



RAIL TEMPEST™

Real Time Rail Temperature and Force Reporting



Rail Temp
& Force



Real-time
Measurements



Configurable
Alerting



No Sensors
Required



KB SIGNALING™

Rail TempEst™

Intelligent Rail Monitoring

Rail buckles remain one of the most serious threats to rail safety, often contributing to severe derailments. Traditionally, railroads rely on weather forecasts to guide inspections and determine when to apply speed restrictions. However, forecasts can be imprecise, lack real-time updates, and typically impact broad geographic regions – creating unnecessary operational constraints.

RailTempEst™ delivers a smarter, more targeted solution. By leveraging existing Electro Code (EC5 or ElectroLogIXS®) track circuit infrastructure, Rail TempEst uses live circuit data to measure actual rail temperature with greater accuracy and location-specific granularity. This empowers operators to pinpoint exactly where and when risk-mitigating actions – such as speed reductions – are necessary. The result: enhanced safety, minimized derailment risk, and improved operational efficiency, all without additional hardware.

Rail TempEst marks a significant advancement in infrastructure monitoring, enabling railroads to transition from forecast-based assumptions to data-driven action.

Key Benefits

- Real-time estimates of rail temperature and longitudinal forces
- Alerts when rail temperature exceeds or drops below a configured threshold
- Alerts can be sent via MQTT messages to any back office system for further processing
- Application for WSDMM edge processor
- Leverages existing Electro Code (EC6) track circuit data

Software License

ElectroLogIXS® Selective Function Key (BigData) is required.

Software Maintenance

Optional annual maintenance fee includes:

- 3-Tiered support during business hours
- App updates with bug fixes
- App upgrades with feature enhancements

Compatibility

Compatible with VTI2S or VTI2E, and ElectroCode or EC6 track protocols. Requires VPM-3 software version 6.45 or later.

Description

Easy to Configure

- Configuration via Panorama web user interface
- Configurable alert thresholds and alerting mechanisms (MGTT, SMS, and emails.)
- Configurable neutral temperature and other optional parameters

Rail temperature and force assessment application for WSDMM

- Beta version now available for evaluation

Rail temperature estimates within 10°F with 95% confidence, at nominal conditions

- Higher accuracy is possible with the use of EC6 track circuits
- Works across hot and cold temperatures to provide useful information related to rail buckles or rail brakes

State-of-the-Art Visualization

- Data visualization via remotely accessible web user interface
- Data can be visualized real-time or historical



Rail TempEst™ Intelligent Rail Monitoring

As part of our continued commitment to delivering customer value, we're introducing an updated pricing structure for Rail TempEst™ – designed to align with your operational needs while upholding the high standards of service and support you expect from Knorr-Bremse.

Two licensing models are now available: Perpetual and Recurring, each offered for individual users or enterprise-wide deployments.

- The Perpetual License provides long-term access with annual support and update coverage, ensuring continuous performance and product evolution.
- The Recurring License offers predictable, monthly billing – ideal for flexible budgeting and scaling as your needs evolve.

Whether you're managing a single installation or deploying across a large network, our pricing options are structured to offer the flexibility, transparency, and value your business demands.



Licenses

Per-Instance License, Perpetual

- Pay for single instance of Rail TempEst, one per WSDMM, up to four track circuits monitored
- Includes one-year warranty. After that, two years of separate Software Maintenance Agreement are mandatory (see below for details)

Recurring Per-instance License

- Includes Service & Support. No need to purchase separate Software Maintenance Agreement
- Minimum two years
- Ability to contribute to roadmap with one feature per year guaranteed, agreed upon

Site (Enterprise) License, Perpetual

- Unlimited number of licenses, up to 750 (please contact us if more are needed)
- Comes with one year warranty. After that, two years of separate Software Maintenance Agreement are mandatory (see below for details)
- Option to upgrade from Per-Instance to Site at any time, with credit for already purchased Per-Instance licenses

Recurring Site (Enterprise) License

- Includes Service & Support. No need to purchase separate Software Maintenance Agreement
- Minimum two years

Software Maintenance Agreements

- Tier 1, 2, and 3 Support during business hours, via phone and email.
- Standard SW updates (bug fixes), when available. Max frequency: quarterly.
- Standard SW upgrades (new features), when available. Max frequency: quarterly.

Per-instance License

- Scales up with installed base

Site (Enterprise) License

- Includes ability to contribute to roadmap with one feature per year guaranteed, agreed upon

Contact your KB Signaling Business Development Manager
Call 1-800-825-7090, or Email us at aso.techsupport-kb@alstomgroup.com for more information today

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