MOTEON

Motor Test Bench

Integrated testing and measurement platform for embedded systems

Motor Test Bench - MTB

Manual and automated testing of motors and electronics.

With our Motor Test Bench, it is possible to perform manual or automated tests on complete mechatronic systems, as well as testing various environmental influences (e.g. fluctuations in supply voltage or simulated communication errors). The MTB offers enough space and capacity to operate several load sections thus several load motors.

Width: 1245 mm
Length: 2040 mm
Height: 1775 mm

One MTB for various use cases:

Separated or integrated DUT (motor and electronics) measurement

Deviating from the normal testing of motor and electronics seperatly. It is permissible to use an integrated DUT consisting of motor and electronics. This is then located completely in the mechanical test chamber.

Simultaneous measurement and recording of various variables

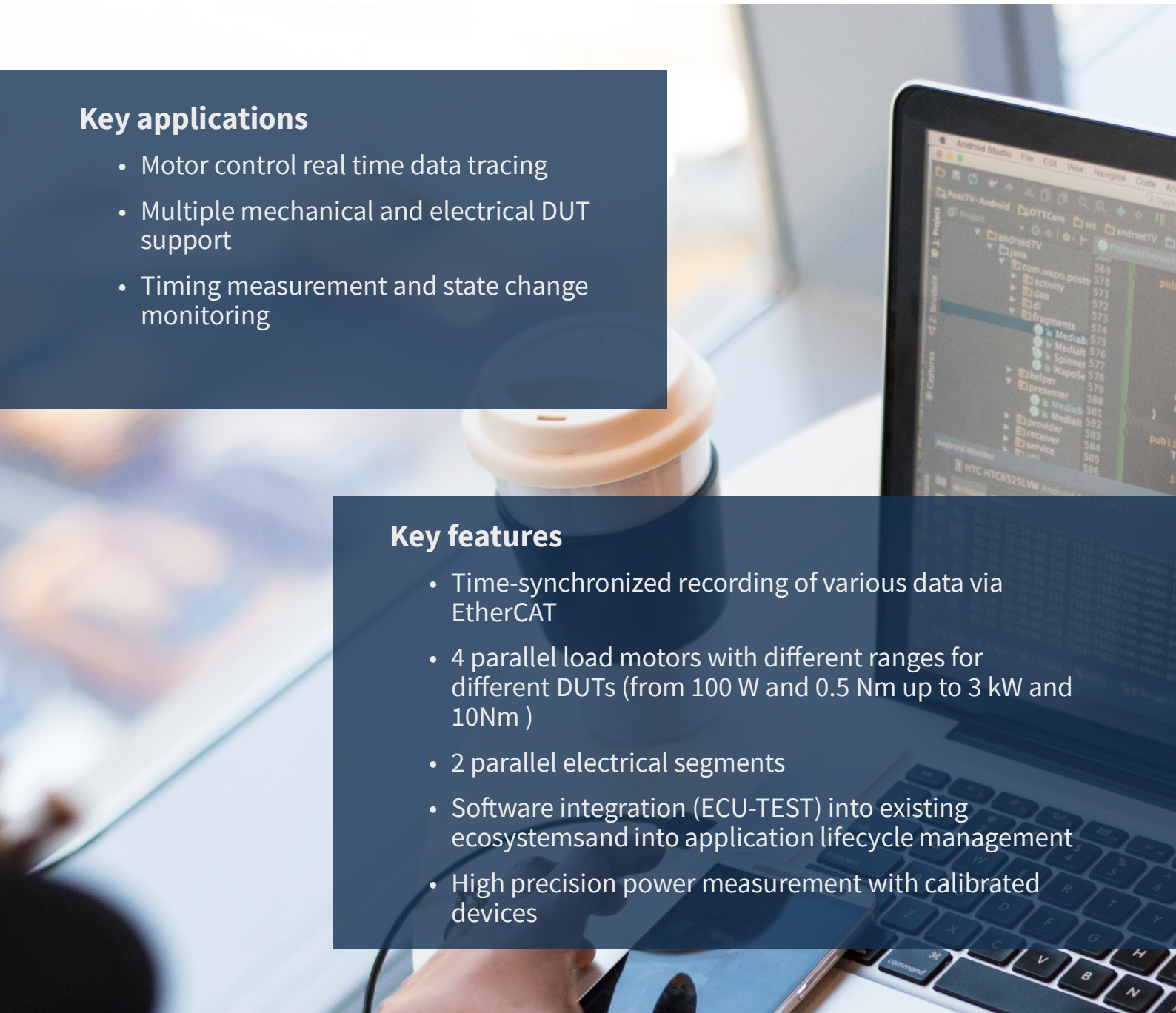
The MTB offers coverage for testing and measuring the functions and parameters of embedded systems. Analyzing mechanical and electrical characteristics, or evaluating mechatronic components during the development. It is a versatile tool that can be used to perform these tasks effectively.

Design constructed for reliable results

Its modular design allows for different performance classes, providing precise and reliable results across diverse applications.

Technical parameters

- Maximum continuous output power of 3.6 kW and maximum peak power of 4 kW
- High precision torque measurement with encoder resolution of 24 Bit
- Ingress Protection (IP) code of IP54 for electrical connections related to safety modes
- Wide range of voltage supplies including 230 VAC and 440 VDC



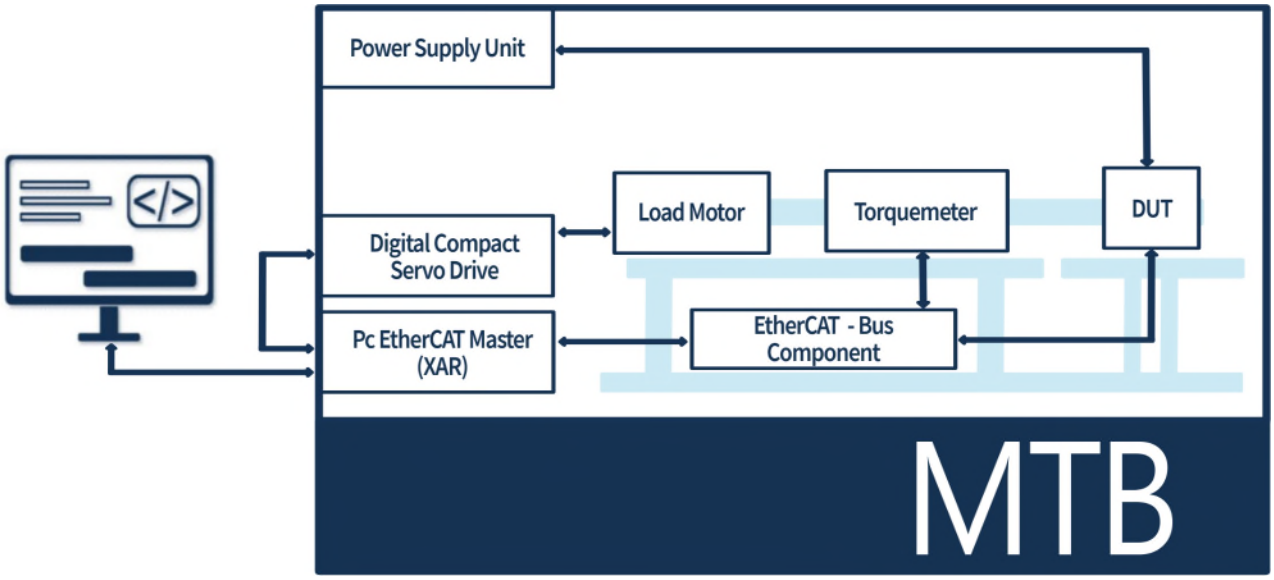
Key applications

- Motor control real time data tracing
- Multiple mechanical and electrical DUT support
- Timing measurement and state change monitoring

Key features

- Time-synchronized recording of various data via EtherCAT
- 4 parallel load motors with different ranges for different DUTs (from 100 W and 0.5 Nm up to 3 kW and 10Nm)
- 2 parallel electrical segments
- Software integration (ECU-TEST) into existing ecosystemsand into application lifecycle management
- High precision power measurement with calibrated devices

MTB Setup



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Do you have questions about this document?

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