



Threat Detection Solution

Detect intrusion attempts for rail vehicles.

Detect threats before they disrupt rail operations.

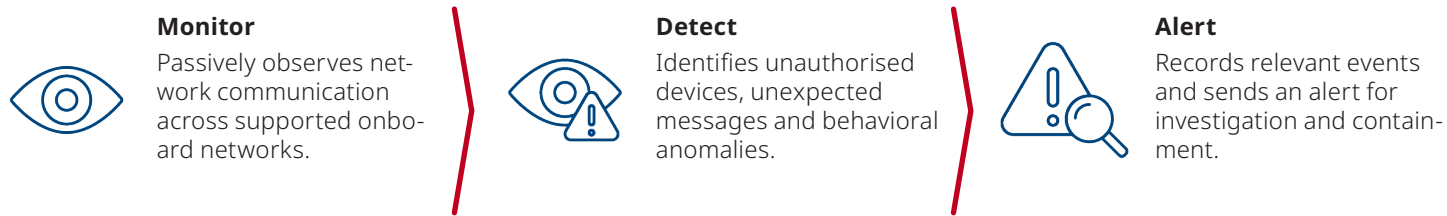
The Selectron threat detection solution (TDS) passively monitors rail vehicle networks, identifies abnormal activity and triggers actionable alerts – without interfering with train control processes.



SELECTRON

Threat Detection Solution

Threat Detection Solution - how it works.

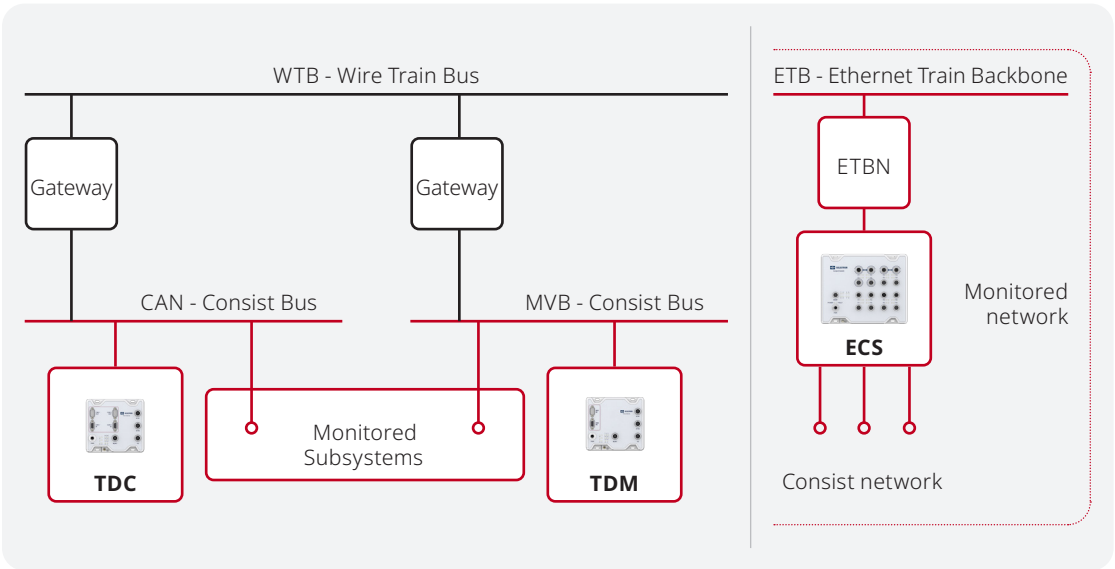


Designed for rail networks.

Early threat detection	Passive monitoring	New and legacy fleets	Actionable security events	Supported networks
Detects threats in the early reconnaissance phase.	Improves visibility without interfering with train control processes.	Integrates seamlessly into new vehicles and supports the retrofit of existing fleets.	Provides reliable alerts and event information for faster response.	CAN MVB Ethernet

Passive monitoring throughout the consist network.

The threat detection solution (TDS) monitors communication between onboard controllers and subsystems from a passive network connection. When suspicious activity is detected, the TDS records the relevant events and generates an alert.



Reliability & Cybersecurity

Built for dependable rail applications.



Cybersecurity by design
According to IEC 62443-4-2, Security Level 2 (SL-C 2).
*) Certification planned for Q4 2027



Network resilience
Redundancy and bypass options ensure communication during failures.



Defense in depth
Multiple protection mechanisms help reduce the risk of accidental or intentional network manipulation.



Developed for rail networks
Designed for Ethernet communication in demanding onboard rail environments.

Engineering & lifecycle support



Network architecture
Support for Ethernet Train Backbone, consist network and onboard subsystem integration.



Configuration & commissioning
Engineering support for network topology, device configuration, testing and vehicle commissioning.



Lifecycle & retrofit
Support for network extensions, vehicle modernisation and long-term operation.

Technical highlights

- Integrated TDS sensors within the switch
 - 2 × TDS sensors for CAN, depending on model
 - 1 × TDS sensor for MVB-EMD, depending on model
 - Service and uplink interfaces (Ethernet / USB)
- Wide-range power supply
 - Certification to IEC 62443-4-2 (Security Level 2)
*) Certification planned for Q4 2027
 - Ensures compliance with regulations, such as the EU NIS Directive 2016/1148

Built for your reliable rail network



Reduced attack surface
Limit communication paths between onboard networks.



Flexible & scalable
Adapt separation to vehicle architecture and project needs.



Rail-ready operation
Designed for harsh mobile conditions.



Easy maintenance
Configuration and software can be updated.

Next steps | Find the right Threat Detection Solution for your rail vehicle project.



Get in touch
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