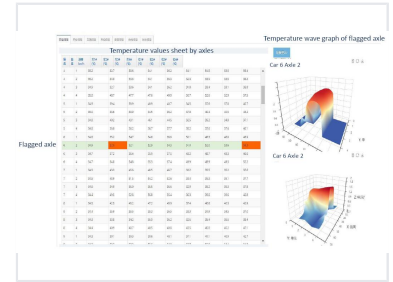


Hot Axle Box and Hot Wheel Detector

This detector monitors the temperature of passing train axle boxes and wheels. It detects temperature anomalies that indicate potential bearing or brake issues.



ADDITIONAL IMAGES



System Overview

China Railway Network Group of Technology Corp. (CRTC)



Key benefits:

- Detects temperature anomalies in real-time
- Provides early warning for potential bearing or brake issues
- Reduces maintenance costs and downtime
- Improves safety and operational efficiency

Key features:

- Real-time monitoring of axle temperatures
- Automated alert generation and reporting
- High-speed operation up to 350 km/h
- Multi-element infrared detectors

Wayside installation demonstrating real-time temperature monitoring and alert generation flow.

Advanced Railway Monitoring

The Hot Axle Box and Hot Wheel Detector is a wayside, free-attendance system engineered to monitor the temperatures of all axle boxes and wheels on passing trains in real-time. By utilizing advanced thermal imaging and multi-element infrared detectors, it identifies potential mechanical failures such as bearing collapse or brake issues before they lead to accidents. The system supports high-speed operation up to 350 km/h and delivers automated alerts and train reports to operators within seconds of a train passing.

Technical Capabilities

Supported Train Speeds	350 km/h
Maximum Train Capacity	256 vehicles
Compliance Standards	ISO 9001, GB, CE

Operational Environment

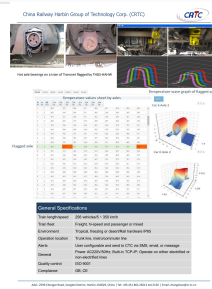
Line Compatibility

- Trunk lines
- Metro lines
- Commuter lines
- Electrified lines
- Non-electrified lines

Environmental Resilience

Tropical • Freezing • Desert

Connectivity and Alerts



Detailed software interface for temperature analysis, trend tracking, and flagged axle reporting.

Communication

TCP-IP, SMS, Email, CTC Integration

Power Requirements

AC 220V / 50Hz