

More Than Just Data Acquisition

Visualize, automate, save, analyze



Up to Any Challenge



Reliable and dependable results

Are you faced with a challenging measurement task and need software that offers more than just data acquisition? Regardless of how complex your challenges may be, you can depend on catman to reliably support your data acquisition and analysis. catman allows for data visualization, analysis, storage and reporting even during the measurement.

Configure catman to fully meet your requirements and benefit from using the software's extensive range of functions. Whether it is in mobile road tests, testing of components in test benches, monitoring tasks or research: catman is up to any challenge.

From Sensor to Software

catman is the software that seamlessly integrates with the measurement chain comprising of precise sensors, transducers and measuring amplifiers from HBM. This perfect interplay of all components results in reliable data.

catman enables you to get your results quickly. Use TEDS* and the sensor database to configure your channels in no time and get started with your measurement immediately. The acquired data is automatically stored, together with the data ensuring traceability of your measuring equipment and measurement task.

Various visualization options enable you to decide individually how you would like to map your data, for example, by directly linking to an image of your test sample. In addition, you can integrate data from multiple sources such as measuring amplifiers, optical interrogators, cameras or GPS. Save data with up to 12 MS/s or 100 MB/s and perform live or post-process analysis.



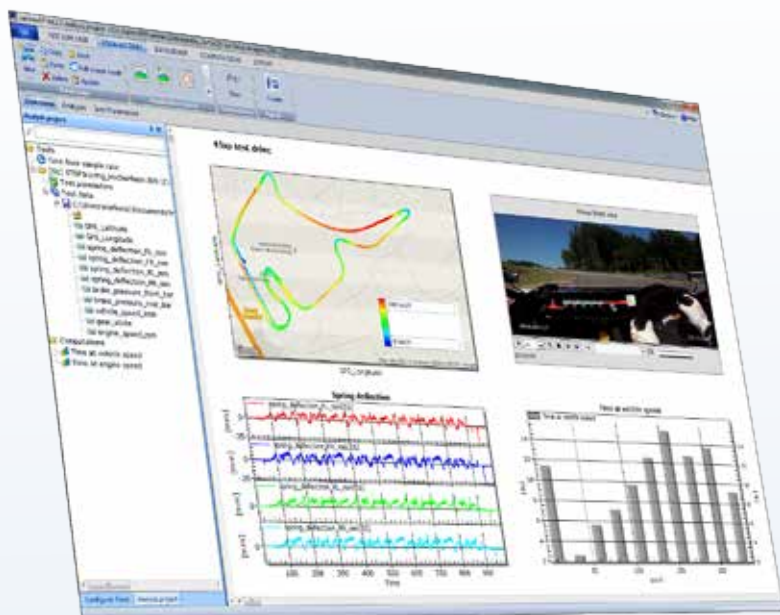
*Transducer Electronic Datasheet:

The measurement modules identify transducers as soon as they are connected and automatically configure the channel.

A Valuable Tool

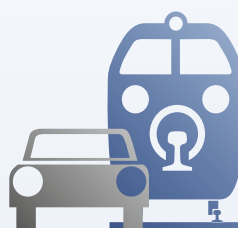
catman is a powerful and versatile tool that supports your measurement task.

Practical functions at all times offer you the flexibility required to optimally process your measured data.



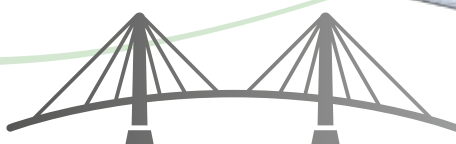
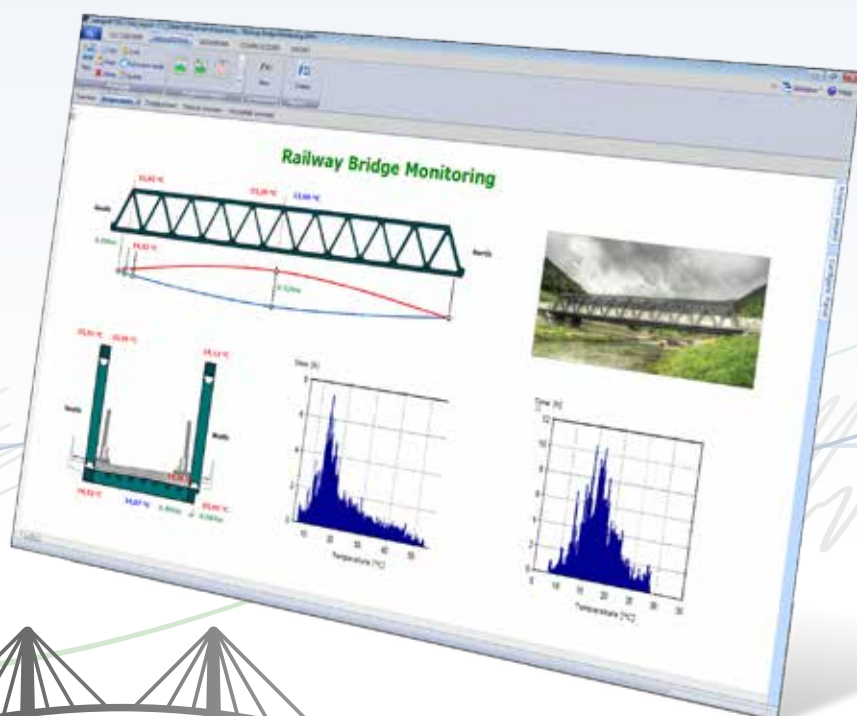
Mobile data acquisition

- Acquire vehicle bus and analog measured data in parallel and synchronously
- Integrate GPS, wheel force sensor and video data
- Assign events by date and place to video, data stream and map
- Perform online data counting using Rainflow and time-at-level



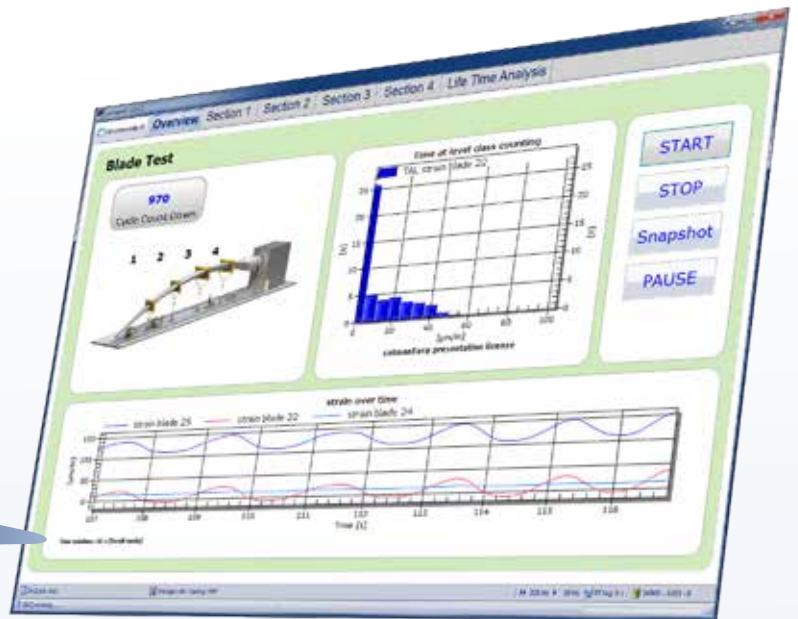
Monitoring

- Take long-term measurements over several days, weeks and months
- Carry out parallel data acquisition jobs using a single data recorder (individual files, triggers)
- Save data locally or automatically transfer data to FTP servers or the Cloud
- Implement automated actions and alerts such as smart phone push messages triggered by defined events



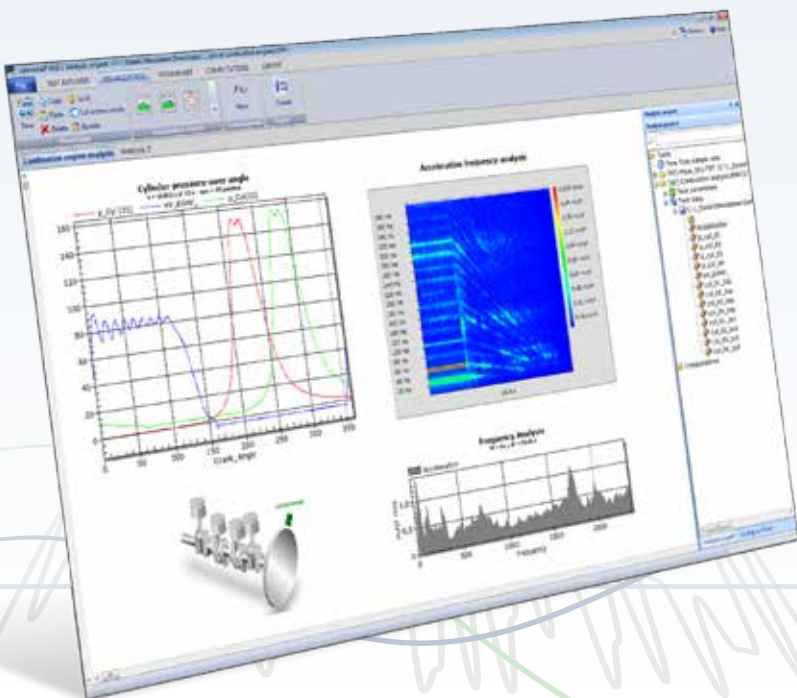
Durability testing

- Reduce data through cyclic memory module, cycle counter, range pair counting and Rainflow analysis
- Peak valley detection
- Strain gauge rosette calculation
- In particular for large structures (with up to 20,000 channels):
 - Live access to measured data for any number of users through client server architecture
 - Intuitive configuration of the measurement task through logical channel groups



Functional testing and analysis during development

- Analysis of combustion engines through visualization of measured data over angle
- Frequency analysis with 2D color spectrogram
- Noise analysis
- Human vibration analysis according to EN ISO 8041
- Electrical power calculation and analysis



Data Analysis Made Easy

catman combines all the functions you need for your data acquisition and analysis tasks. Convenient channel configuration using TEDS, sensor database or CAN DBC file enables you to easily start measuring and use the wide range of catman options right away.



Visualize and control

- Individually visualize and control on multiple pages, screens or in full-screen format
- Visualize signals in the time, frequency or angular range
- Integrate up to four video signals
- Visualize GPS data on maps



Save

- Save data with up to 12 MS/s or 100 MB/s
- Record two parallel measurement tasks and statistics log
- Use signal analysis to define smart triggers
- Multiple formats for storage and export available (catman BIN, Microsoft® Excel, ASCII, MDF 3/4, National Instruments DIAdem, MathWorks MATLAB, RPC III, UFF58, etc.)
- Scale few up to 20,000 channels



Automate

- Trigger automated actions by defined events such as email alert or smart phone push message
- Use auto sequences to automate work flows and test sequences
- Use VBA script to automate analyses and advanced functions



Analyze

- Compare data sets, compute and analyze signals
- Use plugins for rotating mechanical shafts, combustion engines, electric drives and mechanical stress and fatigue life analyses
- Perform powerful data analysis



Report

- Create professional reports through export of the visualization to Microsoft Word
- Create print page in multiple formats



	catman [®] Easy	catman [®] AP	catman [®] PostProcess
	Visualize and save	Visualize, save, analyze and report	Analyze and report
Live data view and storage			
Acquire and save data with up to 12 MS/s	✓	✓	--
Visualize live data	✓	✓	--
Integrate video	\$	✓	--
Acquire GPS data	✓	✓	--
Measurement and data acquisition jobs	✓	✓	--
Live data analysis			
General mathematics functions	✓	✓	--
Math functions for structural and durability testing, drive train and electrical power	✓	✓	--
Noise analysis	\$	✓	--
Human vibration analysis according to EN ISO 8041	\$	✓	--
Post process data analysis and handling			
Graphically visualize data over time, frequency, range, and position	✓	✓	✓
Visualize GPS data on maps	\$	✓	✓
Clean up and edit data (curve operations, statistics)	\$	✓	✓
Analyze data based on video	\$	✓	✓
General mathematics functions	\$	✓	✓
Math functions for drive train, noise analysis, human vibration analysis according to EN ISO 8041, structural and durability testing	\$	✓	✓
Export data and create reports	✓	✓	✓
Automation of recurrent activities			
Create auto-sequences	\$	✓	\$
Create scripts	\$	✓	\$
Additional system functions			
Configure devices	✓	✓	--
Parameterize CAN via DBC file	✓	✓	--
Acquire and parameterize optical interrogator data	\$	\$	--
	catman[®] Enterprise		
Structural testing with high channel counts	<ul style="list-style-type: none"> ▪ Up to 20,000 measurement channels ▪ Shunt calibration of all strain gauge channels with just one click ▪ Perfect distribution of tasks through multi user function ▪ Many trigger and event types, e.g. increased sample rate with events ▪ Quick and easy (offline) configuration of measurement channels ▪ Application-specific visualization and tables ▪ Interaction with control systems ▪ Logging of all events 		

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measure and predict with confidence

