# RELEASEnotes

## 1    Introduction:

These release notes contain:
- Update information
- What is new
- What is improved
- Supported Windows platforms
- Supported Genesis High Speed platforms
- Supported QuantumX modules
- Licensing information

**NOTE: Support for IM1 based systems will be discontinued in the near future. Perception 7.2x will be the last version to support this generation. Perception will notify you if this applies to your hardware.**

**Connecting to these systems will no longer be possible in versions beyond Perception 7.2x.**

## 2    Version 7.20

### 2.1    Update information:

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

V7.14.17317 and V7.20.18075

Highlights:

- Support for the new GEN2tB mainframe
- Support for the new fast GN8101B acquisition card
- GEN DAQ API offering integration of GEN Series mainframes without Perception
- Configurable mainframe stand-alone behavior
- Live synchronous RTFDB output for Yt, XY and Spectral displays
- IRIG synchronization via the GMR1000 with GEN Series and QuantumX mainframes
- eDrive: GN611B can now be used in all application modes
- eDrive: Improved usability of sensors

**RELEASEnotes**

## 2.2    What is new:

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| **GEN2tB:** Perception now supports the new GEN2tB mainframe. |
| **GN8101B:** Perception now supports the new fast GN8101B acquisition card. |
| **Configured boot mode:** Enable mainframe configuration of automatic, standalone startup behavior. |
| **Live synchronous RTFDB data**: Synchronous RTFDB output can now also be shown in the live Yt, XY and FFT displays. |
| **GEN DAQ API**: Integrate control of GEN Series mainframes into custom applications without using Perception. |
| **IRIG / GMR1000:** Use IRIG synchronization via the GMR1000 with GEN Series and QuantumX mainframes. |

## 2.3    What is improved:

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| **EtherCAT**: Bus state not changed unless EtherCAT configuration of mainframe is changed. |
| **Acquisition control:** Sweeps are now immediately stopped when pressing stop. |
| **QuantumX**: Parameter for more than 32 channels per recorder now works. |
| **RTFDB**: Realtime formula database support for flexible software filtering. |
| **Complex mainframe synchronization:** PTP synchronization in a master-slave setup is improved. |
| **Display search window:** Perception search window no longer goes to background. |
| **Mainframe recording:** Connecting to a mainframe running a mainframe stored recording could cause a small gap in the data at that time, this is now fixed. |
| **Automation:** When using automation during the recording process, it is now possible to hide the progress window to keep focus on the data. |
| **Display of high channel count**: When displaying high speed recordings some drawing artifacts are fixed. |
| **Instrument panel**: Clicking in between settings in the settings grid no longer gives an error. |
| **Instrument panel**: Recording name is always visible. |
| **eDrive:**  Better fit for AC fit eMachines. |
| **eDrive**: Loading a recording with eDrive active sometimes caused duplicate sheets. |
| **eDrive:** Sensor selection is improved. |
| **eDrive:** Better indication of sensor search window. |
| **eDrive:** Configured digital inputs are automatically added to the display. |
| **eDrive:** It is now possible to drag and drop sensors from the sensor tree to the configuration field. |
| **eDrive:** Better indication of acquisition status. |

# RELEASEnotes

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| **eDrive:** Measurement range also shown in RMS. |
| **Sheets:** More consistent management of hidden or removed sheets. |
| **BE3200 Sequencer**: Several new user keys to manipulate sequencer channels were added. |
| **HVIA:** Improved handling of tail-chopped waveforms. |
| **Time display:** Under certain conditions the time display showed a DirectX problem, this is addressed. |

**RELEASE**notes

### 2.4 Supported/Tested on latest Windows versions

Including all updates until 13th February 2018:

- Windows 7 Ultimate SP1 (64 and 32 bit)
- Windows 8 Pro (64 and 32 bit)
- Windows 8.1 Pro (64 and 32 bit)
- Windows 10 Pro (64 bit only)

**Notes:**

Perception is no longer supported on Windows XP and only tested on Windows Vista for GEN5i use

Perception 32-bit version is no longer actively distributed.

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

**Installation requirements:**

- Dot Net Framework V4.6
  (distributed with the install CD and available for download on the internet)
- Microsoft Direct3D® capable graphics card.

### 2.5 Supported/Tested Genesis High Speed platforms:

- GEN2i
- GEN2tB
- GEN3i
- GEN3t
- GEN5i
- GEN7i
- GEN7t
- GEN7tA
- GEN16t
- GEN17tA
- ISOBE5600
- BE3200

**Notes:**

Setup and recording data with LIBERTY, BE256 and MultiPro is no longer supported by Perception.

### 2.6 Supported/Tested QuantumX Modules:

- MX1609KB
- MX1609TB
- MX471B
- MX809B

**Note:** Perception includes and only works with the following QuantumX software components

QuantumX firmware: V4.10.4.0

HBM QuantumX API: V4.3.1.171

HBM common API: V2.0.1.2

## Patents no: 7,868,886

**RELEASE**notes

## 2.7 Perception licenses:

| Version | Description | |
|---|---|---|
| **1-PERC-ST-01-2** | Perception Standard | Free |
| **1-PERC-AD-01-2** | Perception Advanced | Paid |
| **1-PERC-VA-01-2** | Perception Viewer Enterprise | Paid |
| **1-PERC-E64-01-2** | Perception Enterprise | Paid |

### 2.7.1 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-2** | CSI Runtime extensions (Customized Software Interfaces) | Paid |

### 2.7.2 Perception license upgrade notes

The Perception licensing model was updated since version 7.14 (dec-2017), this may impact your existing license. The table below shows which options are included in which version.

| Option | Description | Perception Standard | Perception Advanced | Perception Viewer Enterprise | Perception Enterprise |
|---|---|---|---|---|---|
| | Single mainframe control | V | V | | V |
| **1-PERC-OP-MMF** | Multiple Mainframes | | | | V |
| | PNRF viewing | V | V | V | V |
| **1-PERC-OP-IF** | SOAP & RPC Interface | V | V | V | V |
| **1-PERC-OP-SEQ** | Sequencer (BE3200) setup and control | V | V | V | V |
| **1-PERC-OP-AN** | Analysis (Formula database) | | V | V | V |
| **1-PERC-OP-RP** | Reporting & Word Reporting | | V | V | V |
| **1-PERC-OP-MEX** | Multiple Exports formats | | V | V | V |
| **1-PERC-OP-VP** | Video Playback | | V | V | V |
| **1-PERC-OP-MWB** | Multiple Workbooks | | V | V | V |
| **1-PERC-OP-IS** | Customized Info sheets | | V | V | V |
| **1-PERC-OP-BFFT** | Basic FFT | | | V | V |
| **1-PERC-OP-SDB** | Sensor Management | | | V | V |

License conversion:

Licenses are automatically updated to ensure existing options are kept:
Existing paid Viewer licenses are automatically upgraded to Viewer Enterprise.
Existing Perception Standard licenses with one or more options are upgraded to Perception Advanced.
Existing Perception Professional licenses with one or more options are upgraded to Perception Enterprise.