# Weigh In Motion

Nagory Foster offers a state-of-the-art Weigh In Motion (WIM) system, building on the solid foundation that the WILD detector has provided the industry for more than 20 years. The WIM system provides accurate vehicle weight. It alerts on overload, side-to-side imbalance, and end-to-end imbalance conditions.

Available as an add-on capability to the Wheel Impact Load Detector or as a stand-alone wayside installation, the Weigh In Motion system is a must-have for any railway.



# WIM

### **Benefits:**

- Monitor Individual Vehicles
- Monitor Fleet Performance
- Improve Safety
- Reduce Track Damage
- Reduce Operating Costs
- Reduces the Need to Take Individual Rail Cars Out of Service for Weighing
- Monitor Load Environment

#### Features:

- Train, Vehicle, and Wheel Information
- Bi-Directional Traffic
- Automatic Car Counting and Identification (With Valid Car Library)
- Robust Hardware (20 plus Years of Design and Improvements)
- Self-Diagnostics
- Automated Alarm Notifications



powered by



# **Specifications**

- Operating Speeds 16 to 300 km/h (10 mph to 180 mph)
- Resolution 100 lb./445 Newtons
- Accuracy 2% Static/1% Dynamic
- Measurement Zone 16 Meters (50 Feet)
- Hardened Electronics in 19" rack
- Power 120/220 volts AC or 12/24 volts DC
- Power Approximately 4 amps at 24 volts DC
- Bungalow Electronics Operating Temperature 0°C to 55°C (32 °F to 131 °F)



## How WIM is Unique

Nagory Foster's Weigh In Motion is a low-cost solution that can reduce derailment conditions and infrastructure damage by detecting and alarming on overloaded or imbalanced vehicles at track speeds. Using statistical analysis of multiple vertical load measurements recorded by the detector, an estimate of the static weight of a rail car is derived to determine if the rail car is overloaded or imbalanced beyond safe operating limits. These systems are stand-alone, strain-gage measurement arrays like the WILD, which cost-effectively monitor vehicle weight and detect weight-based alarm conditions. Nagory Foster's Weigh In Motion system reduces the need to take individual rail cars out of service for weighing. Low speed or revenue-scale weigh in motion systems command a very high price and require special vehicle handling, which usually will require outof-service operations. Nagory Foster's high speed Weigh In Motion systems provides an alternative to weigh bridges by delivering a +/-1% weighing accuracy over 95% of the time for a fraction of the cost.

