June 2016
Version 4.32

Thank you for choosing HBM as solution provider for your measurement, testing and analysis tasks.

This document shows product news and dependencies around the QuantumX and SomatXR data acquisition series, for instance modules, accessories, firmware, PC software, documentation, services and trainings.

As this document is also part of the DVD shipped together with every single module, please check whether an updated version is available: http://www.hbm.com

We always recommend using the released firmware and software shown in this document!

Your opinion counts a lot. Please contact us and let us know how to improve our products and services. Many thanks in advance: http://www.hbm.com/support/

What's new or updated?

Modules

- New: QuantumX MX430B strain gage full bridge amplifier with accuracy class 100 ppm
- New: QuantumX MX238B strain gage full bridge amplifier with accuracy class 25 ppm
- New: QuantumX MX809B isolated amplifier for thermocouple and cell voltage (5 V)

Module Firmware

- **MX460/B**: new - support of crank angle sensors and gap detection (i.e. 50:2 and more) for position and speed measurement in angle based analysis of combustion engines.
- **MX471/B**: new - transmitting several sensor inputs or any signals in single CAN messages with variable data type (i.e. 16 or 32 bit fix or floating point), which allows an easy integration into test bench automation or can be used as CAN-2-CAN gateway. Parameterization with MX Assistant.
- **MX471/B, MX840/A/B:** new parameters - "sample point" and "re-synchronization jump width" (SJW) optimizing bit timing (default: 87.5%).
- **Bug fixing:**
    - MX878B and MX879B: sync'd signal output, scaled to +/- 10 V
    - MX1609: parameterization lost after reboot.

PC Software

- catman – professional data acquisition and analysis software: **4.2.2**
    - New with MX460B: angle and cycle based data analysis of combustion engines.
- MX Assistant
    - MX471/B: mapping several signals with different data types to a single CAN message, using the maximum bandwidth.

        Example: 4 temperatures, acquired by thermos couple with MX809B, send as UINT16 in a single message ID #500.
- Drivers for other PC software packages:
    - Please check our web page.

Documentation

- QuantumX
    - New datasheets: MX430B, MX238B, MX809B
    - Modified data sheets: MX471B, MX460B, MX403B, MX410B, MX840B, MX440B, MX1601B, MX1615B.
    - Extended operating manual: new modules and accessories.

Version Chart

QuantumX / SomatXR system PC software (DVD and download)	Version 4.41 (* = has been updated)
MX Assistant	4.4.1.240 *
FireWire driver for Microsoft Windows™	1.45.0.0 / 0.40.0.0 *
HBM Device Manager	1.0

Device / module firmware	Version
QuantumX Data Recorder CX22B and CX22B-W	4.2.2 (just install catman)
QuantumX MX840B, MX440B, MX1615B, MX1601B, MX1609KB/TB, MX410B, MX460B, MX403B, MX471B, MX878B, MX879B, CX27B and older modules…	4.6.18 *
SomatXR Data Recorder CX23-R	1.10.0
SomatXR MX840B-R, MX1615B-R, MX1601B-R, MX1609KB-R, MX411B-R, MX471B-R	4.6.18 *

Commercial PC software (DVD and download)	Version
catman®EASY / AP	4.2.2 *
catman®Enterprise	6.5.1
HBM Common LabVIEW™ driver	2.0.2
HBM Common API driver for Visual Studio .NET	3.1
QuantumX CANape driver	4.1.3

HBM

Minimal Requirements for the PC

- Software:
    - Windows®XP, Vista™, 7, 8.x or 10
    - Microsoft Internet Explorer Version 8.0 or newer
    - Microsoft .NET Framework 4.0
      if necessary, needs to be manually installed using Windows-Update under Windows 8
- Hardware:
    - 32 or 64 Bit architecture
    - Intel Pentium 1 GHz or equivalent
    - Memory (RAM):
        - 512 MByte under Windows® XP
        - 1024 MByte under Windows Vista™, 7, 8.x or 10
    - Graphic card and monitor with resolution of at least 1024 x 768 pixels
    - Up to 100 MByte free hard disk memory (more in case of lacking .NET Framework)
    - Ethernet interface (10/100/1000 MBit)
    - Optional FireWire 1394b adapter (PC-CARD, expressCARD/34, PCI, PCIexpress)