

TwinTrain-Traction



TwinTrain-Traction transforms the testing of electrical and mechanical couplings in rail vehicles by electronically and mechanically simulating a coupled train. Instead of requiring a second vehicle to verify traction and coupling functionality, maintenance and commissioning teams can perform comprehensive testing using a single vehicle and a portable test platform.

TwinTrain-Traction

Product Highlights:

- Eliminates the need for a second vehicle during testing
- Wireless tablet-based operation for maximum flexibility
- Supports dual-traction mode, including coupling and communication interface testing
- Fast deployment for maintenance and commissioning activities
- Built on the UTMS platform

→ Electronic and Mechanic Simulation of a Coupled Vehicle

Designed for both mainline and urban rail applications, TwinTrain-Traction supports a wide range of coupling interfaces while reducing maintenance effort, improving fleet availability, and simplifying workshop and field operations. Built on our proven UTMS architecture, the solution provides a future-ready platform with long-term support and scalability.



→ Efficient Coupling and Traction Testing Through Electronic Simulation

- Simulates all required electrical and mechanical coupling interfaces
- Supports multiple traction tests and functional verification activities
- Enables commissioning and maintenance of streetcars and mainline rail vehicles
- Streamlines troubleshooting and diagnostic activities
- Reduces vehicle movement and resource requirements during testing
- Eliminates the need for a second vehicle



→ TwinTrain Runs on UTMS

Avera Powered by Spherea's UTMS (Universal Test Management System) is a centralized platform that enables organizations to **define, release, execute**, and prove testing activities with complete traceability. By linking test requirements, procedures, configurations, execution records, and results in a controlled workflow, UTMS delivers **auditable test evidence and repeatable processes**. Its hardware-independent architecture preserves test knowledge across generations of technology, supports long-term maintainability, and allows organizations to modernize equipment without losing valuable test assets, ensuring sustainable test capability for decades.



Key Benefits

- Reduced maintenance times without requiring additional vehicles
- Lower labor and material costs during testing activities
- Increased fleet availability and operational efficiency
- Simplified commissioning and diagnostics processes
- Flexible deployment across multiple vehicle types
- Future-proof architecture with long-term platform support

→ Technical Highlights

- Wireless communication architecture
- Tablet-based local or remote operation
- Automated and customizable test sequences
- Advanced energy management
- Modular and retrofit-friendly design
- Long-term availability through UTMS technology

SYSTEM SPECIFICATIONS

Product Type	Coupled Vehicle Simulation System
Primary Use	Maintenance & Commissioning
Platform	UTMS
Operation	Wireless Tablet Interface
Vehicle Compatibility	Mainline Rail & Streetcars
Additional Vehicle Required	No
Architecture	Modular & Retrofit-Friendly
Interface Type	TCN WTB ETB Ethernet/TRDP Passenger Information Systems Audio Signals
Discrete Signals	24V / 36V / 110V