE
		Enum name changed ("Channel3", "")
		- hmo_rngSourceChannel.HMO_VAL_SOURCE_CH4 - HMO_ATTR_MASK_SOURCE, HMO_ATTR_XY_X_SOURCE, HMO_ATTR_XY_Y_SOURCE, HMO_ATTR_XY_Z_SOURCE
		Enum name changed ("Channel4", "")
		- hmo_rngSourceChannel - HMO_ATTR_MASK_SOURCE, HMO_ATTR_XY_X_SOURCE, HMO_ATTR_XY_Y_SOURCE, HMO_ATTR_XY_Z_SOURCE
		Changed enum name ("SourceChannel", "")
		- hmo_rngSourceParallel.HMO_VAL_SOURCE_D0 - HMO_ATTR_PARALLEL_BUS_SOURCE
		Enum name changed ("DigitalChannel0", "")
		- hmo_rngSourceParallel.HMO_VAL_SOURCE_D1 - HMO_ATTR_PARALLEL_BUS_SOURCE
		Enum name changed ("DigitalChannel1", "")
		- hmo_rngSourceParallel.HMO_VAL_SOURCE_D2 - HMO_ATTR_PARALLEL_BUS_SOURCE
		Enum name changed ("DigitalChannel2", "")
		- hmo_rngSourceParallel.HMO_VAL_SOURCE_D3 - HMO_ATTR_PARALLEL_BUS_SOURCE
		Enum name changed ("DigitalChannel3", "")
		- hmo_rngSourceParallel.HMO_VAL_SOURCE_D4 - HMO_ATTR_PARALLEL_BUS_SOURCE
		Enum name changed ("DigitalChannel4", "")
		- hmo_rngSourceParallel.HMO_VAL_SOURCE_D5 - HMO_ATTR_PARALLEL_BUS_SOURCE
		Enum name changed ("DigitalChannel5", "")
		- hmo_rngSourceParallel.HMO_VAL_SOURCE_D6 - HMO_ATTR_PARALLEL_BUS_SOURCE
		Enum name changed ("DigitalChannel6", "")
		- hmo_rngSourceParallel.HMO_VAL_SOURCE_D7 - HMO_ATTR_PARALLEL_BUS_SOURCE
		Enum name changed ("DigitalChannel7", "")
		- hmo_rngSourceParallel.HMO_VAL_SOURCE_D8 - HMO_ATTR_PARALLEL_BUS_SOURCE
		Enum name changed ("DigitalChannel8", "")
		- hmo_rngSourceParallel.HMO_VAL_SOURCE_D9 - HMO_ATTR_PARALLEL_BUS_SOURCE
		Enum name changed ("DigitalChannel9", "")
		- hmo_rngSourceParallel.HMO_VAL_SOURCE_D10 - HMO_ATTR_PARALLEL_BUS_SOURCE
		Enum name changed ("DigitalChannel10", "")
		- hmo_rngSourceParallel.HMO_VAL_SOURCE_D11 - HMO_ATTR_PARALLEL_BUS_SOURCE
		Enum name changed ("DigitalChannel11", "")
		- hmo_rngSourceParallel.HMO_VAL_SOURCE_D12 - HMO_ATTR_PARALLEL_BUS_SOURCE
		Enum name changed ("DigitalChannel12", "")
		- hmo_rngSourceParallel.HMO_VAL_SOURCE_D13 - HMO_ATTR_PARALLEL_BUS_SOURCE
		Enum name changed ("DigitalChannel13", "")
		- hmo_rngSourceParallel.HMO_VAL_SOURCE_D14 - HMO_ATTR_PARALLEL_BUS_SOURCE
		Enum name changed ("DigitalChannel14", "")
		- hmo_rngSourceParallel.HMO_VAL_SOURCE_D15 - HMO_ATTR_PARALLEL_BUS_SOURCE
		Enum name changed ("DigitalChannel15", "")
		- hmo_rngSourceParallel - HMO_ATTR_PARALLEL_BUS_SOURCE
		Changed enum name ("SourceParallel", "")

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		- hmo_rngXY2Source.HMO_VAL_SOURCE_CH1 - HMO_ATTR_XY_Y2_SOURCE
		Help changed ("Channel 1", "channel 1")
		- hmo_rngXY2Source.HMO_VAL_SOURCE_CH2 - HMO_ATTR_XY_Y2_SOURCE
		Help changed ("Channel 2", "channel 2")
		- hmo_rngXY2Source.HMO_VAL_SOURCE_CH3 - HMO_ATTR_XY_Y2_SOURCE
		Help changed ("Channel 3", "channel 3")
		- hmo_rngXY2Source.HMO_VAL_SOURCE_CH4 - HMO_ATTR_XY_Y2_SOURCE
		Help changed ("Channel 4", "channel 4")
		- hmo_rngHardcopyDeviceLang.HMO_VAL_HARDCOPY_DEVICE_LANG_PNG - HMO_ATTR_HARDCOPY_DEVICE_LANGUAGE_OUTPUT_FORMAT
		Enum name changed ("PNG", "")
		- hmo_rngHardcopyDeviceLang.HMO_VAL_HARDCOPY_DEVICE_LANG_PNG - HMO_ATTR_HARDCOPY_DEVICE_LANGUAGE_OUTPUT_FORMAT
		Help changed ("PNG output format", "png output format")
		- hmo_rngHardcopyDeviceLang.HMO_VAL_HARDCOPY_DEVICE_LANG_BMP - HMO_ATTR_HARDCOPY_DEVICE_LANGUAGE_OUTPUT_FORMAT
		Enum name changed ("BMP", "")
		- hmo_rngHardcopyDeviceLang.HMO_VAL_HARDCOPY_DEVICE_LANG_BMP - HMO_ATTR_HARDCOPY_DEVICE_LANGUAGE_OUTPUT_FORMAT
		Help changed ("BMP output format.", "bmp output format.")
		- hmo_rngHardcopyDeviceLang.HMO_VAL_HARDCOPY_DEVICE_LANG_GIF - HMO_ATTR_HARDCOPY_DEVICE_LANGUAGE_OUTPUT_FORMAT
		Enum name changed ("GIF", "")
		- hmo_rngHardcopyDeviceLang.HMO_VAL_HARDCOPY_DEVICE_LANG_GIF - HMO_ATTR_HARDCOPY_DEVICE_LANGUAGE_OUTPUT_FORMAT
		Help changed ("GIF output format.", "gif output format.")
		- hmo_rngHardcopyDeviceLang - HMO_ATTR_HARDCOPY_DEVICE_LANGUAGE_OUTPUT_FORMAT
		New items: HMO_VAL_HARDCOPY_DEVICE_LANG_GDI
		- hmo_rngHardcopyDeviceLang - HMO_ATTR_HARDCOPY_DEVICE_LANGUAGE_OUTPUT_FORMAT
		Changed enum name ("HardcopyDeviceLang", "")
		- hmo_rngPageSize - HMO_ATTR_HARDCOPY_PAGE_SIZE
		New items: HMO_VAL_PAGE_LEG, HMO_VAL_PAGE_LETT
		- hmo_rngMaskCondition.HMO_VAL_MASKCOND_PAUSE - HMO_ATTR_MASK_TEST
		Command changed ("PAUS", "PAUSE")
		- hmo_rngTriggerCoupling.HMO_VAL_COUPLING_DIRECT - HMO_ATTR_TRIGGER_COUPLING
		Enum name changed ("DirectCurrent", "")
		- hmo_rngTriggerCoupling.HMO_VAL_COUPLING_ALTERNATING - HMO_ATTR_TRIGGER_COUPLING
		Enum name changed ("AlternatingCurrent", "")
		- hmo_rngTriggerCoupling.HMO_VAL_COUPLING_HIGHFREQ - HMO_ATTR_TRIGGER_COUPLING
		Enum name changed ("HighFrequency", "")
		- hmo_rngTriggerCoupling.HMO_VAL_COUPLING_AUTO_LEVEL -

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		HMO_ATTR_TRIGGER_COUPLING
		Enum name changed ("AutoLevel", "")
		- hmo_rngTriggerCoupling - HMO_ATTR_TRIGGER_COUPLING
		Changed enum name ("TriggerCoupling", "")
		- hmo_rngFirstBitOffset - HMO_ATTR_PROTOCOL_I2C_TRIGGER_FIRST_BYTE_OFFSET, HMO_ATTR_PROTOCOL_SPI_TRIGGER_OFFSET, HMO_ATTR_PROTOCOL_UART_TRIGGER_DATA_POSITION_INDEX_MIN
		Range changed to <0;4095>
		- hmo_rngFirstBitOffset - HMO_ATTR_PROTOCOL_I2C_TRIGGER_FIRST_BYTE_OFFSET, HMO_ATTR_PROTOCOL_SPI_TRIGGER_OFFSET, HMO_ATTR_PROTOCOL_UART_TRIGGER_DATA_POSITION_INDEX_MIN
		Changed data type ("ViInt32", "ViReal64")
		- hmo_rngAmplitudeTimeMeasurementType.HMO_VAL_MEAS_FREQUENCY - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		Enum name changed ("Frequency", "")
		- hmo_rngAmplitudeTimeMeasurementType.HMO_VAL_MEAS_PERIOD - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		Enum name changed ("Period", "")
		- hmo_rngAmplitudeTimeMeasurementType.HMO_VAL_MEAS_PEAK - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		Enum name changed ("PeakPeak", "")
		- hmo_rngAmplitudeTimeMeasurementType.HMO_VAL_MEAS_PEAK - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		Help changed ("Peak Peak", "Peak Peak ")
		- hmo_rngAmplitudeTimeMeasurementType.HMO_VAL_MEAS_PEAK - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		Description changed ("Peak Peak", "Peak Peak ")
		- hmo_rngAmplitudeTimeMeasurementType.HMO_VAL_MEAS_UPEAK - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		Enum name changed ("PeakUpper", "")
		- hmo_rngAmplitudeTimeMeasurementType.HMO_VAL_MEAS_LPEAK - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		Enum name changed ("PeakLower", "")
		- hmo_rngAmplitudeTimeMeasurementType.HMO_VAL_MEAS_PPC - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		Enum name changed ("PositivePulsesCount", "")
		- hmo_rngAmplitudeTimeMeasurementType.HMO_VAL_MEAS_NPC - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		Enum name changed ("NegativePulsesCount", "")
		- hmo_rngAmplitudeTimeMeasurementType.HMO_VAL_MEAS_REC - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		Enum name changed ("RisingEdgesCount", "")
		- hmo_rngAmplitudeTimeMeasurementType.HMO_VAL_MEAS_FEC - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		Enum name changed ("FallingEdgesCount", "")

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		- hmo_rngAmplitudeTimeMeasurementType.HMO_VAL_MEAS_HIGH - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		Enum name changed ("High", "")
		- hmo_rngAmplitudeTimeMeasurementType.HMO_VAL_MEAS_LOW - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		Enum name changed ("Low", "")
		- hmo_rngAmplitudeTimeMeasurementType.HMO_VAL_MEAS_AMP - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		Enum name changed ("Amplitude", "")
		- hmo_rngAmplitudeTimeMeasurementType.HMO_VAL_MEAS_MEAN - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		Enum name changed ("MeanValue", "")
		- hmo_rngAmplitudeTimeMeasurementType.HMO_VAL_MEAS_RMS - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		Enum name changed ("RMSValue", "")
		- hmo_rngAmplitudeTimeMeasurementType.HMO_VAL_MEAS_RTM - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		Enum name changed ("RiseTime", "")
		- hmo_rngAmplitudeTimeMeasurementType.HMO_VAL_MEAS_FTIM - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		Enum name changed ("FallingTime", "")
		- hmo_rngAmplitudeTimeMeasurementType.HMO_VAL_MEAS_PDCY - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		Enum name changed ("DutyCyclePositive", "")
		- hmo_rngAmplitudeTimeMeasurementType.HMO_VAL_MEAS_NDCY - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		Enum name changed ("DutyCycleNegative", "")
		- hmo_rngAmplitudeTimeMeasurementType.HMO_VAL_MEAS_PPW - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		Enum name changed ("PulseWidthPositive", "")
		- hmo_rngAmplitudeTimeMeasurementType.HMO_VAL_MEAS_NPW - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		Enum name changed ("PulseWidthNegative", "")
		- hmo_rngAmplitudeTimeMeasurementType.HMO_VAL_MEAS_CYCM - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		Enum name changed ("CycleMean", "")
		- hmo_rngAmplitudeTimeMeasurementType.HMO_VAL_MEAS_CYCR - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		Enum name changed ("CycleRMS", "")
		- hmo_rngAmplitudeTimeMeasurementType.HMO_VAL_MEAS_SSTDD - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		Enum name changed ("StandardDeviation", "")
		- hmo_rngAmplitudeTimeMeasurementType.HMO_VAL_MEAS_TFR - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		Enum name changed ("TriggerFrequency", "")

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		- hmo_rngAmplitudeTimeMeasurementType.HMO_VAL_MEAS_TPER - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		Enum name changed ("TriggerPeriod", "")
		- hmo_rngAmplitudeTimeMeasurementType.HMO_VAL_MEAS_POV - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		Enum name changed ("PositiveOvershoot", "")
		- hmo_rngAmplitudeTimeMeasurementType.HMO_VAL_MEAS_NOV - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		Enum name changed ("NegativeOvershoot", "")
		- hmo_rngAmplitudeTimeMeasurementType.HMO_VAL_MEAS_DELAY - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		Enum name changed ("Delay", "")
		- hmo_rngAmplitudeTimeMeasurementType.HMO_VAL_MEAS_PHASE - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		Enum name changed ("Phase", "")
		- hmo_rngAmplitudeTimeMeasurementType - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		New items: HMO_VAL_MEAS_WAVM, HMO_VAL_MEAS_WAVR, HMO_VAL_MEAS_WAVS, HMO_VAL_MEAS_CYCS, HMO_VAL_MEAS_BWID, HMO_VAL_MEAS_CREST
		- hmo_rngAmplitudeTimeMeasurementType - HMO_ATTR_AMPT_MAIN_MEASUREMENT
		Changed enum name ("AmplitudeTimeMeasurementType", "")
		- hmo_rngProtocolType.HMO_VAL_PTYPE_PARALLEL - HMO_ATTR_PROTOCOL_TYPE
		Enum name changed ("Parallel", "")
		- hmo_rngProtocolType.HMO_VAL_PTYPE_CPARALLEL - HMO_ATTR_PROTOCOL_TYPE
		Enum name changed ("CParallel", "")
		- hmo_rngProtocolType.HMO_VAL_PTYPE_I2C - HMO_ATTR_PROTOCOL_TYPE
		Enum name changed ("I2C", "")
		- hmo_rngProtocolType.HMO_VAL_PTYPE_SPI - HMO_ATTR_PROTOCOL_TYPE
		Enum name changed ("SPI", "")
		- hmo_rngProtocolType.HMO_VAL_PTYPE_SSPI - HMO_ATTR_PROTOCOL_TYPE
		Enum name changed ("SSPI", "")
		- hmo_rngProtocolType.HMO_VAL_PTYPE_UART - HMO_ATTR_PROTOCOL_TYPE
		Enum name changed ("UART", "")
		- hmo_rngProtocolType.HMO_VAL_PTYPE_CAN - HMO_ATTR_PROTOCOL_TYPE
		Enum name changed ("CAN", "")
		- hmo_rngProtocolType.HMO_VAL_PTYPE_LIN - HMO_ATTR_PROTOCOL_TYPE
		Enum name changed ("LIN", "")
		- hmo_rngProtocolType - HMO_ATTR_PROTOCOL_TYPE
		Changed enum name ("ProtocolType", "")
		- hmo_rngProtocolFormat - HMO_ATTR_PROTOCOL_DISPLAY_FORMAT
		New items: HMO_VAL_PFORMAT_OCT
		- hmo_rngBckLight - HMO_ATTR_BACKGROUND_INTENSITY
		Range changed to <10.0;100.0>
		- hmo_rngRelativeMode.HMO_VAL_MEAS_RELATIVE_TEN -

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		HMO_ATTR_MEAS_RELATIVE_MODE
		Enum name changed ("Ten", "")
		- hmo_rngRelativeMode.HMO_VAL_MEAS_RELATIVE_TEN - HMO_ATTR_MEAS_RELATIVE_MODE
		Help changed ("10, 50 and 90%", "TEN: 10, 50 and 90%")
		- hmo_rngRelativeMode.HMO_VAL_MEAS_RELATIVE_TWENTY - HMO_ATTR_MEAS_RELATIVE_MODE
		Enum name changed ("Twenty", "")
		- hmo_rngRelativeMode.HMO_VAL_MEAS_RELATIVE_TWENTY - HMO_ATTR_MEAS_RELATIVE_MODE
		Help changed ("20, 50 and 80%", "TWENty: 20, 50 and 80%")
		- hmo_rngRelativeMode - HMO_ATTR_MEAS_RELATIVE_MODE
		Changed enum name ("RelativeMode", "")
		- hmo_rngChannelPolarity.HMO_VAL_POLARITY_NORM - HMO_ATTR_CHANNEL_POLARITY
		Enum name changed ("Normal", "")
		- hmo_rngChannelPolarity.HMO_VAL_POLARITY_INV - HMO_ATTR_CHANNEL_POLARITY
		Enum name changed ("Inverted", "")
		- hmo_rngChannelPolarity - HMO_ATTR_CHANNEL_POLARITY
		Changed enum name ("ChannelPolarity", "")
		- hmo_rngExternalTriggerCoupling.HMO_VAL_COUPLING_AC - HMO_ATTR_EXTERNAL_TRIGGER_COUPLING
		Enum name changed ("AC", "")
		- hmo_rngExternalTriggerCoupling.HMO_VAL_COUPLING_DC - HMO_ATTR_EXTERNAL_TRIGGER_COUPLING
		Enum name changed ("DC", "")
		- hmo_rngExternalTriggerCoupling - HMO_ATTR_EXTERNAL_TRIGGER_COUPLING
		Changed enum name ("ExternalTriggerCoupling", "")
		- hmo_rngMeasCategory.HMO_VAL_MEAS_AMPT - HMO_ATTR_MEAS_CATEGORY
		Enum name changed ("AMPTime", "")
		- hmo_rngMeasCategory - HMO_ATTR_MEAS_CATEGORY
		Changed enum name ("MeasCategory", "")
		- hmo_rngSearchCondition.HMO_VAL_SEARCHCOND_EDGE - HMO_ATTR_SEARCH_CONDITION
		Enum name changed ("Edge", "")
		- hmo_rngSearchCondition.HMO_VAL_SEARCHCOND_EDGE - HMO_ATTR_SEARCH_CONDITION
		Help changed ("An edge search result is found when the waveform passes the given level in the specified direction.", "Edge")
		- hmo_rngSearchCondition.HMO_VAL_SEARCHCOND_WIDTH - HMO_ATTR_SEARCH_CONDITION
		Enum name changed ("Width", "")
		- hmo_rngSearchCondition.HMO_VAL_SEARCHCOND_WIDTH - HMO_ATTR_SEARCH_CONDITION
		Help changed ("A width search finds pulses with an exact pulse width, or pulses shorter or longer than a given time, or pulses inside or outside the allowable time range.", "Width")

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		- hmo_rngSearchCondition.HMO_VAL_SEARCHCOND_PEAK - HMO_ATTR_SEARCH_CONDITION
		Enum name changed ("Peak", "")
		- hmo_rngSearchCondition.HMO_VAL_SEARCHCOND_PEAK - HMO_ATTR_SEARCH_CONDITION
		Help changed ("The peak search finds pulses exceeding a given amplitude.", "Peak")
		- hmo_rngSearchCondition.HMO_VAL_SEARCHCOND_RUNT - HMO_ATTR_SEARCH_CONDITION
		Enum name changed ("Runt", "")
		- hmo_rngSearchCondition.HMO_VAL_SEARCHCOND_RUNT - HMO_ATTR_SEARCH_CONDITION
		Help changed ("The runt search finds pulses lower than normal in amplitude. The amplitude crosses the first threshold twice without crossing the second one. In addition to the threshold amplitudes, you can define a time limit for the runt in the same way as for width search: runts with exact width, shorter or longer than a given time, or runts inside or outside the allowable time range.", "Runt")
		- hmo_rngSearchCondition.HMO_VAL_SEARCHCOND_RTIME - HMO_ATTR_SEARCH_CONDITION
		Enum name changed ("RiseFallTime", "")
		- hmo_rngSearchCondition.HMO_VAL_SEARCHCOND_RTIME - HMO_ATTR_SEARCH_CONDITION
		Help changed ("The rise or fall time search finds slopes with an exact rise or fall time, or rise/fall times shorter or longer than a given limit, or rise/fall times inside or outside the allowable time range.", "Rise/Fall Time")
		- hmo_rngSearchCondition - HMO_ATTR_SEARCH_CONDITION
		New items: HMO_VAL_SEARCHCOND_DAT, HMO_VAL_SEARCHCOND_PATT, HMO_VAL_SEARCHCOND_PROT
		- hmo_rngSearchCondition - HMO_ATTR_SEARCH_CONDITION
		Changed enum name ("SearchCondition", "")
		- hmo_rngSearchSource - HMO_ATTR_SEARCH_SOURCE
		Changed enum name ("SearchSource", "")
		- hmo_rngSearchSlope.HMO_VAL_POSITIVE - HMO_ATTR_SEARCH_TRIGGER_EDGE_SLOPE, HMO_ATTR_SEARCH_TRIGGER_PEAK_POLARITY, HMO_ATTR_SEARCH_TRIGGER_RUNT_POLARITY, HMO_ATTR_SEARCH_TRIGGER_RISE_TIME_POLARITY
		Enum name changed ("Positive", "")
		- hmo_rngSearchSlope.HMO_VAL_NEGATIVE - HMO_ATTR_SEARCH_TRIGGER_EDGE_SLOPE, HMO_ATTR_SEARCH_TRIGGER_PEAK_POLARITY, HMO_ATTR_SEARCH_TRIGGER_RUNT_POLARITY, HMO_ATTR_SEARCH_TRIGGER_RISE_TIME_POLARITY
		Enum name changed ("Negative", "")
		- hmo_rngSearchSlope.HMO_VAL_EITHER - HMO_ATTR_SEARCH_TRIGGER_EDGE_SLOPE, HMO_ATTR_SEARCH_TRIGGER_PEAK_POLARITY, HMO_ATTR_SEARCH_TRIGGER_RUNT_POLARITY, HMO_ATTR_SEARCH_TRIGGER_RISE_TIME_POLARITY
		Enum name changed ("Either", "")
		- hmo_rngSearchSlope - HMO_ATTR_SEARCH_TRIGGER_EDGE_SLOPE, HMO_ATTR_SEARCH_TRIGGER_PEAK_POLARITY, HMO_ATTR_SEARCH_TRIGGER_RUNT_POLARITY, HMO_ATTR_SEARCH_TRIGGER_RISE_TIME_POLARITY
		Changed enum name ("SearchSlope", "")
		- hmo_rngSearchRange.HMO_VAL_SHORTER - HMO_ATTR_SEARCH_TRIGGER_WIDTH_RANGE, HMO_ATTR_SEARCH_TRIGGER_RUNT_RANGE,

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		HMO_ATTR_SEARCH_TRIGGER_RISE_TIME_RANGE
		Enum name changed ("Shorter", "")
		- hmo_rngSearchRange.HMO_VAL_LONGER - HMO_ATTR_SEARCH_TRIGGER_WIDTH_RANGE, HMO_ATTR_SEARCH_TRIGGER_RUNT_RANGE, HMO_ATTR_SEARCH_TRIGGER_RISE_TIME_RANGE
		Enum name changed ("Longer", "")
		- hmo_rngSearchRange.HMO_VAL_WITHIN - HMO_ATTR_SEARCH_TRIGGER_WIDTH_RANGE, HMO_ATTR_SEARCH_TRIGGER_RUNT_RANGE, HMO_ATTR_SEARCH_TRIGGER_RISE_TIME_RANGE
		Enum name changed ("Within", "")
		- hmo_rngSearchRange.HMO_VAL_OUTSIDE - HMO_ATTR_SEARCH_TRIGGER_WIDTH_RANGE, HMO_ATTR_SEARCH_TRIGGER_RUNT_RANGE, HMO_ATTR_SEARCH_TRIGGER_RISE_TIME_RANGE
		Enum name changed ("Outside", "")
		- hmo_rngSearchRange - HMO_ATTR_SEARCH_TRIGGER_WIDTH_RANGE, HMO_ATTR_SEARCH_TRIGGER_RUNT_RANGE, HMO_ATTR_SEARCH_TRIGGER_RISE_TIME_RANGE
		Changed enum name ("SearchRange", "")
		- hmo_rngScalingUnit.HMO_VAL_FFT_LIN - HMO_ATTR_FFT_SCALING_UNIT
		Enum name changed ("Linear", "")
		- hmo_rngScalingUnit.HMO_VAL_FFT_DBM - HMO_ATTR_FFT_SCALING_UNIT
		Enum name changed ("DBM", "")
		- hmo_rngScalingUnit.HMO_VAL_FFT_DBV - HMO_ATTR_FFT_SCALING_UNIT
		Enum name changed ("DBV", "")
		- hmo_rngScalingUnit - HMO_ATTR_FFT_SCALING_UNIT
		Changed enum name ("ScalingUnit", "")
		- hmo_rngAcquisitionState.HMO_VAL_ACQUISITION_RUN - HMO_ATTR_ACQUISITION_STATE
		Enum name changed ("Run", "")
		- hmo_rngAcquisitionState.HMO_VAL_ACQUISITION_STOP - HMO_ATTR_ACQUISITION_STATE
		Enum name changed ("Stop", "")
		- hmo_rngAcquisitionState.HMO_VAL_ACQUISITION_COMPLETE - HMO_ATTR_ACQUISITION_STATE
		Enum name changed ("Complete", "")
		- hmo_rngAcquisitionState.HMO_VAL_ACQUISITION_BREAK - HMO_ATTR_ACQUISITION_STATE
		Enum name changed ("Break", "")
		- hmo_rngAcquisitionState - HMO_ATTR_ACQUISITION_STATE
		Changed enum name ("AcquisitionState", "")
		- hmo_rngAcquisitionMode.HMO_VAL_ACQUISITION_REFRESH - HMO_ATTR_ACQUISITION_MODE
		Enum name changed ("Refresh", "")
		- hmo_rngAcquisitionMode.HMO_VAL_ACQUISITION_ROLL - HMO_ATTR_ACQUISITION_MODE
		Enum name changed ("Roll", "")
		- hmo_rngAcquisitionMode.HMO_VAL_ACQUISITION_ENVELOPE - HMO_ATTR_ACQUISITION_MODE

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		Enum name changed ("Envelope", "")
		- hmo_rngAcquisitionMode.HMO_VAL_ACQUISITION_AVERAGE - HMO_ATTR_ACQUISITION_MODE
		Enum name changed ("Average", "")
		- hmo_rngAcquisitionMode.HMO_VAL_ACQUISITION_FILTER - HMO_ATTR_ACQUISITION_MODE
		Enum name changed ("Filter", "")
		- hmo_rngAcquisitionMode - HMO_ATTR_ACQUISITION_MODE
		Changed enum name ("AcquisitionMode", "")
		- hmo_rngComponentTestFrequency.HMO_VAL_COMPONENT_TEST_FREQUENCY_50 - HMO_ATTR_COMPONENT_TEST_FREQUENCY
		Enum name changed ("Freq50Hz", "")
		- hmo_rngComponentTestFrequency.HMO_VAL_COMPONENT_TEST_FREQUENCY_200 - HMO_ATTR_COMPONENT_TEST_FREQUENCY
		Enum name changed ("Freq200Hz", "")
		- hmo_rngComponentTestFrequency - HMO_ATTR_COMPONENT_TEST_FREQUENCY
		Changed enum name ("ComponentTestFrequency", "")
		- hmo_rngLogicChannelSize.HMO_VAL_LOGIC_CHANNEL_SIZE_SMALL - HMO_ATTR_LOGIC_CHANNEL_SIZE
		Enum name changed ("Small", "")
		- hmo_rngLogicChannelSize.HMO_VAL_LOGIC_CHANNEL_SIZE_MEDIUM - HMO_ATTR_LOGIC_CHANNEL_SIZE
		Enum name changed ("Medium", "")
		- hmo_rngLogicChannelSize.HMO_VAL_LOGIC_CHANNEL_SIZE_LARGE - HMO_ATTR_LOGIC_CHANNEL_SIZE
		Enum name changed ("Large", "")
		- hmo_rngLogicChannelSize - HMO_ATTR_LOGIC_CHANNEL_SIZE
		Changed enum name ("LogicChannelSize", "")
		- hmo_rngPodThreshold.HMO_VAL_POD_THRESHOLD_TTL - HMO_ATTR_POD_THRESHOLD
		Enum name changed ("TTL", "")
		- hmo_rngPodThreshold.HMO_VAL_POD_THRESHOLD_ECL - HMO_ATTR_POD_THRESHOLD
		Enum name changed ("ECL", "")
		- hmo_rngPodThreshold.HMO_VAL_POD_THRESHOLD_CMOS - HMO_ATTR_POD_THRESHOLD
		Enum name changed ("CMOS", "")
		- hmo_rngPodThreshold.HMO_VAL_POD_THRESHOLD_USER_1 - HMO_ATTR_POD_THRESHOLD
		Enum name changed ("User", "")
		- hmo_rngPodThreshold.HMO_VAL_POD_THRESHOLD_USER_2 - HMO_ATTR_POD_THRESHOLD
		Enum name changed ("User2", "")
		- hmo_rngPodThreshold - HMO_ATTR_POD_THRESHOLD
		Changed enum name ("PodThreshold", "")
		- hmo_rngBusSignalSource.HMO_VAL_BUS_SIGNAL_SOURCE_FUNCTION_SQUARE - HMO_ATTR_BUS_SIGNAL_SOURCE
		Enum name changed ("Square", "")
		- hmo_rngBusSignalSource.HMO_VAL_BUS_SIGNAL_SOURCE_FUNCTION_RANDOM -

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		HMO_ATTR_BUS_SIGNAL_SOURCE
		Enum name changed ("Random", "")
		- hmo_rngBusSignalSource.HMO_VAL_BUS_SIGNAL_SOURCE_FUNCTION_I2C - HMO_ATTR_BUS_SIGNAL_SOURCE
		Enum name changed ("I2C", "")
		- hmo_rngBusSignalSource.HMO_VAL_BUS_SIGNAL_SOURCE_FUNCTION_SPI - HMO_ATTR_BUS_SIGNAL_SOURCE
		Enum name changed ("SPI", "")
		- hmo_rngBusSignalSource.HMO_VAL_BUS_SIGNAL_SOURCE_FUNCTION_COUNT - HMO_ATTR_BUS_SIGNAL_SOURCE
		Enum name changed ("Count", "")
		- hmo_rngBusSignalSource.HMO_VAL_BUS_SIGNAL_SOURCE_FUNCTION_UART - HMO_ATTR_BUS_SIGNAL_SOURCE
		Enum name changed ("UART", "")
		- hmo_rngBusSignalSource - HMO_ATTR_BUS_SIGNAL_SOURCE
		Changed enum name ("BusSignalSource", "")
		- hmo_rngTriggerPatternPointState.HMO_VAL_FALSE - HMO_ATTR_TRIGGER_PATTERN_POINT_STATE
		Enum name changed ("False", "")
		- hmo_rngTriggerPatternPointState.HMO_VAL_FALSE - HMO_ATTR_TRIGGER_PATTERN_POINT_STATE
		Description changed ("False", "")
		- hmo_rngTriggerPatternPointState.HMO_VAL_TRUE - HMO_ATTR_TRIGGER_PATTERN_POINT_STATE
		Enum name changed ("True", "")
		- hmo_rngTriggerPatternPointState.HMO_VAL_TRUE - HMO_ATTR_TRIGGER_PATTERN_POINT_STATE
		Description changed ("True", "")
		- hmo_rngTriggerPatternPointState - HMO_ATTR_TRIGGER_PATTERN_POINT_STATE
		Changed enum name ("TriggerPatternPointState", "")
		- hmo_rngPatternMode.HMO_VAL_PATTERN_OFF - HMO_ATTR_TRIGGER_PATTERN_MODE
		Enum name changed ("Off", "")
		- hmo_rngPatternMode.HMO_VAL_PATTERN_TIMEOUT - HMO_ATTR_TRIGGER_PATTERN_MODE
		Enum name changed ("Timeout", "")
		- hmo_rngPatternMode.HMO_VAL_PATTERN_WIDTH - HMO_ATTR_TRIGGER_PATTERN_MODE
		Enum name changed ("Width", "")
		- hmo_rngPatternMode - HMO_ATTR_TRIGGER_PATTERN_MODE
		Changed enum name ("PatternMode", "")
		- hmo_rngPatternCondition.HMO_VAL_SHORTER - HMO_ATTR_TRIGGER_PATTERN_CONDITION
		Enum name changed ("Shorter", "")
		- hmo_rngPatternCondition.HMO_VAL_SHORTER - HMO_ATTR_TRIGGER_PATTERN_CONDITION
		Help changed ("Triggers on pulses shorter than the reference time", "Shorter: Triggers on pulses shorter than the reference time")

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		- hmo_rngPatternCondition.HMO_VAL_SHORTER - HMO_ATTR_TRIGGER_PATTERN_CONDITION
		Description changed ("Shorter", "")
		- hmo_rngPatternCondition.HMO_VAL_LONGER - HMO_ATTR_TRIGGER_PATTERN_CONDITION
		Enum name changed ("Longer", "")
		- hmo_rngPatternCondition.HMO_VAL_LONGER - HMO_ATTR_TRIGGER_PATTERN_CONDITION
		Help changed ("Triggers on pulses longer than the reference time", "Longer: Triggers on pulses longer than the reference time")
		- hmo_rngPatternCondition.HMO_VAL_LONGER - HMO_ATTR_TRIGGER_PATTERN_CONDITION
		Description changed ("Longer", "")
		- hmo_rngPatternCondition.HMO_VAL_WITHIN - HMO_ATTR_TRIGGER_PATTERN_CONDITION
		Enum name changed ("Within", "")
		- hmo_rngPatternCondition.HMO_VAL_WITHIN - HMO_ATTR_TRIGGER_PATTERN_CONDITION
		Help changed ("Triggers on pulses inside a specified range", "Within: Triggers on pulses inside a specified range")
		- hmo_rngPatternCondition.HMO_VAL_WITHIN - HMO_ATTR_TRIGGER_PATTERN_CONDITION
		Description changed ("Within", "")
		- hmo_rngPatternCondition.HMO_VAL_OUTSIDE - HMO_ATTR_TRIGGER_PATTERN_CONDITION
		Enum name changed ("Outside", "")
		- hmo_rngPatternCondition.HMO_VAL_OUTSIDE - HMO_ATTR_TRIGGER_PATTERN_CONDITION
		Help changed ("Triggers on pulses outside a specified range", "Outside: Triggers on pulses outside a specified range")
		- hmo_rngPatternCondition.HMO_VAL_OUTSIDE - HMO_ATTR_TRIGGER_PATTERN_CONDITION
		Description changed ("Outside", "")
		- hmo_rngPatternCondition - HMO_ATTR_TRIGGER_PATTERN_CONDITION
		Changed enum name ("PatternCondition", "")
		- hmo_rngProtocolCANLineType.HMO_VAL_CAN_LOW - HMO_ATTR_PROTOCOL_CAN_LINE_TYPE
		Enum name changed ("CANLow", "")
		- hmo_rngProtocolCANLineType.HMO_VAL_CAN_HIGH - HMO_ATTR_PROTOCOL_CAN_LINE_TYPE
		Enum name changed ("CANHigh", "")
		- hmo_rngProtocolCANLineType - HMO_ATTR_PROTOCOL_CAN_LINE_TYPE
		Changed enum name ("ProtocolCANLineType", "")
		- hmo_rngProtocolCANTriggerMode.HMO_VAL_CAN_FRAME_START - HMO_ATTR_PROTOCOL_CAN_TRIGGER_MODE
		Enum name changed ("StartOfFrame", "")
		- hmo_rngProtocolCANTriggerMode.HMO_VAL_CAN_FRAME_END - HMO_ATTR_PROTOCOL_CAN_TRIGGER_MODE
		Enum name changed ("EndOfFrame", "")
		- hmo_rngProtocolCANTriggerMode.HMO_VAL_CAN_MSG_ID - HMO_ATTR_PROTOCOL_CAN_TRIGGER_MODE
		Enum name changed ("Identifier", "")
		- hmo_rngProtocolCANTriggerMode.HMO_VAL_CAN_MSG_IDDT -

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		HMO_ATTR_PROTOCOL_CAN_TRIGGER_MODE
		Enum name changed ("IdentifierData", "")
		- hmo_rngProtocolCANTriggerMode.HMO_VAL_CAN_FRAME_TYPE - HMO_ATTR_PROTOCOL_CAN_TRIGGER_MODE
		Enum name changed ("FrameType", "")
		- hmo_rngProtocolCANTriggerMode.HMO_VAL_CAN_ERROR_COND - HMO_ATTR_PROTOCOL_CAN_TRIGGER_MODE
		Enum name changed ("ErrorCondition", "")
		- hmo_rngProtocolCANTriggerMode - HMO_ATTR_PROTOCOL_CAN_TRIGGER_MODE
		Changed enum name ("ProtocolCANTriggerMode", "")
		- hmo_rngCANFrameType.HMO_VAL_CAN_FRAME_TYPE_DATA - HMO_ATTR_PROTOCOL_CAN_TRIGGER_FRAME_TYPE
		Enum name changed ("Data", "")
		- hmo_rngCANFrameType.HMO_VAL_CAN_FRAME_TYPE_REMOTE - HMO_ATTR_PROTOCOL_CAN_TRIGGER_FRAME_TYPE
		Enum name changed ("Remote", "")
		- hmo_rngCANFrameType.HMO_VAL_CAN_FRAME_TYPE_ERROR - HMO_ATTR_PROTOCOL_CAN_TRIGGER_FRAME_TYPE
		Enum name changed ("Error", "")
		- hmo_rngCANFrameType.HMO_VAL_CAN_FRAME_TYPE_OVER_LOAD - HMO_ATTR_PROTOCOL_CAN_TRIGGER_FRAME_TYPE
		Enum name changed ("OverLoad", "")
		- hmo_rngCANFrameType.HMO_VAL_CAN_FRAME_TYPE_ANY - HMO_ATTR_PROTOCOL_CAN_TRIGGER_FRAME_TYPE
		Enum name changed ("Any", "")
		- hmo_rngCANFrameType - HMO_ATTR_PROTOCOL_CAN_TRIGGER_FRAME_TYPE
		Changed enum name ("CANFrameType", "")
		- hmo_rngCANTriggerIDType.HMO_VAL_CAN_ID_TYPE_B11 - HMO_ATTR_PROTOCOL_CAN_TRIGGER_ID_TYPE
		Enum name changed ("B11", "")
		- hmo_rngCANTriggerIDType.HMO_VAL_CAN_ID_TYPE_B29 - HMO_ATTR_PROTOCOL_CAN_TRIGGER_ID_TYPE
		Enum name changed ("B29", "")
		- hmo_rngCANTriggerIDType.HMO_VAL_CAN_ID_TYPE_ANY - HMO_ATTR_PROTOCOL_CAN_TRIGGER_ID_TYPE
		Enum name changed ("Any", "")
		- hmo_rngCANTriggerIDType - HMO_ATTR_PROTOCOL_CAN_TRIGGER_ID_TYPE
		Changed enum name ("CANTriggerIDType", "")
		- hmo_rngProtocolCondition.HMO_VAL_COND_NQ - HMO_ATTR_SEARCH_LIN_ID_CONDITION, HMO_ATTR_SEARCH_LIN_DATA_CONDITION, HMO_ATTR_SEARCH_CAN_ID_CONDITION, HMO_ATTR_SEARCH_CAN_DATA_CONDITION, HMO_ATTR_PROTOCOL_LIN_TRIGGER_CONDITION, HMO_ATTR_PROTOCOL_CAN_TRIGGER_CONDITION
		Enum name changed ("NotEqual", "")
		- hmo_rngProtocolCondition.HMO_VAL_COND_EQ - HMO_ATTR_SEARCH_LIN_ID_CONDITION,

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		HMO_ATTR_SEARCH_LIN_DATA_CONDITION, HMO_ATTR_SEARCH_CAN_ID_CONDITION, HMO_ATTR_SEARCH_CAN_DATA_CONDITION, HMO_ATTR_PROTOCOL_LIN_TRIGGER_CONDITION, HMO_ATTR_PROTOCOL_CAN_TRIGGER_CONDITION
		Enum name changed ("Equal", "")
		- hmo_rngProtocolCondition.HMO_VAL_COND_LT - HMO_ATTR_SEARCH_LIN_ID_CONDITION, HMO_ATTR_SEARCH_LIN_DATA_CONDITION, HMO_ATTR_SEARCH_CAN_ID_CONDITION, HMO_ATTR_SEARCH_CAN_DATA_CONDITION, HMO_ATTR_PROTOCOL_LIN_TRIGGER_CONDITION, HMO_ATTR_PROTOCOL_CAN_TRIGGER_CONDITION
		Enum name changed ("LessThan", "")
		- hmo_rngProtocolCondition.HMO_VAL_COND_GT - HMO_ATTR_SEARCH_LIN_ID_CONDITION, HMO_ATTR_SEARCH_LIN_DATA_CONDITION, HMO_ATTR_SEARCH_CAN_ID_CONDITION, HMO_ATTR_SEARCH_CAN_DATA_CONDITION, HMO_ATTR_PROTOCOL_LIN_TRIGGER_CONDITION, HMO_ATTR_PROTOCOL_CAN_TRIGGER_CONDITION
		Enum name changed ("GreaterThan", "")
		- hmo_rngProtocolCondition - HMO_ATTR_SEARCH_LIN_ID_CONDITION, HMO_ATTR_SEARCH_LIN_DATA_CONDITION, HMO_ATTR_SEARCH_CAN_ID_CONDITION, HMO_ATTR_SEARCH_CAN_DATA_CONDITION, HMO_ATTR_PROTOCOL_LIN_TRIGGER_CONDITION, HMO_ATTR_PROTOCOL_CAN_TRIGGER_CONDITION
		Changed enum name ("Condition", "")
		- hmo_rngProtocolLINStandard.HMO_VAL_LIN_STANDARD_AUTO - HMO_ATTR_PROTOCOL_LIN_STANDARD
		Enum name changed ("Auto", "")
		- hmo_rngProtocolLINStandard.HMO_VAL_LIN_STANDARD_1X - HMO_ATTR_PROTOCOL_LIN_STANDARD
		Enum name changed ("V1X", "")
		- hmo_rngProtocolLINStandard.HMO_VAL_LIN_STANDARD_2X - HMO_ATTR_PROTOCOL_LIN_STANDARD
		Enum name changed ("V2X", "")
		- hmo_rngProtocolLINStandard.HMO_VAL_LIN_STANDARD_J2602 - HMO_ATTR_PROTOCOL_LIN_STANDARD
		Enum name changed ("J2062", "")
		- hmo_rngProtocolLINStandard - HMO_ATTR_PROTOCOL_LIN_STANDARD
		Changed enum name ("ProtocolLINStandard", "")
		- hmo_rngLINTriggerMode.HMO_VAL_LIN_FRAME_SYNC - HMO_ATTR_PROTOCOL_LIN_TRIGGER_MODE
		Enum name changed ("Synchronisation", "")
		- hmo_rngLINTriggerMode.HMO_VAL_LIN_FRAME_ID - HMO_ATTR_PROTOCOL_LIN_TRIGGER_MODE
		Enum name changed ("Identifier", "")
		- hmo_rngLINTriggerMode.HMO_VAL_LIN_FRAME_ID_DATA - HMO_ATTR_PROTOCOL_LIN_TRIGGER_MODE
		Enum name changed ("IdentifierData", "")
		- hmo_rngLINTriggerMode.HMO_VAL_LIN_FRAME_WAKEUP -

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		HMO_ATTR_PROTOCOL_LIN_TRIGGER_MODE
		Enum name changed ("WakeupFrame", "")
		- hmo_rngLINTriggerMode.HMO_VAL_LIN_ERR_COND - HMO_ATTR_PROTOCOL_LIN_TRIGGER_MODE
		Enum name changed ("ErrorCondition", "")
		- hmo_rngLINTriggerMode - HMO_ATTR_PROTOCOL_LIN_TRIGGER_MODE
		Changed enum name ("LINTriggerMode", "")
		- hmo_rngQuickmathSource.HMO_VAL_CHANNEL1 - HMO_ATTR_QUICKMATH_SOURCE
		Enum name changed ("Channel1", "")
		- hmo_rngQuickmathSource.HMO_VAL_CHANNEL2 - HMO_ATTR_QUICKMATH_SOURCE
		Enum name changed ("Channel2", "")
		- hmo_rngQuickmathSource.HMO_VAL_CHANNEL3 - HMO_ATTR_QUICKMATH_SOURCE
		Enum name changed ("Channel3", "")
		- hmo_rngQuickmathSource.HMO_VAL_CHANNEL4 - HMO_ATTR_QUICKMATH_SOURCE
		Enum name changed ("Channel4", "")
		- hmo_rngQuickmathSource - HMO_ATTR_QUICKMATH_SOURCE
		Changed enum name ("QuickmathSource", "")
		- hmo_rngQuickmathOperation.HMO_VAL_ADD - HMO_ATTR_QUICKMATH_OPERATION
		Enum name changed ("Add", "")
		- hmo_rngQuickmathOperation.HMO_VAL_SUB - HMO_ATTR_QUICKMATH_OPERATION
		Enum name changed ("Substract", "")
		- hmo_rngQuickmathOperation.HMO_VAL_MUL - HMO_ATTR_QUICKMATH_OPERATION
		Enum name changed ("Multiply", "")
		- hmo_rngQuickmathOperation.HMO_VAL_DIV - HMO_ATTR_QUICKMATH_OPERATION
		Enum name changed ("Divide", "")
		- hmo_rngQuickmathOperation - HMO_ATTR_QUICKMATH_OPERATION
		Changed enum name ("QuickmathOperation", "")
		- hmo_rngPodRange.HMO_VAL_POD_RANGE_DEFAULT - HMO_ATTR_POD_RANGE
		Enum name changed ("Default", "")
		- hmo_rngPodRange.HMO_VAL_POD_RANGE_MAXIMUM - HMO_ATTR_POD_RANGE
		Enum name changed ("Maximum", "")
		- hmo_rngPodRange.HMO_VAL_POD_RANGE_DISPLAY_MAX - HMO_ATTR_POD_RANGE
		Enum name changed ("DisplayMaximum", "")
		- hmo_rngPodRange - HMO_ATTR_POD_RANGE
		Changed enum name ("PodRange", "")
		- hmo_rngProtocolLINPolarity_001.HMO_VAL_POSITIVE - HMO_ATTR_PROTOCOL_LIN_POLARITY
		Enum name changed ("Positive", "")
		- hmo_rngProtocolLINPolarity_001.HMO_VAL_POSITIVE - HMO_ATTR_PROTOCOL_LIN_POLARITY
		Description changed ("Positive", "")
		- hmo_rngProtocolLINPolarity_001.HMO_VAL_NEGATIVE - HMO_ATTR_PROTOCOL_LIN_POLARITY
		Enum name changed ("Negative", "")

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		- hmo_rngProtocolLINPolarity_001.HMO_VAL_NEGATIVE - HMO_ATTR_PROTOCOL_LIN_POLARITY
		Description changed ("Negative", "")
		- hmo_rngProtocolLINPolarity_001 - HMO_ATTR_PROTOCOL_LIN_POLARITY
		Changed enum name ("ProtocolLINPolarity", "")
4.52.1	08/2014	* Support for firmware version 4.525
		* Modified:
		- HMO_ATTR_POD_RANGE ... changed to write only
		- hmo_ReferenceReadWaveformCatalog
		HMO_ATTR_REFERENCE_WAVEFORM_CATALOG .. changed to string (catalog)
		- hmo_DisplayAddLanguage
		- hmo_DisplayRemoveLanguage
		- hmo_ConfigureMeasurementSource
		- Functions changed to support ASRL
		- hmo_InitWithOptions
		- hmo_FetchWaveform
		- hmo_FetchWaveformInteger
		- hmo_FetchWaveformByte
		- hmo_ReadToFileFromInstrument
		- hmo_WriteFromFileToInstrument
		- Utility functions changed to support ASRL
		hmo_dataReadTrace
		hmo_readBinaryDataBlock
		hmo_CheckBeforeRead
4.52.0	03/2013	* Support for firmware version 4.522
		* New functions
		- hmo_FetchWaveformConversionData
		- hmo_DisplayAddLanguage
		- hmo_DisplayRemoveLanguage
		- hmo_ConfigureDelayMeasurementSlope
		- hmo_ConfigureAutomaticMeasurement
		- hmo_ResetAutomaticMeasurement
		- hmo_QueryAutomaticMeasurementNumberOfWaveforms
		- hmo_QueryAutomaticMeasurementResult
		- hmo_ConfigurePodRange
		- hmo_ConfigureQuickmathWaveformPosition
		- hmo_ConfigureQuickmathScaling
		- hmo_FetchWaveformInteger
		- hmo_FetchWaveformByte
		- hmo_FetchWaveformConversionData
		- hmo_FetchEnvelopeWaveformConversionData

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		- hmo_FetchMathWaveformConversionData
		- hmo_FetchQuickmathWaveform
		- hmo_FetchQuickmathWaveformHeader
		- hmo_FetchQuickmathWaveformConversionData
		- hmo_FetchReferenceWaveformConversionData
		- hmo_FetchPodData
		- hmo_FetchPodDataHeader
		- hmo_FetchPodNumberOfSamples
		- hmo_FetchPodDataConversionData
		* Modified
		- In functions in Measurement class - Measurement parameter range is now 1..6 (used to be 1..4)
		- hmo_ConfigureTriggerSource
		- hmo_ConfigureEdgeTriggerSource
		- hmo_ConfigureWidthTriggerSource
		- hmo_ConfigureDisplayLanguage
		- hmo_ConfigureMeasurementSource
		- hmo_ConfigureAmplitudeTimeMainMeasurement
		- hmo_ConfigureCursor
		- hmo_ConfigureBusProtocol
		- hmo_ConfigureSPISource
		- hmo_QueryUARTWordCount - command updated, parameter renamed (Word -> Frame)
		- hmo_QueryUARTFrameData - API changed, all commands new
		- hmo_QueryLINFrameStatus - Frame Status parameter updated
		- hmo_QueryLINFrameID - Status parameter updated
		- hmo_ConfigureLINPolarity
		- hmo_ConfigureSearchSource
		- hmo_ConfigureReferenceWaveformSource
		- hmo_ReferenceReadWaveformCatalog
		- hmo_ReadMainWaveformMeasurement
		- hmo_FetchWaveform
		- hmo_FetchMainWaveformMeasurement
		*Modified Attributes:
		- HMO_ATTR_PROTOCOL_SPI_TRIGGER_OFFSET change data type from ViInt32 to ViReal64
		- HMO_ATTR_BUS_SIGNAL_SOURCE_FREQUENCY change data type from ViInt32 to ViReal64
		- HMO_ATTR_FFT_RESOLUTION_BANDWIDTH_RATIO change data type from ViInt32 to ViReal64
		- HMO_ATTR_HORZ_REFERENCE change data type from ViInt32 to ViReal64
		- HMO_ATTR_PROTOCOL_UART_BIT_RATE data type from ViInt32 to ViReal64
		- HMO_ATTR_PROTOCOL_LIN_BIT_RATE data type from ViInt32 to ViReal64
4.0.0	07/2012	* New subsystems
		- Protocol CAN subsystem
		- Protocol LIN subsystem

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Revision	Date	Note
		- I2C Decode Results subsystem
		- UART Decode Results subsystem
		- SPI Decode Results subsystem
		- Search subsystem
		- Quickmath subsystem
		* New functions
		- hmo_ConfigurePatternTriggerMode
		- hmo_ConfigureMaskYOutputPulsesEnable
		* Modified
		- hmo_ConfigureAmplitudeTimeMainMeasurement - Positive, negative overshoot added
1.0.0	10/2011	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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- ISO 14001-certified environmental management system

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