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 |



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