

AUTOMOTIVE INTRUSION DETECTION & REACTION

Overview

As the automotive industry transforms into a digitally software-based industry, the challenges, risks, and regulations are greater. Automotive cybersecurity is a set of practices and principles designed to protect today's connected vehicles

from being exploited by malicious hackers.

CYMOTIVE's Automotive Intrusion Detection and Reaction System suggests real-time fleet protection against malicious activities and cyberattacks.

Challenges

OEMs today integrate and combine software code and applications from many vendors and sources, which result in having no visibility to the vehicle's behavior post-production, once the vehicles are on the road. This requires the manufacturers and Tier1s to have a clear view of what occurs in the vehicle.

Also, due to increasingly scrupulous regulation requirements for the benefit of the drivers' safety and

security, the measures to monitor, detect, and prevent abnormal behavior are obligatory and will become a necessity. Crafting a real-time automotive-grade solution, with strict optimization and software design considerations, while maintaining a full picture for a complex fleet configuration is challenging. This is where CYMOTIVE's proven knowledge comes into place.

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💡 The Solution

CYMOTIVE's Automotive Intrusion Detection and Response System provides an end-to-end solution for detecting and mitigating cyberattacks by combining three of CYMOTIVE's unique products: Intrusion Detection System (IDS), IDS Engineering Platform (IEP), and Intrusion Reaction System (IRS). The IDS and IRS systems are located in strategic vehicle ECUs that monitor security violations in real-time, based on configurable rules and algorithms. All data collected is transferred to the IEP for further analysis and forensics

(backend connectivity). In the IEP, a full fleet-wide view is crafted both automatically and manually by our cybersecurity analysts. Once a cyberattack is discovered, a response is sent through our bi-directional infrastructure to mitigate the risk that was found.

All products comply with the regulations and automotive standards, such as UNECE, GBT and ASPICE.

The solution is successfully integrated over 100,000 vehicles that are on the road and more to come.