

SCALING ADAS VALIDATION GLOBALLY WITHOUT LOSING A SINGLE FRAME

How a global OEM achieved 100% sensor data capture reliability across a multi-camera ADAS test fleet

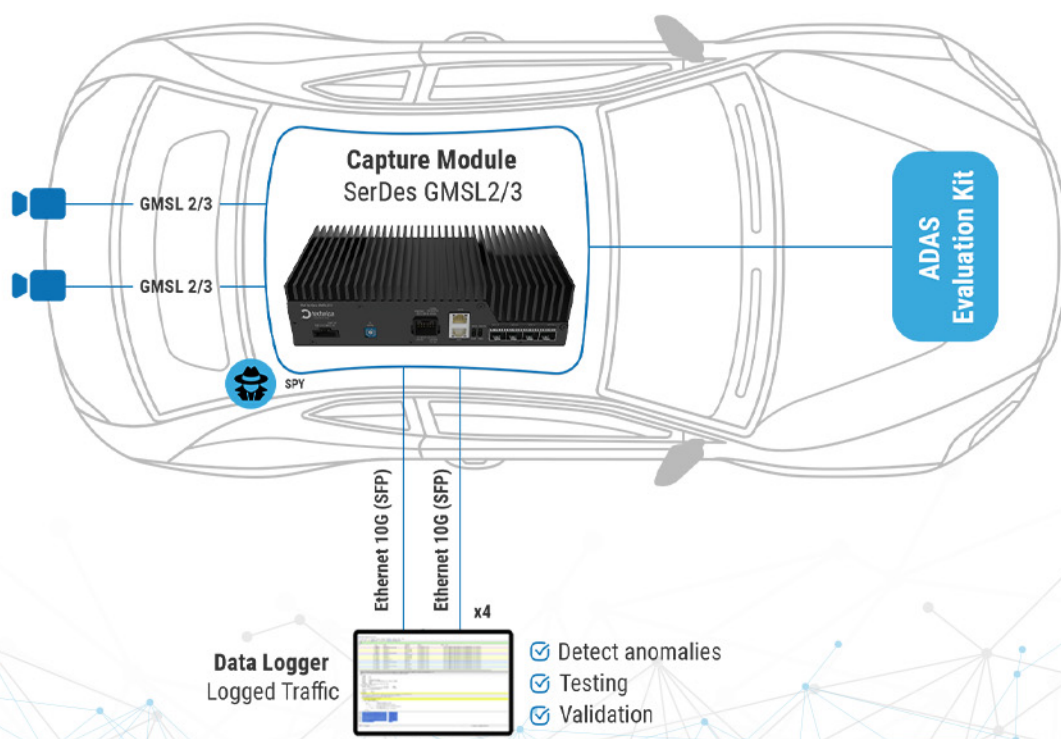
The challenge

Training and validating computer vision algorithms for ADAS demands more than good hardware – it demands consistency at scale. For an OEM running test fleets globally, that meant capturing MIPI video, I2C configuration data, and GPIO events simultaneously, with precise hardware timestamps, across every car in the fleet across geographies.

Traditional loggers couldn't handle it. Multi-camera, high-speed data at that volume overwhelmed existing measurement equipment. One dropped frame in the wrong place meant corrupted training data – and no way to repeat the run.

The solution

Technica's Capture Module SerDes GMSL2/3 was deployed between the camera arrays and the ADAS Evaluation Kits across the fleet. Lossless JPEG compression reduced storage requirements by approximately 50% without sacrificing data integrity. A web-based configurator allowed remote adjustments. Simulation-led validation ensured signal integrity before deployment at scale.



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The results

- 100% data reliability across the OEM's global test fleet – zero missed frames.
- ~50% reduction in storage requirements and cost reduction via lossless JPEG compression.
- Faster Computer Vision (CV) model training and validation cycles.
- Operational agility across multiple global fleets with remote configuration

Want to see Technica's Capture Modules in action?
Join us for a webinar and live demo.



📅 June 17, 2026

🕒 01:00 PM Stuttgart | 04:30PM Mumbai | 07:00AM Detroit

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