



HUMATICS

REAL-TIME TRACK INTELLIGENCE FOR EVERY TRAIN

FOCUS

Transform revenue service vehicles into rolling data platforms, delivering continuous track insights without interrupting operations.

Humatics FOCUS equips revenue service vehicles with advanced sensor and positioning technology to deliver high-frequency data without disrupting service. Operators can detect emerging issues sooner, optimize maintenance, and keep infrastructure safe, efficient, and well-maintained.

KEY FEATURES



REAL-TIME MONITORING & PRECISION ANALYSIS: Continuously captures data from every passing vehicle, pinpointing defects within 3 feet for rapid maintenance action.



INTELLIGENT ANALYTICS ENGINE: Monitors evolving conditions, detects anomalies, and predicts maintenance needs to keep operations running smoothly.



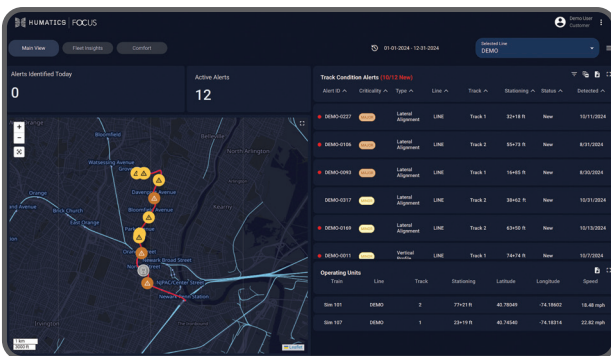
CLOUD-BASED VISUALIZATION: Intuitive dashboards deliver real-time insights into track condition and critical alerts.



SEAMLESS INTEGRATION: Easily connects with existing fleet systems and infrastructure management platforms for streamlined operations.



QUICK TO DEPLOY, MAINTENANCE-FREE: Installs in under two hours per train and operates without ongoing maintenance or calibration needs.



MONITORS KEY TRACK GEOMETRY AND OPERATIONAL PARAMETERS INCLUDING:

- Lateral alignment
- Vertical profile/alignment
- Superelevation/cross-level deviation
- Track twist
- Track warp
- Hard contact or impact
- Passenger comfort
- Emergency brake activations



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HOW IT WORKS



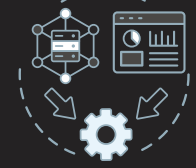
Track geometry anomalies cause irregular train motion

Sensor equipped revenue trains collect, process, and transmit data



AI and ML algorithms detect anomalies

Customer dashboard represents actionable insights



TRUSTED SINCE 2019

SIEMENS

HITACHI

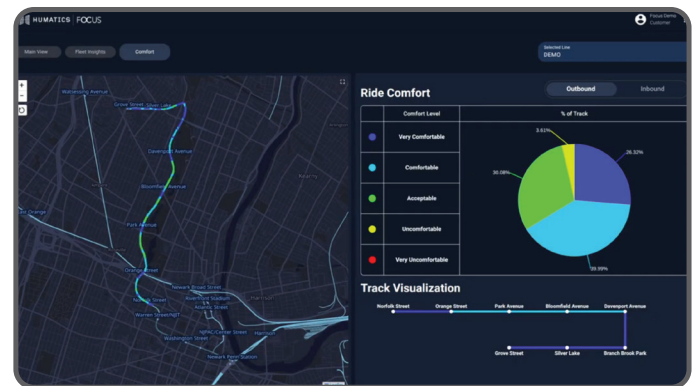


NJ TRANSIT
The Way To Go.

CapMetro

PROVEN VALUE TO OUR CUSTOMERS

- **TRACK DEFECT DETECTION IN-BETWEEN FORMAL TRACK GEOMETRY SCANS:** Revenue service installation performed daily scanning and identified track geometry issues at least 8 months earlier than would otherwise be identified.
- **REDUCTION IN DERAILMENT INVESTIGATION TIME:** Customers verified track geometry in an area of a slow speed derailment within hours of occurrence, saving between 16 – 64 hours of hand measurements.
- **REMOTE DATA ACCESS:** Data for the derailment analysis was immediately accessible via a cloud platform without requiring physical access to the train unit.
- **EMERGENCY BRAKING IMPACTING OPERATIONS:** Identified operational inefficiencies due to abnormal levels of emergency braking during normal operations.
- **VERIFIED TRACK IMPROVEMENTS:** Measure track quality before and after track restorations/ refurbishments to show the improvement in passenger comfort and track geometry parameters.



BETTER FOR YOUR TEAM AND RIDERS

- **MAXIMIZE UPTIME:** Identify and address issues before they disrupt service.
- **REDUCE COSTS:** Optimize maintenance planning with data-driven precision.
- **ENHANCE SAFETY:** Detect early warning signs of potential failures.
- **LEVERAGE EXISTING ASSETS:** Turn your operating fleet into a real-time monitoring network.
- **MEASURE CUSTOMER EXPERIENCE:** Quantify the impact of infrastructure condition on passenger comfort.



WITH HUMATICS FOCUS, ○
YOUR TRACK TELLS ITS STORY IN REAL TIME
SO YOU CAN STAY ONE STEP AHEAD

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