

Ready for Future Mobility

SYSTEMS, COMPONENTS AND SERVICES
FOR RAIL VEHICLES



KIEPE has been based in Düsseldorf since 1906. Today, we develop and integrate electrical systems and components for rail vehicles worldwide. We coordinate traction, auxiliary power supply and vehicle control systems, combining proven

solutions with new technologies.

We support vehicle manufacturers and transport operators from system design through to in-service support – for both new vehicles and the modernisation of existing fleets.

System Portfolio
For New Vehicles and Modernisation

For new vehicles and modernisation projects, KIEPE provides electrical equipment ranging from individual components to fully integrated systems. We coordinate traction, auxiliary power supply and vehicle control systems, integrating third-party components where required. Equipment diagnostics and services complete the portfolio, supporting reliable operation throughout the entire lifecycle.

Systems and Components

Train Control and Management System	Auxiliary Power Supply System	Traction System
Components TCMS incl. application HMI / driver's cab display Emergency brake switch Master controller Including the integration of third-party components.	Components Auxiliary container Auxiliary operating container	Components Traction container Four-quadrant controller (4QC) Including the integration of third-party components.

Equipment Diagnostics

Service	Throughout the Entire Lifecycle	
• After-sales service • Repairs • Trainings	• Spare parts supply • Maintenance • Emergency service	• Obsolescence Management • Testcenter • Fleet management

Our Technology in Detail

Train Control and Management System

Centralised vehicle control based on an integrated SIL 2 hardware and software platform, complemented by application-specific vehicle software and driver's cab displays.

- Modular function library with graphical programming
- Real-time data and intuitive equipment diagnostics
- Cybersecure and cloud-ready for fleet and energy management



Auxiliary Power Supply

Compact auxiliary power converters for roof or underfloor mounting, offering high power density thanks to patented circuit topology. The use of silicon carbide (SiC) will further reduce weight and power losses.

- Independent three-phase AC (3AC) and DC power modules
- Parallel operation on a 3AC busbar
- Fully rated neutral conductor
- Self-starting from the overhead line, even with a deeply discharged battery



Traction

Traction converter modules and traction control units with customer-specific application software. Optimally matched traction and braking technology ensures a high level of ride comfort.

- DC or AC modules for 600 V, 750 V and 1,500 V
- Energy-efficient control and maximum use of electric braking
- Also available as a combined unit with integrated auxiliary power supply
- Aluminium or steel housings with different cooling concepts



Service and System Test Facility

Spare parts, repairs and obsolescence management support reliable operation throughout the entire lifecycle. Training, on-site support and emergency service complete the offering.

At its in-house system test facility, KIEPE tests traction, auxiliary power supply, battery and vehicle systems.



Broad Expertise. Proven Worldwide.



Gothenburg



Cologne



Schwerin



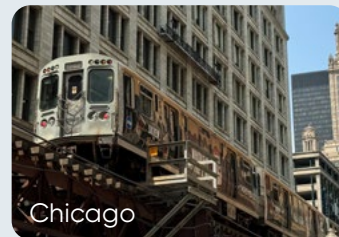
Erfurt



Düsseldorf



Class 455



Chicago



Stuttgart



Draisy



LEAG



Gmunden



Protos



Vienna



Chemnitz



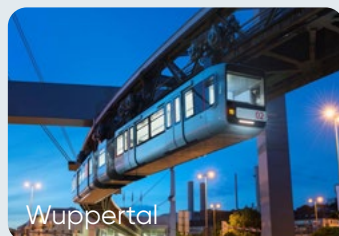
Hanover



Ruhrbahn



Dortmund



Wuppertal



Melbourne



Vossloh DE18

