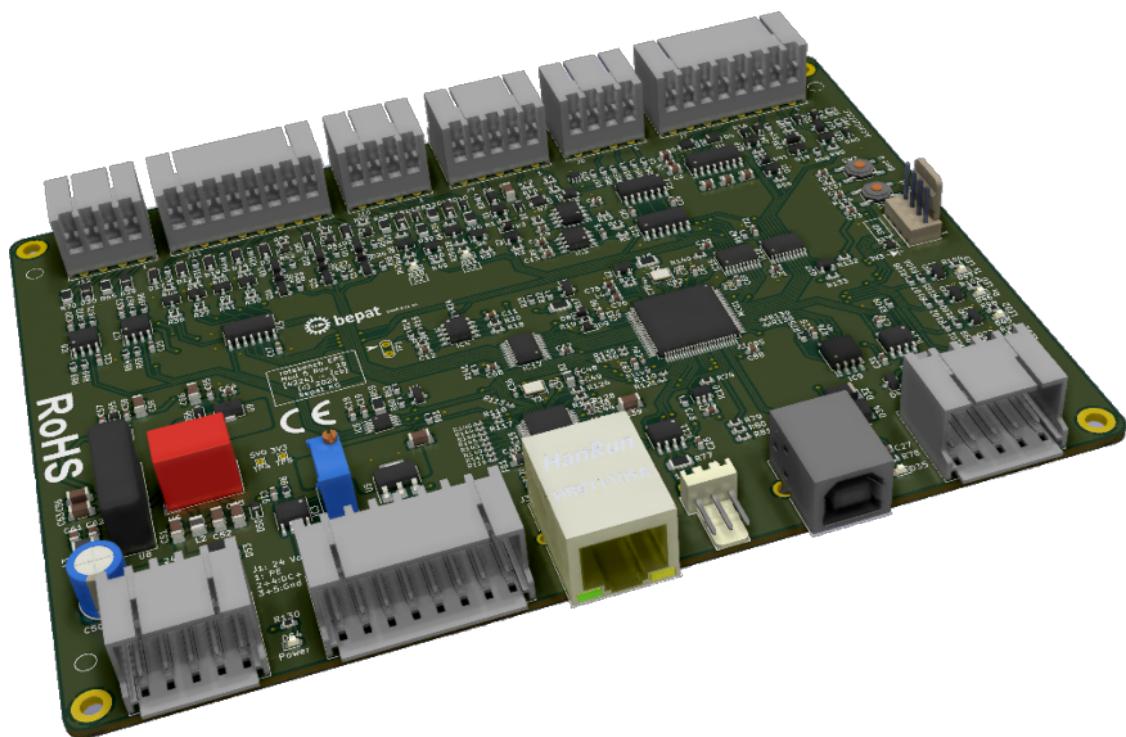


rotabench® EPS Mod. 5

for System Integrators



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The major Challenge in System Integration is:

Bridging the gap between low level hardware integration and high level functionality!

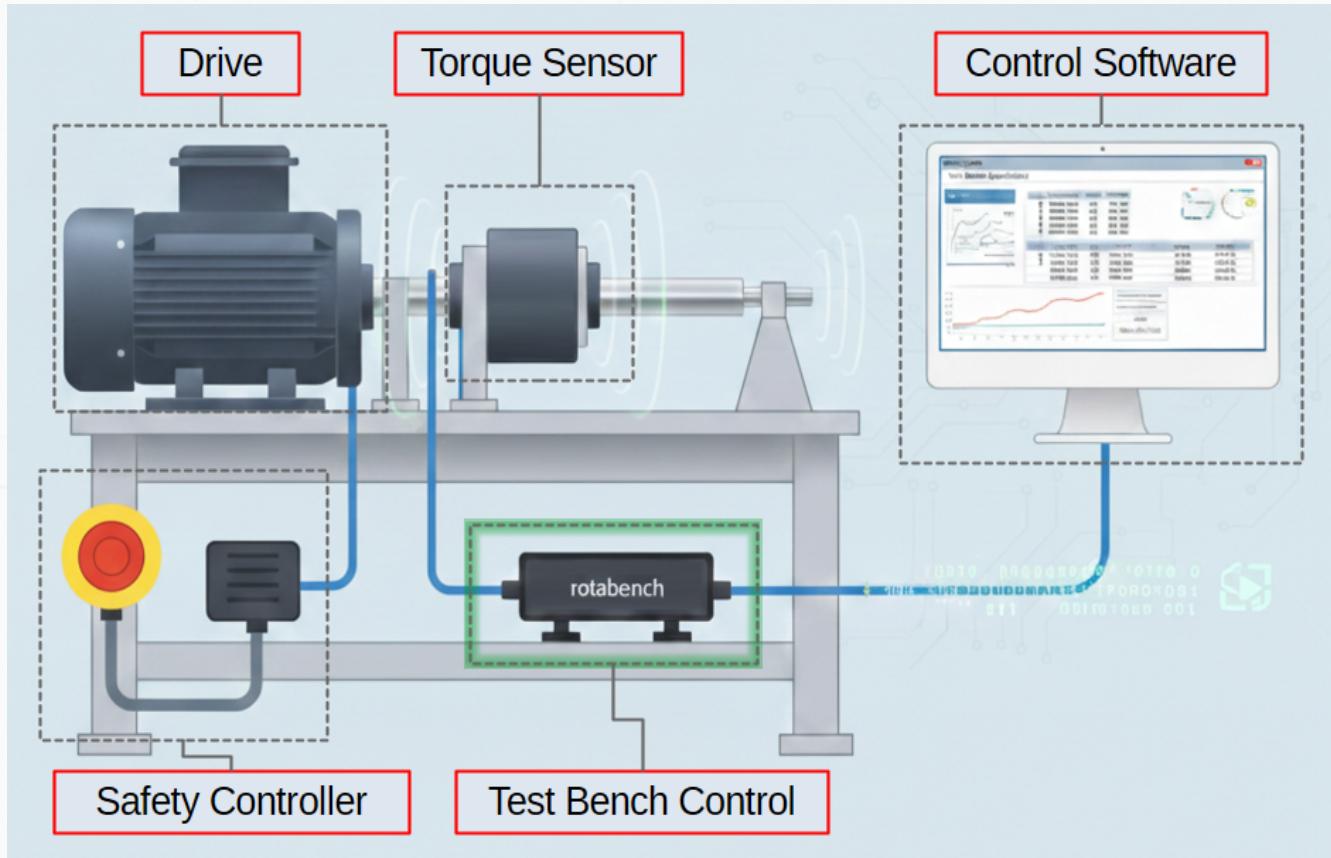
- Building a rotating test bench from scratch is a high-risk investment of engineering hours.
- The "Entry-Level Burdens" often consume the majority of your project budget before the first measurement is even taken.

The rotabench® EPS Advantage:

**Leapfrog the "Low-Level" complexity
with a unified abstraction layer!**

- The Foundation to Build On: A pre-engineered hardware core that standardizes the interaction between drive, sensor, safety and your higher level PLC or PC.
- Ready-to-Scale Versatility: One single device solves the fundamental integration puzzles for any rotating test bench application.

Main Components of a rotating test bench:

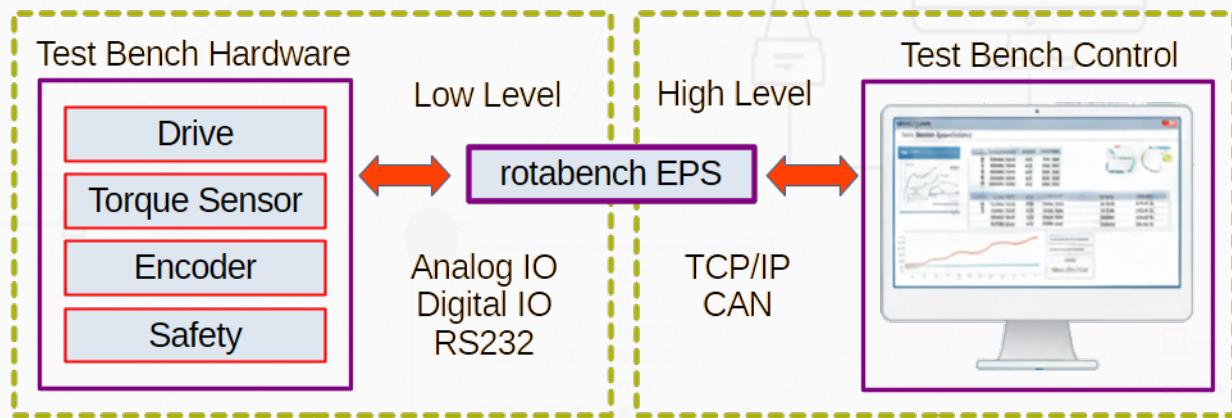


A rotating test bench needs at least:

- an industrial drive
- a torque sensor + encoder
- a safety controller
- a test bench control / PLC
- an automation & Control PC for visualization

Unified Hardware Integration

rotabench EPS is the intelligent link between your high-level application and the physical test bench hardware.

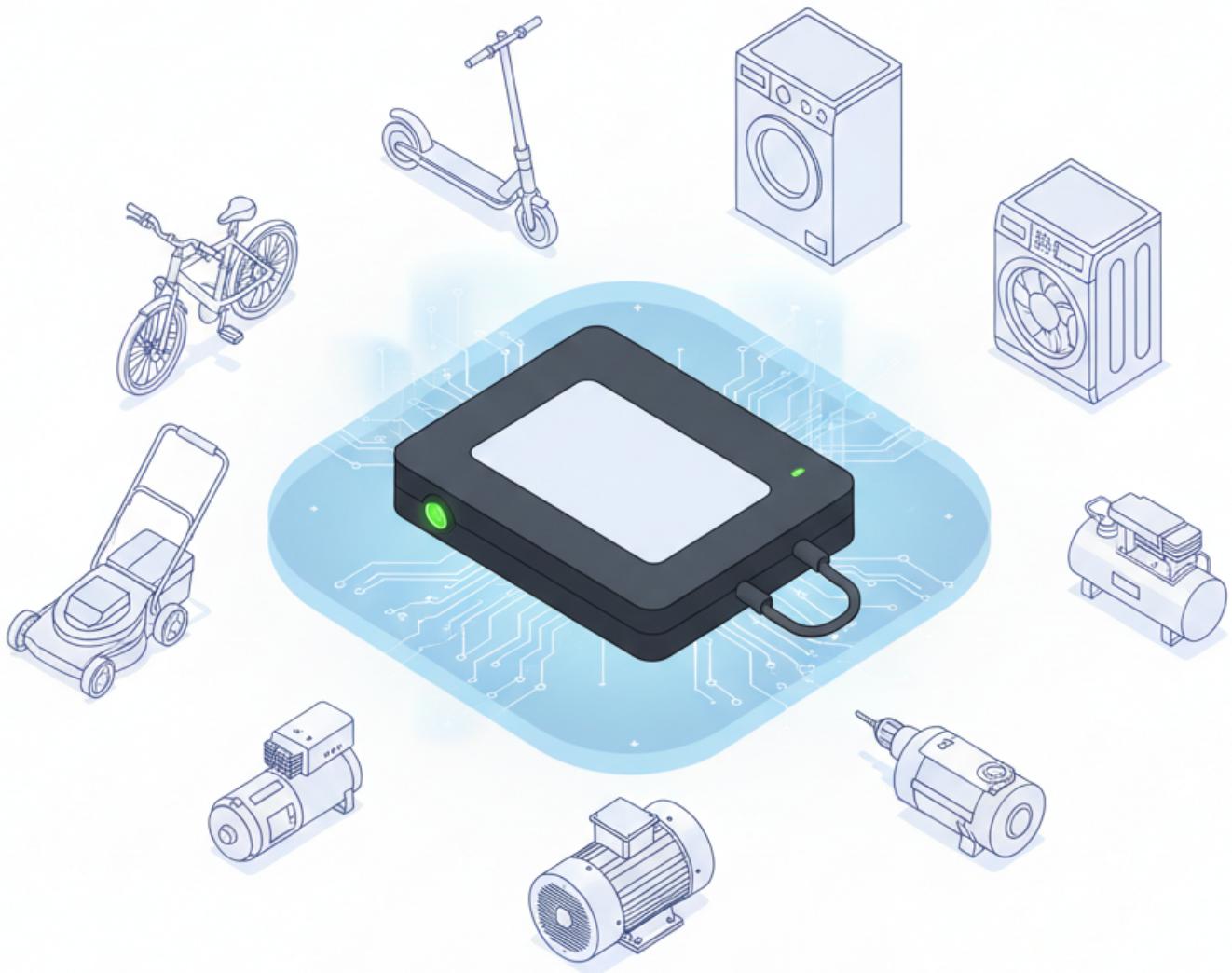


- **Industrial Drive:** direct speed or torque control – no need for deep-level inverter programming.
- **Torque Sensor + Encoder:** 1:1 plug-in for Kistler 4503. Integrated high-speed signal processing for torque, speed, and angle.
- **Safety Controller:** Built-in interface to bridge the emergency stop circuit between hardware and software.
- **Automation / Control PC:** All data is pre-processed and delivered via one single, clean TCP/IP or CAN interface.

Flexible Form Factors: From barebone PCB and DIN-rail (Plastic/Metal) to 19" rack enclosures or custom housings – we provide the mechanical integration that fits your cabinet.

One Solution – Endless Applications

Become the go-to partner for any rotating test application – from E-Mobility to Industrial Fluids



Anything that rotates needs to be tested. Any rotating test bench can be built with rotabench EPS. Whenever more than just torque and speed are relevant, rotabench EPS is the foundation that grows with your needs."

Infinite Markets. One Core.

Stop reinventing the wheel. Redirect your engineering resources from tedious low-level integration to high-value application logic.

Your Universe of Applications:

The world is rotating – and every single part needs a test bench. Where will your expertise shine next? Pick your niche:

| AUTOMOTIVE & E-MOBILITY | HOME & PROFESSIONAL APPLIANCES | INDUSTRIAL & GREEN TECH |
|---|--|---------------------------------------|
| E-Bike & Micro-Drives (BLDC/PMSM) | High-Speed Turbines (Vacuum Cleaners) | Heat Pump Compressors (Scroll/Piston) |
| Chassis Actuators (EPS, Braking) | Drum Drives (Washing Machines) | Wind Energy (Micro-Turbines, Pitch) |
| Thermal Management (Coolant/Oil Pumps) | Fluid Systems (Dishwashers, Mixers) | Industrial Pumps (Hydraulic/Water) |
| Comfort Systems (Windows, Seats, Tailgates) | Battery Power Tools (Drills, Saws) | Solar Tracking (Precision Drives) |
| Starter & Generators (Mild Hybrid) | Garden Tech (Mowers, Trimmers) | HVAC (Industrial Fans & Blowers) |
| Active Suspension (Damping Actuators) | Robotic Vacuum Drives (Wheels & Brushes) | Hydro Power Units (Small Scale) |
| Electronic Braking (iBooster/Actuators) | Medical Centrifuges (Lab Equipment) | Conveyor & AGV Drives (Logistics) |
| Electric Outboard Motors (Marine) | Personal Care (Hair Dryers, Shavers) | Dosing Pumps (Chemical/Pharma) |

The variety of rotating components is endless. rotabench EPS provides the digital headroom and hardware reliability to master them all. Stop debugging sensors – start delivering systems.

The Foundation of Your Success.

rotabench EPS is the beginning, not the end. It's the building block that makes complex test-bench hardware as easy to handle as a digital multimeter with an Ethernet port.

Scalable Software - From Setup to Suite:

- **Basic Edition:** Included. Instant hardware setup and signal validation.
- **Professional Suite:** Full automation and measurement suite via license upgrade.
- **Open API:** Seamless integration into your own LabVIEW, Python, or C# software

Open Sensor Integration: No Limits

- **Any Device:** Connect any PC-based measurement hardware (USB, Ethernet, etc.).
- **Unified Data:** Combine rotabench data with e.g. external power analyzers.
- **Modular:** Your architecture stays consistent, whatever you need to measure ...

The Philosophy: Connect. Read. Scale.