



RAIL AND FLEET MONITORING SOLUTIONS

Vehicle Equipment Measurement Systems

The Next Generation of automated inspection technology, for the optimization of fleet maintenance and inspection routines.

Step into the world of modernized, automated monitoring. With our portfolio of automated, non-contact systems, depots are provided the tools to automatically capture measurement data on key rolling stock components as trains pass by – helping make your fleet safer than ever, without personnel needing to step foot on track.

Solutions designed with maintainers in mind

With systems designed for brakes, collector shoes, pantographs, wheels and more, there's a monitoring solution for every fleet. Each Vehicle Equipment

Measurement System is designed to promote and support optimized, condition-based monitoring and maintenance routines, saving you time, money, and promoting train availability.

Global install base

Rigorously tested in a variety of environments across the globe, our systems are designed to withstand a range of environments and temperatures. With over 200 VEMS installations worldwide, from Australia to Finland, the UK to the U.S., we have demonstrable experience delivering advanced, durable rail monitoring solutions.

SIEMENS

Rail Infrastructure Measurement Systems

Cutting-edge systems, designed to automate and optimize rail inspection and monitoring routines.

Broken Rail Detection System

The Broken Rail Detection system is a train-mounted, self-contained unit suited for commuter vehicles and freight cars. Each train is equipped with a pair of BRD units featuring magnetic sensors and components for power, location and navigation, and wireless communication.

The system continuously scans the tracks for discontinuities, with collected data sent to the Back Office System (BOS). The BOS then alerts following trains to any discontinuities, capable of reliable detection of transverse breaks as small as 0.1 cm in width – at speeds of up to 50 miles per hour.

Data is processed seconds after detection, indicating the break location, and triggering rapid alerts to signaling systems and following trains.

Solution Benefits

Each solution in our portfolio is:

- **Modular & Scalable:** Composed of a series of easily replaceable modules to ensure efficient and pain-free maintenance.
- **Durable:** Designed for a variety of environments, we've ensured our solutions meet the needs of hundreds of depots across the globe - no matter the weather, we're there for you.
- **Rigorously Tested:** Tested and validated against both internal and external industry standards, we deliver the quality you need and can rely on.



- **Highly Accurate:** Capable of measurements down to mere millimeters, we carefully calibrate each system to return the most accurate measurement possible, using a variety of advanced measurement cameras, scanners, and lasers, carefully attuned to your unique fleet and rail layout.
- **Maintainable:** Our solutions are designed with maintainability in mind. We deliver easy-to-understand maintenance routines and schedules for each of our systems, so you can keep your automated inspection technology up-to-date and performing at the highest level possible - without unnecessary downtime.

Visit mobility.siemens.com/global/en/portfolio.html to learn more.



Siemens Mobility, Inc.
One Penn Plaza
11th Floor, Suite 1100, New York, NY 10119, United States

Contact for information:
Customer Services, McClellan, CA 95652
(916) 621-2700, siemensmobility.us@siemens.com

Printed in the USA | © 2025 Siemens Mobility, Inc. | usa.siemens.com/mobility

Subject to changes and errors. Reference to any specific commercial products, processes, or services, or the use of any trade, firm, or corporation name is for the information and convenience of the public and does not constitute endorsement, recommendation, or favoring by their respective entities. The information given in this document only contains general descriptions and/or performance features. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.