1 Version 8.02

1.1 Update information:

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

V8.00.20232 and V8.02.20295

1.2 Mid- and long-term support roadmap

Starting with Perception V8.00 some legacy features, mainframe and card support are no longer present.

(A Perception V7.6x maintenance version is available for critical bug fix support)

1.2.1 Supported on latest Windows versions

Including all updates until July 2020:

• Windows 10 Pro 1607 and higher (64 bit only)

Installation requirements:

- Dot Net Framework V4.8 (distributed with the install CD and available for download on the internet)
- Microsoft Direct3D® capable graphics card.

1.2.2 Downgrade

Perception V8.0x can be downgraded to the following versions.

- Perception V7.6x
- Perception V7.5x

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



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1.4 New Features

Phasor Display improvements	Display inherits colors and font from linked display.
User Key	New action that allows to update an RT-FDB scalar. Update can be either hard-coded or taken from a datasource (for example an InfoSheet datasource).
Start-up video	The ePower Suite now shows a video at startup. This gives an 11 minute introduction into basic operation principles of the ePower suite. Later releases will see updated video content.
GN310b analog Torque/Speed	The ePower Suite added support for analog torque and speed when using the GN310B card.
Timed Cycles	The ePower Suite now adds more fine-grained selections when selecting a timespan for timed cycles. Selections can now be made from 1 ms1 s.
Ext Trigger Out Settings	The acquisition setup now also supports 'External Trigger Out' settings.
More responsive ePower Suite setup	During ePower Suite setup, certain selections cause the system to enter a (time-consuming) process of redeploying formulas. This happens now less often.
Efficiency page	A new sheet is added to the ePower Suite, showing efficiencies.
Scope display improved	The ePower Suite scope display now is more stable.
Bridge Wizard removed	The Bridge Wizard is no longer part of Perception.
File size VWB reduced	Since Perception 8.0 the VWB file size increased due to storing icons. This file size increase has been much improved. For the next Perception release a compressed storage format is planned, reducing typical file size by a factor of 10.
Skip waiting for WOL	GHS mainframes support Wake On Lan. When connecting to a mainframe that is not 'On' a WOL packet is sent to wake up. This takes 2 minutes. Option is added to skip mainframe/waiting.



1.5 Improvements

GN1202B/GN8101B	Default sample rate was changed from 25 MS/s to 20 MS/s. This default also allows Digital IO.	
ePOwer Suite	ePowerSuite Copy button now also works with display scaling other than 100%.	
Post-process formulas	ePowerSuite can generate post-process formulas. In some conditions this caused an exception.	
CAN Data output	 Corrected the endianness of published float values. In some conditions it was flipped the wrong way. CAN *.DBC file generation contained faulty endianness information. 	
CAN Acquisition Control	A saved workbench – containing CAN acquisition control setup – is now properly loaded.	
Sensors	Various improvements on usage of non-linear sensors. Note that some of these improvements might affect (i.e. improved) interpretation of existing recordings. - RTFDB: Timer/Counter signals apply non-linear user scaling for non-linear sensors. - Correct ADC ranges are applied for a sensor with multi point linearization. - TEDS sensors with two-point linearization are mapped on Technical unit scaling. - Fix in applying technical unit scaling Improvements on TEDS sensors: - The sense lines are always enabled for TEDS sensors in Bridge mode - Zeroing of a two-point linearization sensor now works always rather than only once - after TEDS detection.	
GEN DAQ API	The command StartRecording is now forwarded to Perception (if connected). This facilitates starting a recording on all connected mainframes.	
System	 Improved diagnostics In the case of switching RTFDB configuration of many async signals to one async signal could in rare cases result in a memory allocation issue. 	
EtherCAT	The fixed Status and Value properties of published data have been renamed to the published data name with an _S suffix for status and and _V suffix for value.	
QuantumX	Fix for scenario where in some sweep based recordings a false positive 'Timebase synchronization lost' marker was inserted.	



1.6 Supported Genesis High Speed platforms:

- GEN2tB
- GEN3i/GEN3iA
- GEN3t
- GEN4tB
- GEN7i/GEN7iA
- GEN7tA
- GEN17tA
- BE3200

1.7 Supported QuantumX Modules:

- MX1609KB
- MX1609TB
- MX471B / MX471C
- MX809B
- CX27B as single network access point only, no setup or control of CX27B 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: V4.0.0.56

Patents no: 7,868,886

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