New Features in ibaCMC v3.2.0

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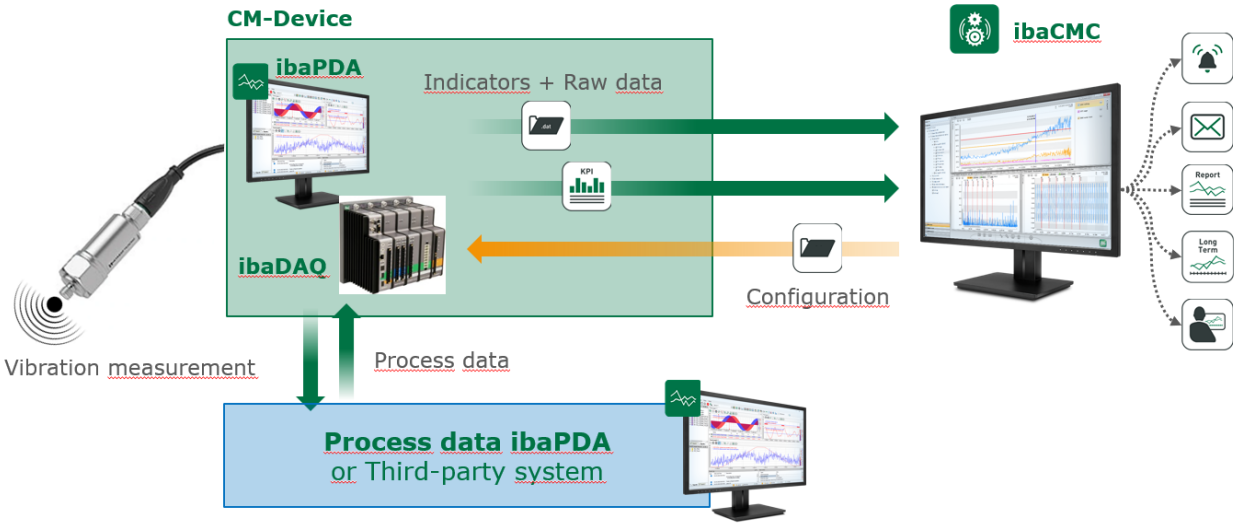
1 New Features

1.1 ibaDAQ is available as CM-Device

With ibaCMC v3.2 the ibaDAQ is supported as CM-Device. The ibaDAQ is the successor of the ibaCMU-S and is based on the ibaPDA system. In this version the ibaDAQ can be used instead of an ibaCMU-S with almost the same functionality.



The following is currently possible:

- Configuration and calculation of all existing indicators
- Configuration of 2 TCP/IP send telegrams and 2 TCP/IP receive telegrams to receive and send and receive process data with max. amount of 64 channels each.
- Connection of 2 digital sensors to the ibaDAQ to measure the e.g speed signal of an aggregate. The digital outputs can not be configured from ibaCMC.
- Measure up to 32 IEPE sensors in paralell
- Measure up to 40 kHz
- Files are created per snapshot which makes it easier to perform later analysis on it.
- Comunication of ibaDAQ and ibaCMC
    - Download Configuration to ibaDAQ from ibaCMC
        - Automatic or manuell apply of ibaCMC configuration in ibaPDA is possible.
    - Automatic Upload DAT files and KPIs to ibaCMC
    - Basic Diagnostics data (CMU Info) from ibaPDA in ibaCMC

Notes:

- There is no automated workflow to replace an ibaCMU-S with an ibaDAQ.
- Sensor defects are not shown in ibaCMC but can be checked directly in ibaPDA. This feature will be implemented in one of the next versions.
- ibaNET750 can not be configured from ibaCMC. But it is possible to connect an ibaNET750 directly to ibaPDA.
- The virtual channel feature is not supported for ibaDAQ anymore. The TCP telegrams can be used instead.

Note

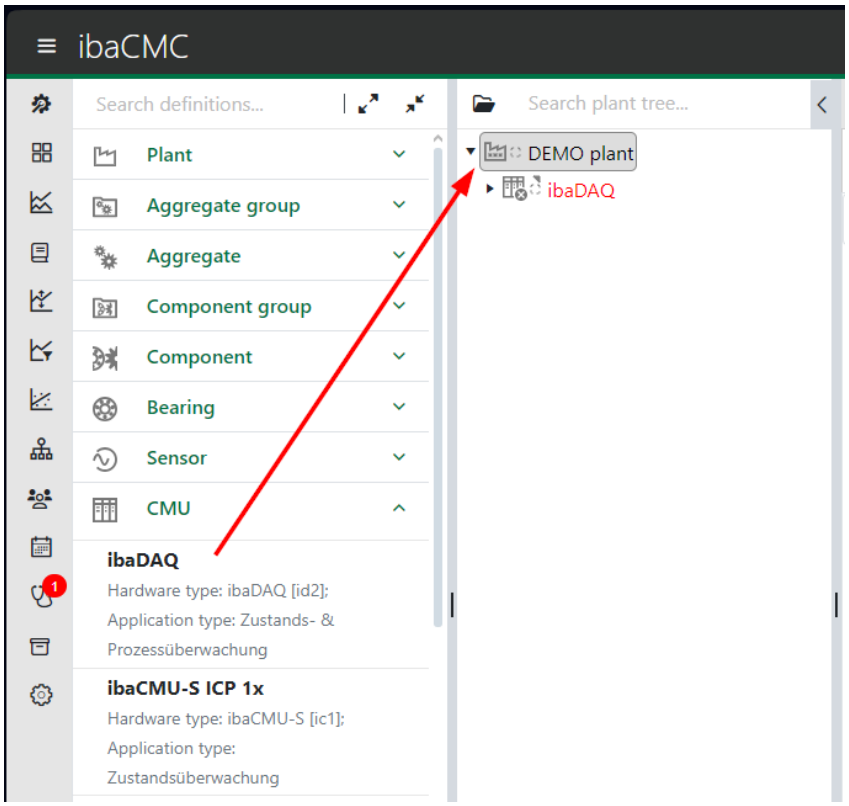
The Crestfactor on the ibaDAQ is calculated based on the standards which is Peak / RMS. The ibaCMU-S calculated the Crestfactor with Peak to Peak / RMS.

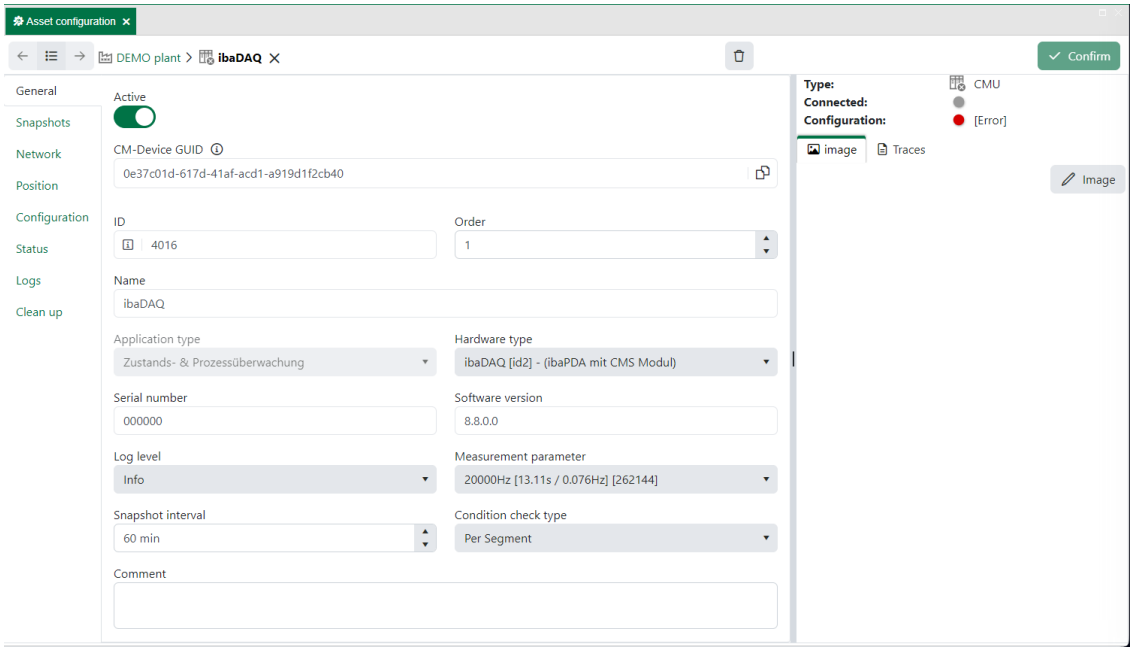
1.1.1 New ibaDAQ definition in asset configuration

To add a ibaDAQ to the planttree is as simple as it was with an ibaCMU-S.

Just drag & drop the ibaDAQ definition from the library on the plant to add the ibaDAQ.

Adding CMU modules, assigning sensors and adding snapshot conditions works like with the ibaCMU-S.

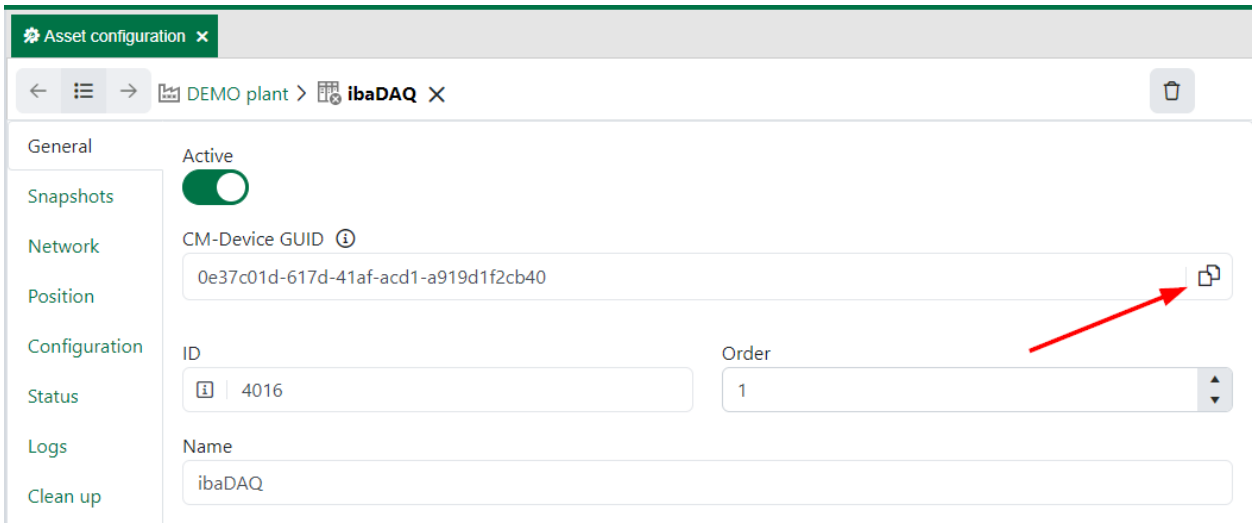




1.1.2 Connecting an ibaDAQ with ibaCMC

Connecting an ibaDAQ to the ibaCMC is explained below.

1. Copy the CM-Device GUID from ibaCMC



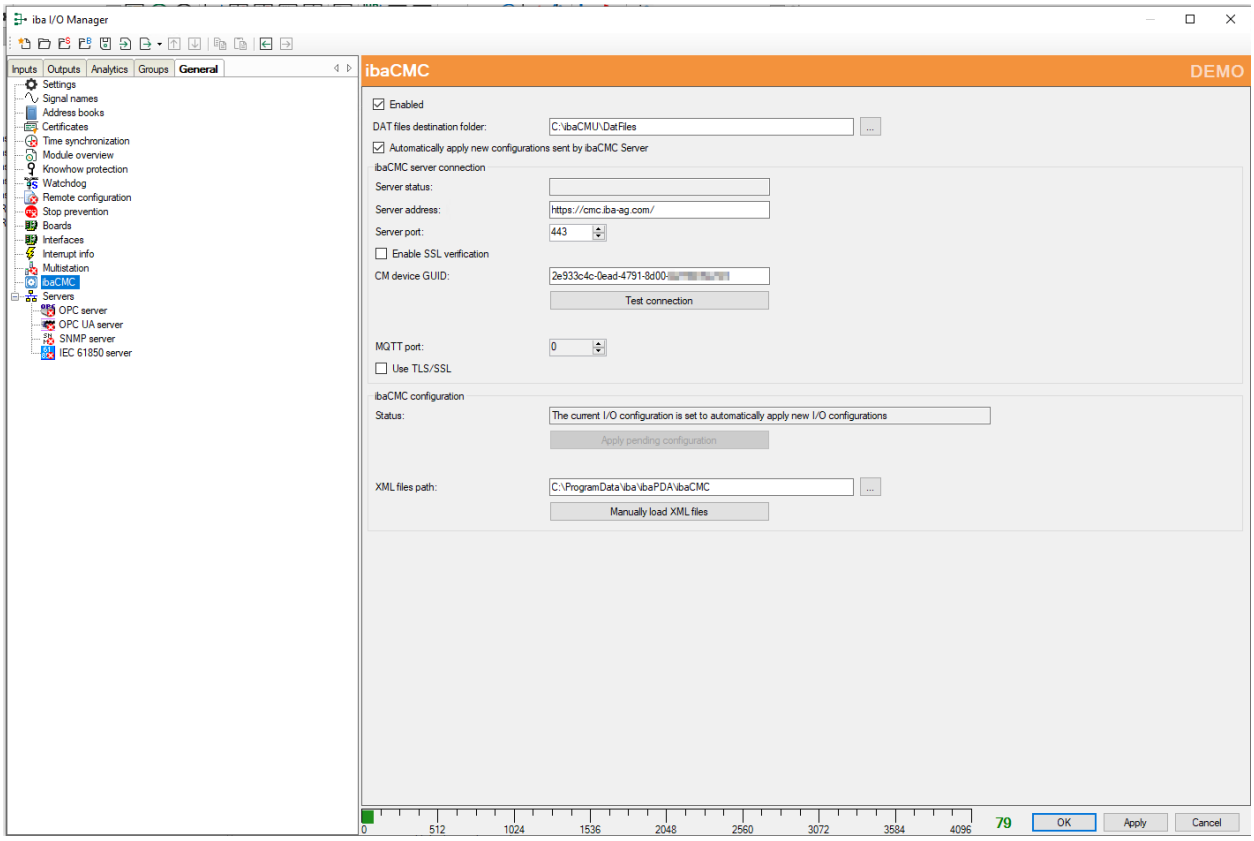
2. Open ibaPDA client and connect to the ibaDAQ
3. Open the I/O Manger and navigate to *General* > *ibaCMC*

Note

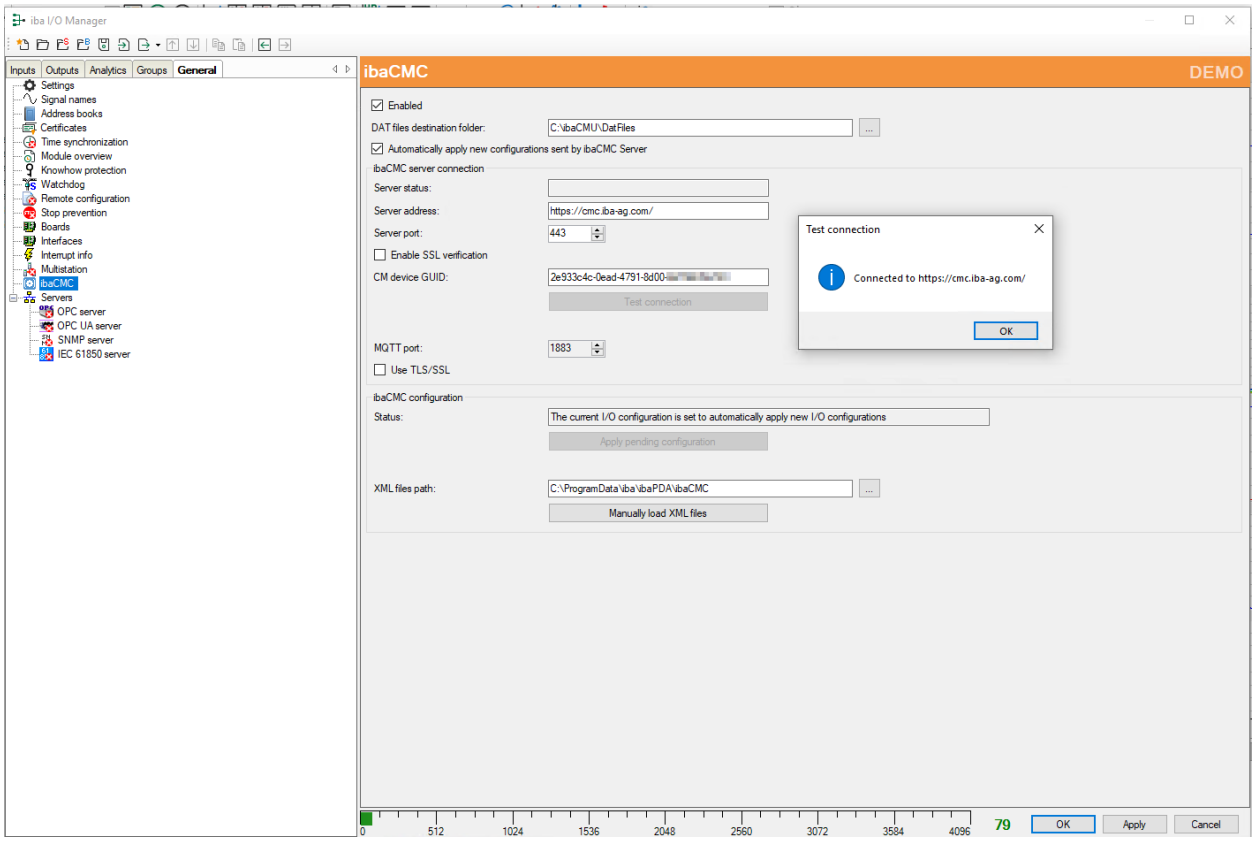
The ibaCMC tab will just be visible if the **ibaCMS-One-Sensor** license is activated on the ibaPDA.

4. Enter the *Server address*, *Server Port* and the copied *CM-Device GUID* to the input fields.

5. By clicking the Test connection button ibaPDA connects to ibaCMC.



If the connection is successful, you should get an success message.



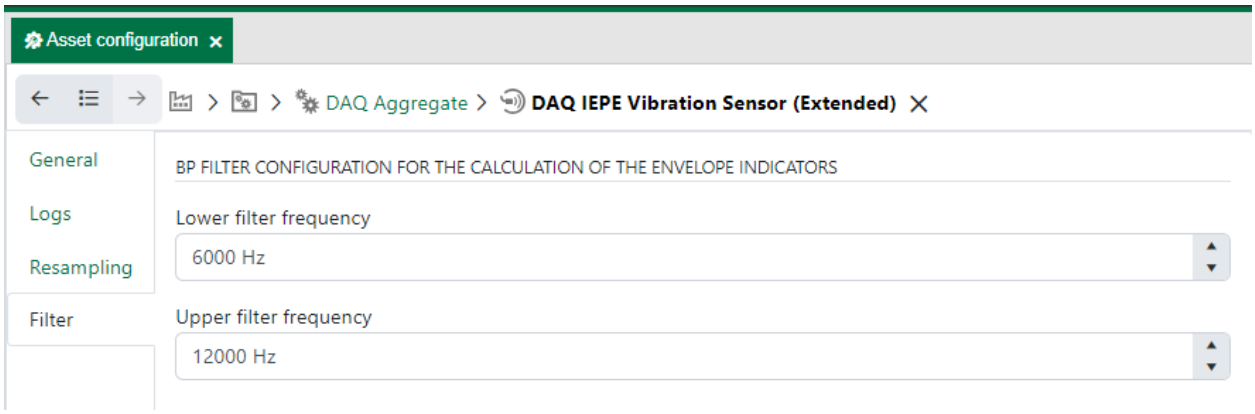
6. After that, click 'Apply' to save the settings in ibaPDA Server.

1.1.3 Custom bandpass filters sensor which are connected to an ibaDAQ

Due to the advanced capabilities of ibaPDA now it is possible to set an custom bandbass filter for each sensor.

Note

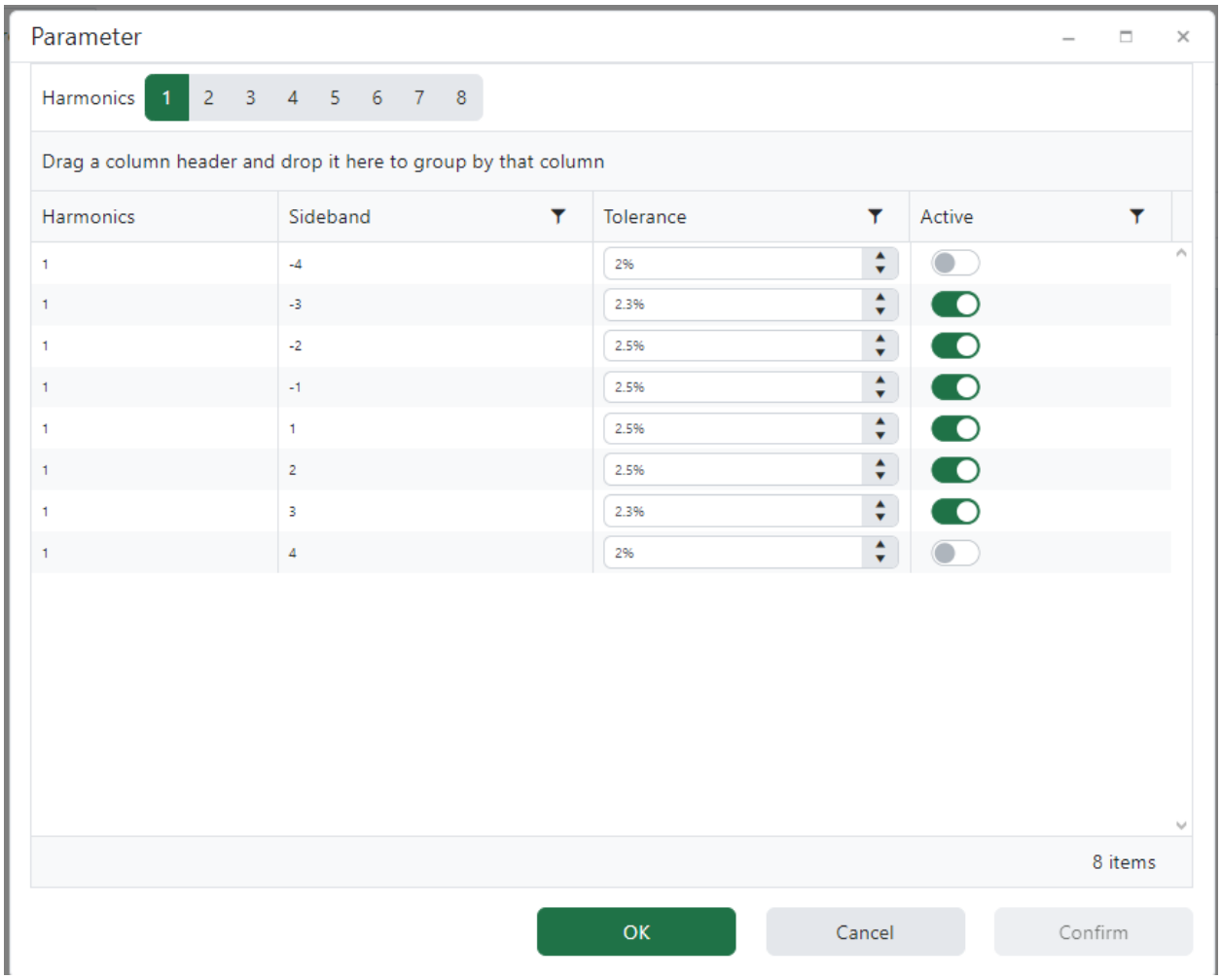
For Lower and Upper filter frequency there is a limit of 5% to 45% of the sample rate of the ibaDAQ. This will be checked when changing the filter frequencies, changing the samplerate or assigning the sensor to a CMU module.



2 Improvements

2.1 Damage pattern view was improved

To have a better overview of the sideband configuration within the CMU calculation of a trend a harmonic selector was added.

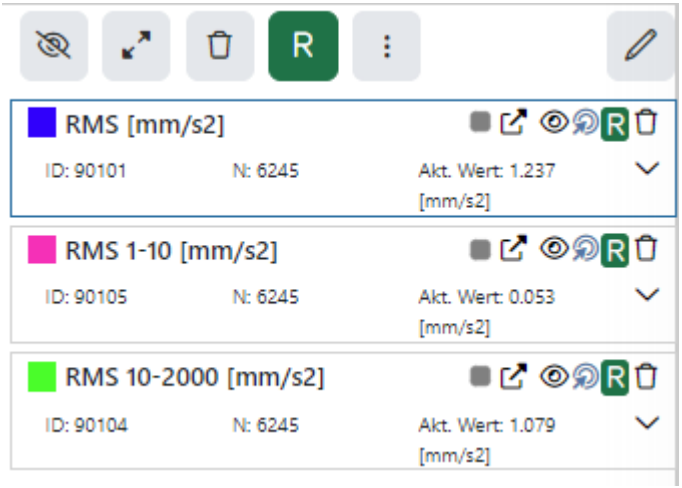


2.2 Renamed RMS 2000-20000 to RMS 2000-max

All RMS 2000-20000 were renamed RMS 2000-max since there was always a filter active below 20000 Hz. Depending on the hardware module it is approximately 1/3 or 1/2 of the sampling frequency.

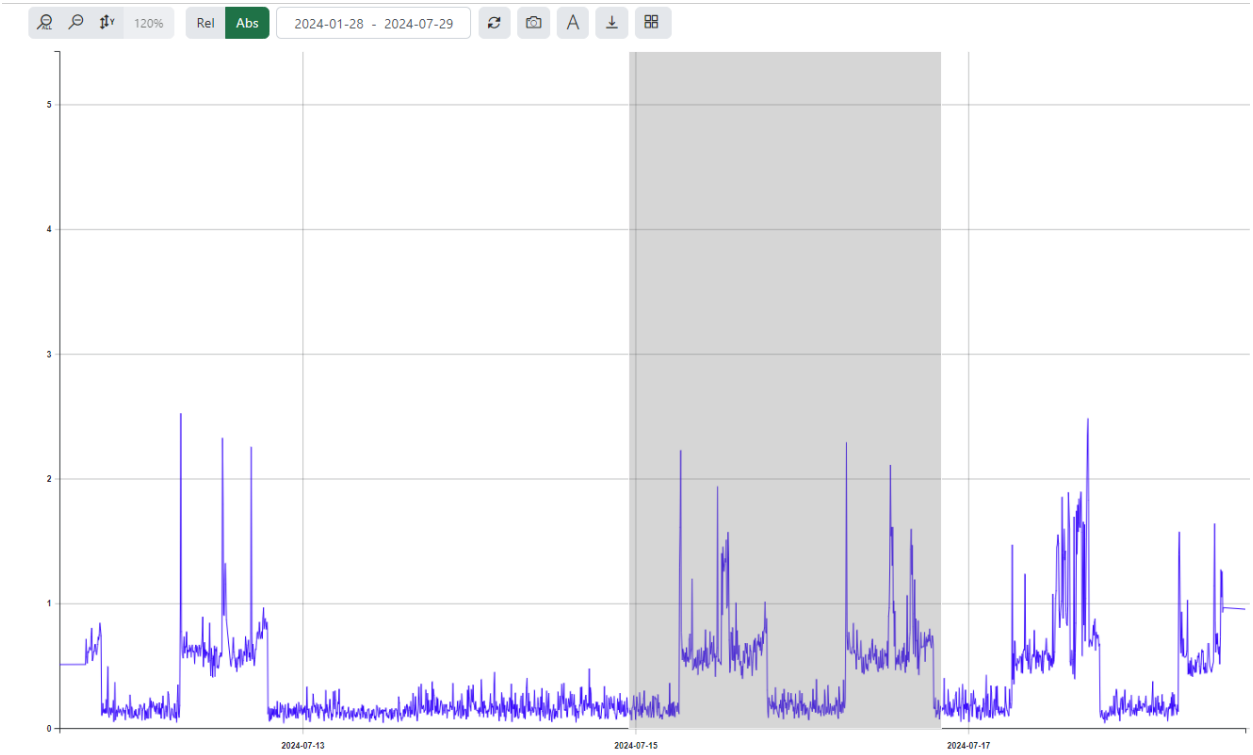
2.3 Raw data view in trend analysis

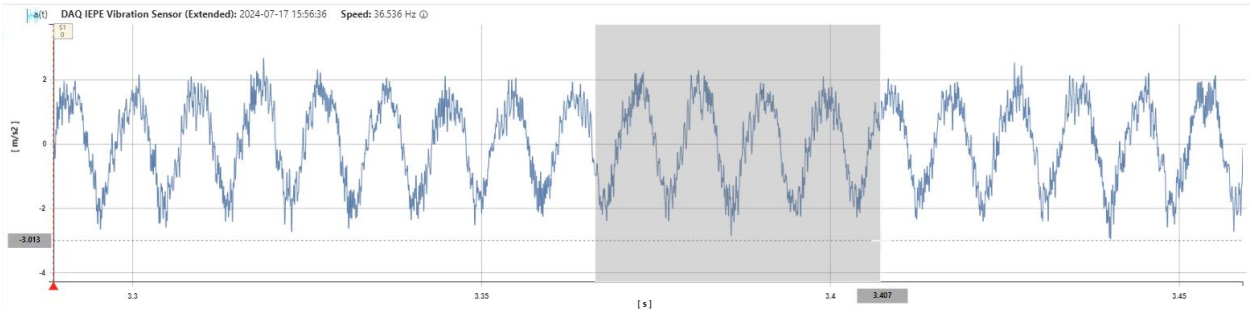
By clicking the “R” button it is possible to enable or disable the Raw data mode for all trends in the trend legend. The state of the raw data mode is also saved when removing trends from the trend analysis legend and add them again.



2.4 Enable X-brush Zoom in Charts with Shift Key

When pressing the shift key during zooming the zoom mode changes to an X-brush zoom. It is the same behaviour as in ibaPDA and ibaAnalyzer.




a(t) DAQ IEPE Vibration Sensor (Extended): 2024-07-17 15:56:36 Speed: 36.536 Hz
[m/s2]
2
0
-2
-3.013
-4
3.3
3.35
3.4
3.407
3.45
[s]