



zentrak RAIL CROSSING MONITORING

Description

Level crossings are a critical interface between the railway and the public that require regular maintenance and testing to ensure that the crossing functions correctly.

zentrak RAIL CROSSING MONITORING solutions can help to reduce crossing failures, and provide real time monitoring of the asset condition and also operational sequence of various level crossing types.

Your advantages

- » Monitoring of asset condition and sequence timing of each crossing operation
- » Enables introduction of more efficient maintenance regimes and reduces life cycle costs
- » Remote data diagnosis can be used to predict failures and avoid significant disruption to the crossing operations
- » Records operational sequence which can be used to support incident investigations
- » zentrak provides visualizations of alarms, condition and control relay sequence
- » Long term trending supports customizable detailed reporting of rail crossing condition

INTERESTED?

Our Diagnostic and Monitoring Technologies continuously capture the condition of your railway infrastructure, enabling proactive, condition-based maintenance. The result: higher availability, improved lifecycle management, and lower costs.

SCAN &
LEARN MORE





What we monitor:

- » Barrier motor current
- » Barrier lower and raise times
- » Barrier angle
- » Barrier lights current
- » Road warning lights current
- » Flash frequency of road warning lights
- » Control relays & indications
- » Battery voltage and charging current
- » Audible warnings current
- » Wind speed and direction
- » Optional temperature monitoring (ambient, rail)

RXM for early fault detection

Sensor	Contribution to fault detection
Barrier angle sensor	Can display unusual movement patterns such a slow lifting, abrupt stops, or jerky motions.
Motor current monitoring	Registers increased power consumption under additional resistance – e.g. due to barrier damage or mechanical failure.
Barrier bounce/whip detection	Detects delays or deviations from normal movement profiles – a sign of mechanical disturbances caused by external influences.
Wind direction sensors	Serve as exclusion criteria for unusual barrier movement caused by wind – enabling targeted identification of external factors such as vandalism.
Power supply/battery	Early indication of low power supply or aging battery life.