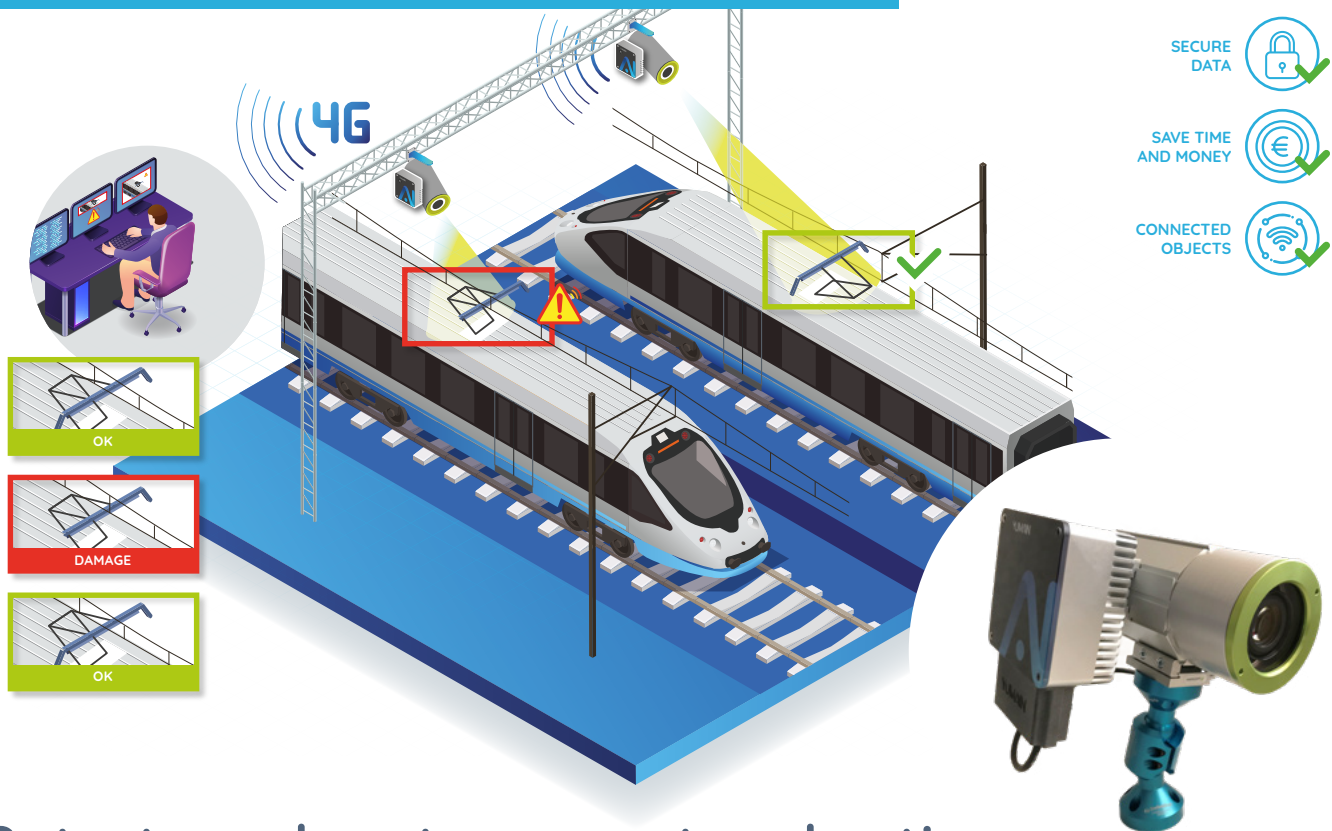


SOLUTION SHEET

AUTOMATIC PANTOGRAPHS DETECTION AND FAULT ANALYSIS



Detect, analyse to prevent and act!

AUTOMATED REAL-TIME ANALYSIS ALLOWS THE PREVENTION OF CATENARY TEARING INCIDENTS, TOGETHER WITH THE PREDICTIVE MAINTENANCE OF PANTOGRAPHS.

Operating principle: (Train speeds can reach up to 160 km/h.)

- Automatic detection and identification of the train as soon as it passes under the sensor.
- Detection and Analysis of Pantograph' integrity: Presence of horns, friction strips: chips, cracks and furrows, homogeneity and thickness of the carbon strip as well as pantograph's misalignment.
- As soon as a defect is detected, an alarm is generated and directly sent via a 4G communication, or any other low cost communication media.
- Location and counting of the pantographs (folded or unfolded) is an option.

- ▶ **Intelligent device:** Processing, analysis and alert sending in real time.
- ▶ **Plug and play:** Simple installation and commissioning. Alert sent only when defects are seen.
- ▶ **Optimized and controlled maintenance costs:** Very attractive sensor prices allowing the multiplication of control points on the rail network.
- ▶ **Connected alarm system:** Alert sent via 4G communication. Device adaptable to the tramway market.



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