Perception & GEN Series firmware V7.00.16336

These release notes are: Perception: from V6.72.15352 to V7.00.16336

GEN series firmware: from V6.72.15352 to V7.00.16336

Firmware release notes are an integral part of the software and these release notes.

IMPORTANT: Perception 32-bit version is no longer actively distributed and is only available for GEN2i systems and users running 32-bit Windows. Perception 32-bit version is available for download from the HBM website. Perception Enterprise (1-PERC-E64) is no longer required to run the 64-bit version of Perception.

Supported/Tested Windows 32 bit versions:

- Windows Vista Business SP2
- Windows Vista Ultimate SP2
- Windows 7 Ultimate SP1
- Windows 8 Pro
- Windows 8.1 Pro
- Windows 10 Pro

Supported/Tested 64 bit versions:

- Windows Vista Business SP2
- Windows Vista Ultimate SP2
- Windows 7 Ultimate SP1
- Windows 8 Pro
- Windows 8.1 Pro
- Windows 10 Pro

And Windows Updates until 11^h October 2016.

IMPORTANT: Perception is no longer supported on Windows XP.

Supported/Tested Genesis High Speed platforms:

- GEN2i
- GEN3i
- GEN3t
- GEN5i
- GEN7i
- GEN7t
- GEN7tA

- GEN16t
- GEN17tA
- ISOBE5600
- BE3200

IMPORTANT: LIBERTY, BE256 and MultiPro are no longer supported by Perception. Data recorded with these units is still accessible using Perception.

Supported/Tested QuantumX Modules:

- MX1609KB
- MX1609TB
- MX471B
- MX809B

QuantumX firmware: V4.6.26.0

HBM QuantumX API: V4.2.1.168

HBM common API: V2.0.1.2

All Perception versions require Dot Net Framework V4.6 which will be distributed with the install and is also available for download on the internet.

All Perception versions also require a Microsoft Direct3D[®] capable graphics card.

Patents: Patent No. 7,868,886

This version is distributed using the following editions:

- Perception FREE Viewer
- 1-PERC-VA-01-2 Perception Viewer Enterprise
- 1-PERC-ST-01-2 Perception Standard
- 1-PERC-AD-01-2 Perception Advanced
- 1-PERC-E64-01-2 Perception Enterprise

IMPORTANT: Existing Viewer licenses are automatically upgraded to Viewer Enterprise. Existing Perception Professional licenses are automatically upgraded to Perception Enterprise

The following options are part of this version:

- 1-PERC-OP-MWB Multiple Workbooks
- 1-PERC-OP-MEX Multiple Exports formats
- 1-PERC-OP-MMF Multiple Mainframes
- 1-PERC-OP-AN Analysis (Formula database)
- 1-PERC-OP-RP Reporting & Word Reporting
- 1-PERC-OP-IF SOAP & RPC Interface



• 1-PERC-OP-VP Video Playback

•

- 1-PERC-OP-CSI-2 CSI Runtime
- 1-PERC-OP-STL Advanced High Voltage/High Power analysis (STL)
- 1-PERC-OP-IS Customized Info sheets
- 1-PERC-OP-HHP HP-HV Automated Analysis
- 1-PERC-OP-BE BE256 / MultiPro Control
- 1-PERC-OP-BFFT Basic FFT
- 1-PERC-OP-HIA HVIA
- 1-PERC-OP-SEQ Sequencer (BE3200)
- 1-PERC-OP-SDB Sensor Management
- 1-PERC-OP-EDR eDrive application (setup & live)



The following features have been added:

Perception:

- 10324 Make Sequencer pulse parameters available in Data sources 11584 eDrive: Use Phi to indicate "inductive" or "capacitive" load per phase 11637 eDrive: Support torque transducer with analog voltage output 11696 Add data sources to mainframe reflecting Connect time & uptime 11697 Add datasource to mainframes such that the 'sync source time' can be visualized in Perception eDrive solution discontinuous support for setups with old 1kV board beyond Perception 7.0 ==> 11699 message needed for customers 11708 Sensor health check with system level health overview 11710 Add new user key actions for opening next and opening previous recording 11731 Add new user key script actions to manipulate the start and length of a sequencer channel pulse 11738 Add user key script action to open a recording 11739 UFF58 export format needs option to write Absolute UTC time (now relative only) Add an interface to the eDrive sheet which can be used to get the calculated values just like the RPC 11748 function GeteDriveValues() 11756 New RPC method needed to retrieve exact UTC StartOfRecording time
- 11763 Perception pinned on taskbar should support a 'jump list' to allow fast starting with recently used PNRF or VWB
- 11773 User Keys can be part of automation
- 11785 eDrive: Allow auto-y-axis ALL on automation
- 11791 CycleCrestFactor in Formula Database
- 11793 eDrive: Add sweep / trigger number to "Export to Matlab" file creation dialog
- 11817 eDrive: Add new function to the formula database called ReadLogFile
- 11835 Real time formula database: Manage formulas from Perception
- 11836 Real time formula database: integrate into eDrive to enhance scalability
- 11839 Add support for MX809B

GEN Series firmware:

- 11782 Add both edge trigger for Marker (Event) channels
- 11837 Real time formula database: Perform preconfigured math on measured data and deliver the results in real time

The following improvements have been made:

Perception:

10338 Space for channel names in Sequencer control sheet is limited



- 10339 Channel size and font size in Sequencer control sheet are fixed
- 10991 Formatting of numerical values in user table should always allow large numbers
- 11623 eDrive: Allow torque signal to be inverted in eDrive GUI
- 11658 Improve time base (groups) settings of Dual Mode in Setting sheet
- 11672 Improve usability on setting sheet by including mainframe names
- 11702 Customers dislike the PNRF auto split in 8GB files.
- 11711 Simplify sales offering and licensing of Perception software packages
- 11724 eDrive project: Goto Sweep function or improved GoTo Trigger
- 11725 eDrive project: Allow any cycle number to be entered instead of pulldown
- 11736 View last used recordings and VWBs from the file menu
- 11742 Perception needs to size and position itself identically as it was closed
- 11744 Perception Hardware Tree needs speed improvement
- 11745 Settings sheet should be more responsive
- 11750 Mainframe connection time should be improved
- 11764 Add autocomplete to edit controls which are used to enter filename
- 11771 eDrive: Allow to change "Offset angle" while in Pause mode
- 11784 eDrive: Add some review sheets with displays
- 11797 Make "Recording Automation Processing" dialog sizeable
- 11818 Hide recorder external start/stop column on all mainframes except GEN2i
- 11819 More accurate naming for different trigger output options
- 11820 Simplify mainframe trigger control in settings sheet (Backward compatible through CSI)
- 11822 Grid should show nice values
- 11846 Drop RTC formula 'MeanOfMultiplication'

The following errors have been fixed:

Perception:

11063	Reporting to word fails if no default printer is selected
11086	Renaming Mainframe takes effect in SETTINGS SHEET only on next Perception start
11180	Reset to factory defaults leaves Accelerometer group active
11440	Loading workbench doesn't work correctly for channels not in Basic mode
11451	Crash after loading HVIA collection related to splitter control
11455	remove impedance column from charge amplifier settings sheet

11516	Bridge wizard doesn't automatically go to balance grid
11530	Memory leak caused by audiodg.exe should be solved on integrated systems
11588	Print settings do not match Settings sheet settings anymore
11602	Fiber Status sheet doesn't update properly when channel is activated
11651	STLprevZeroCrossing problem with measured signal from customer
11661	XCursors pool variables incorrect after a recording and display in review sweep mode
11670	Print Settings from File lacks Sensor information
11675	MX1609. Offset value not updated when range from/to changes
11676	MX1609. Unhandled exception can occur on the Settings sheet in the Input / Temperature graphics section.
11694	Export to Matlab for short sweeps (10 ms.) fails
11712	Problem reloading report with custom report size
11727	CycleArea in Formula Database produces wrong results
11728	Channels not added to bridge tab when applying sensor
11733	Problem setting properties for the report to Word automation action
11735	Missing data in first sweep displayed of the Gen3i instrument panel
11737	Incorrect reading of stored Angle trace when (Precision * PulsesPerRotation) exceeds 8191
11746	Perception markers in a PNRF file disappear when PC date changes when X-axis is in "Absolute Local" time
11749	No more support for Vision and Odyssey remote recording access in V7.0
11765	QuantumX channel names exceeding 32 characters invalids associated traces in recording
11766	center position in y-scaling is not displayed
11767	eDrive: Sensor database limits span to wrong values if RMS is selected
11777	eDrive: Hysteresis is artificially limited to "1000" EU
11778	Matlab export not working properly on certain settings
11781	Function Creator doesn't understand text string
11786	CycleMean not calculated correctly
11789	Perception freezes when printing report to PDF
11810	eDrive: Using "unique" CT´s with different sensitivity result in a list of possible spans of 1 (largest span)
11811	Settings in Bridge wizard not saved as selected
11812	Amplifier settings shown with Storage OFF
11813	Channel scaling in Preview mode needs attention
11814	Wrong axis labels in XY display with large numbers



- 11815 Perception ignores the option READ ONLY in the Reporting when loading VWB
- 11816 Settings sheet: incorrect input UI for span if first recorder is in different amplifier mode
- 11828 Absolute Trigger Time incorrect for Isobe5600 sweeps recording
- 11838 Crash when user key has no text assigned
- 11842 FormulaDB CycleTHD returns THD of 0.0%
- 11848 Sensor database sheet not loaded correctly
- 11851 Meter values incorrect when using signal offset
- 11854 Scale as trace not correctly loaded when two traces have same name with different casing
- 11874 Meters cannot be re-arranged by drag drop

GEN Series firmware:

- 11770 System unresponsive when starting a recording quickly after changing to IRIG time synchronization
- 11808 GN3210: Mismatch in filter settings
- 11809 GN610(B): Mismatch in filter settings
- 11855 Alarm Level may be incorrect after input range change



HBM GmbH

www.hbm.com Email: info@hbm.com Tel. +49 6151 803-0 Fax +49 6151 803-9100



xxxxx-x.0 en