1 Version 7.60

1.1 Update information:

These release notes describe changes between Perception (including GEN series firmware) versions

V7.50.19343 and V7.60.20240

1.2 Mid- and long-term support roadmap

Windows 7 and Windows 8 support

January 2020 Perception has officially stopped support for Windows 7 and Windows 8.0. Perception V7.xx allows you to install and work on Windows 7 and Windows 8. However, Perception is no longer actively tested on these windows versions.

With security updates stopped, it's highly recommended to upgrade to Windows 10

Note: Microsoft stops safety updates for Windows 8.1 end of 2023.

Perception V7.60

HBM will support Perception V7.6x for Windows 7 and Windows 8.1 both as 32 bit as well as 64 bit version. A reasonable amount of effort will be spend on any V7.6x data integrity and/or data loss issues to investigate and possibly fix the issue. Cosmetic issues and new features will be not be addressed for V7.6x.

1.3 Perception versions

Version	Description	
	Perception Standard	Free
1-PERC-AD-0x	Perception Advanced	Paid
1-PERC-VA-0x	Perception Viewer Enterprise	Paid
1-PERC-E64-0x	Perception Enterprise	Paid

1.3.1 Perception supports the following application extensions:

Version	Description	
1-PERC-OP-EDR	eDrive application (setup, live and efficiency mapping table)	Paid
1-PERC-OP-STL	Advanced High Voltage/High Power analysis according STL standards	Paid
1-PERC-OP-HIA	High Voltage Impulse Analysis	Paid
1-PERC-OP-CSI	CSI Runtime extensions (Customized Software Interfaces)	Paid



1.4 New Features

Quadrature encoder support	Quadrature encoders are now supported on the GN1202B card.	
RTFDB	 New formulas: CycleHarmonicRMS : Calculates a specified nth harmonic RTFDB trigger formulas accept this value for triggering. CycleHarmonicPhase : Calculates the phase difference between 2 signals 	
Formula database	New formulas: CycleHarmonic CycleHarmonicRMS : Post run equivalent version of RTFDB function CycleHarmonicPhase : Post run equivalent version of RTFDB function 	
HPHV	A new high voltage high power application sheet is introduced that generates FDB formulas. Application support and customer can modify and extend the application math provided. NOTE : HPHV formulas do not exist in real-time variants for RTFDB.	

1.5 Improvements

Ethernet Connectivity	First time SFP Ethernet connection to GEN Series mainframe could fail with auto IP
Zero balancing	Zero balancing setting is now always properly restored when loading a workbench
Mainframe storage – filename	Improved handling of long filenames, it is now possible to use filenames on mainframe disk of up to 100 characters
BE3200 / sequencer	The precision of the BE3200 has been improved by half LSB
Instrument panel	Instrument panel user interface stability has been improved
Formula database	TriggerTimeToText robustness against unexpected input has been improved
Speed/Angle signal problems	Applying a speed or angle sensor resulted in wrong digital filter setting. As a result either wrong or no speed/angle signals are recorded.
Torque zero	Torque zero value now properly restored on reloading VWB
Mainframe connectivity	Improved connection/mainframe stability
Multi-mainframe workbench	In some cases workbench failed to load properly but only in multi-mainframe context.
Display	In some setups, changing or closing displays caused instability.
Automation	Clearing Log File now also clears cache.
Downgrade path to Perception < 8.00	Facilitate downgrading of new Perception 8.00 devices to Perception < 8.00.
Async triggering	Fixed progressive error in async trigger times
Sweep data deletion	New user key action called "Sweep data deletion" has been added. This action is used for deleting the data of a sweep in the active recording file.

1.6 Supported Windows versions

- Windows 7 Ultimate SP1 (Not tested)
- Windows 8.1 Pro (Not tested)
- Windows 10 Pro 1607 and higher (Including updates to Feb 2020)

Perception 32-bit version can be downloaded from the HBM website

Installation requirements:

Notes:

- Dot Net Framework V4.7.2
 - (distributed with the install CD and available for download on the internet)
- Microsoft Direct3D® capable graphics card.

1.7 Supported Genesis High Speed platforms:

- GEN2i (With IM2 only)
- GEN2tB
- GEN3i (With IM2 only)
- GEN3t
- GEN5i (With IM2 only)
- GEN7i (With IM2 only)
- GEN7t
- GEN7tA
- GEN16t (With IM2 only)
- GEN17tA
- ISOBE5600
- BE3200

1.8 Supported QuantumX Modules:

- MX1609KB
- MX1609TB
- MX471B / MX471C (CAN setup must be done with QX assistant)
- MX809B
- CX27B as single network access point only, no setup or control of CX27B PTP sync can be activated in QX assistant, Perception is not able to show the synchronization status. It is recommended to use a MX1609K/T/MX809B with network access to do PTP sync. This way Perception can report the PTP synchronization status.

Data streaming is available for all other B type or later QuantumX modules.

Note: Perception includes and only works with the following QuantumX software components QuantumX firmware: V4.12.32.0 HBM common API: V4.00.56

Patents no: 7,868,886

(64 and 32 bit) (64 and 32 bit) (64 bit only)

1.9 Perception V8.xx

Starting with Perception V8.00 some legacy features, mainframe and card support will no longer be present. (A Perception V7.6x will be available for critical bug fix support)

1.9.1 Features removed in V8.00

- Perception no longer runs on Windows 7 and Windows 8.1
- Perception no longer runs as 32 bit Windows version
- External Timebase
- Binary Timebase
- Direct GEN DAQ NAS drive storage (iSCSI), Perception can still use NAS drives
- Complex backplane trigger-bus setup
- SOAP software interface
- Instrument panel user interface
- RTC channels

1.9.2 Mainframe & card support removed in V8.00

Check with your local sales contact for possible trade-in programs.

Part nr	Name
ISOBE5600m	100 MS/s stand-alone transient recorder
GEN2i	2 slot integrated mainframe
GEN5i	5 slot integrated mainframe
GEN7t	7 slot tethered mainframe
GEN16t	16 slot tethered mainframe
G040	Master/Slave card
G060	IM2 interface card
G001	IRIG option card (Built-in)
G002	IRIG/GPS option card (Built-in)
	DAQ cards
GN810	Basic 200 kS/s
GN811	Basic 1 MS/s
GN812	Basic ISO 1 MS/s
GN813	Basic XT ISO 1 MS/s
GN814	Basic XT ISO 200 kS/s
GN401	Optical receiver multi-mode fibers
GN402	Optical receiver single-mode fibers
GN410	Bridge ISO 200 kS/s
GN411	Bridge ISO 1 MS/s
GN412	Diff 100 MS/s
GN413	Diff 25 MS/s
GN440	Diff/IEPE ISO 200 kS/s
GN441	Diff/IEPE ISO 1 MS/s
GN4070	Optical Event marker
GN6470	Event marker



HBM GmbH

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



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