## WHY AUTOMOTIVE CYBERSECURITY MATTERS?

Modern vehicles are highly connected, software-driven systems with dozens of ECUs and multiple wireless interfaces, making them prime targets for cyberattacks. A single vulnerability can compromise passenger safety, vehicle operations, or backend cloud infrastructure. Strong automotive cybersecurity ensures trust, prevents malicious manipulation, and supports compliance with global safety and regulatory requirements.

## CONTACT US


**Email:**
enquiry@araiindia.com

**Phone:**
+91-20-6762 1405/31

**Website:**
www.araiindia.com


ए आर ए आई
ARAI
Progress through Research

# AUTOMOTIVE CYBERSECURITY TESTING & COMPLIANCE SERVICES

End-to-end testing, validation & certification for modern connected vehicles.

## OUR CYBERSECURITY TESTING CAPABILITES

- Protocol Fuzzing
- Penetration Testing
- Threat Analysis & Risk Assessment (TARA)
- Vulnerability Scanning
- Simulated real-world attacks on vehicle systems, CAN/LIN/FlexRay, telematics & OTA modules.
- Testing of in-vehicle & V2X communication protocols.

## TESTING INFRASTRUCTURE

- Secure test labs with isolated networks
- Tools for fuzzing, penetration testing, Vulnerability Scanning & bus monitoring
- Wireless testing setups for Bluetooth, Wi-Fi, Telematics & GNSS
- OTA & backend security evaluation environments

## OUR SERVICES

- Compliance readiness as per AIS 189 /AIS 190 /ISO 21434 /R155/ R156.
- Certification support
- OEM-specific cybersecurity support
- Pen-Test & Vulnerability validation as per industry best practices
- Threat analysis and risk assessment for component and vehicle level.

## SUPPORT FOR GLOBAL REGULATIONS & STANDARDS

- **AIS 189 / AIS 190 Testing**
  - Indian automotive cybersecurity regulatory compliance
  - End-to-end system assessment
  - OTA update & software update management verification
- **Homologation and development Testing as per AIS 189 and AIS 190**
- **Consultancy on the complete AIS 189 and AIS 190 implementation**
- **Awareness session on the AIS 189 and AIS 190**
- **Mock Audits for Management Level Cybersecurity establishment**
- **ISO/SAE 21434 Assessments**
  - Concept phase → development → production → post-production
  - Risk assessment & cybersecurity goals
  - Threat analysis & risk assessment (TARA)
- **UNECE R155/R156 Support**
  - CSMS audit support
  - SUMS readiness evaluation
  - Documentation & gap analysis
- **Testing as per UNECE R-155 & UNECE R-156**