

KinetiX

Inspection  
Technologies



# ThermalCAM

## THERMAL MONITORING

ThermalCAM uses thermographic camera technology for thermal monitoring of rolling stock components. It can measure heat in bearing endcaps and is ideally suited to detect hot or cold wheels due to inoperative brake conditions, for example when brakes are not sufficiently applied (cold wheel) or released (hot wheel).

ThermalCAM can provide thermal data for any rolling stock component within the camera's field of view. A typical example is a bogie side view where the regions of interest (ROIs) are the bearing endcaps and wheels. Other examples are a full view of the train side or top to detect hot regions.



## THERMALCAM SYSTEMS

ThermalCAM uses track-mounted wheel sensors, which allow for thermal data to be allocated to specific wheels within the train consist. Additionally, the system can be integrated with Automatic Equipment Identification (AEI) readers to obtain component histories for trending purposes.

The system automatically transfers train data to FleetONE, which is a data integration and analytics platform offered by Wabtec. FleetONE provides various functionalities such as alerting, trending, scheduled reporting, and emailing capabilities.

## GENERAL FEATURES

Thermal color map of user-defined regions

Bearing temperature data and statistics

Wheel temperature data and statistics

Hot bearing detection per  
AAR Standard S-6001 (2008)

Hot/cold wheel detection per  
AAR Standard S-6031 (2016)



KINETIX

# ThermalCAM

## GENERAL SPECIFICATIONS

**Capacity:** Train length – unlimited

**RF Tags:** Suitable for RF tagged vehicles (or virtual tagging reports)

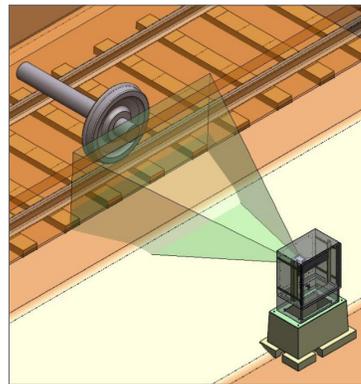
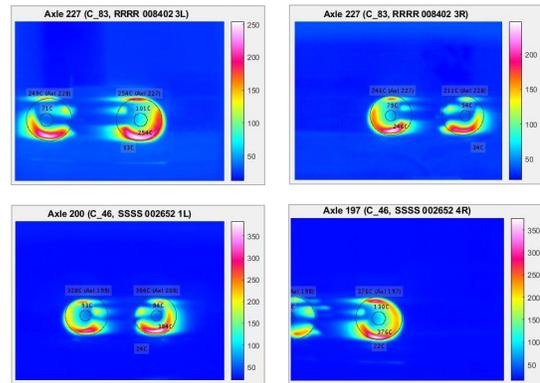
**Alarms:** User configurable, delivered via SMS, email or message to Central Train Control

**Operating environment:** Main Line/ Depot

**Fleet:** Mixed fleet – heavy haul, inter-modal and passenger

**Environment:** Rail hardware and wayside hut equipment suitable for arctic, tropical and desert environment

**Database:** ThermalCAM information presented by the FleetONE database



## WABTEC CORPORATION

30 Isabella Street  
Pittsburgh, PA 15212 USA

Phone: 412.825.1000  
Email: [wabtec-kinetix@wabtec.com](mailto:wabtec-kinetix@wabtec.com)

