

Are you ready for the 'Real-World'?

The Aukua MGA8410 is the first and only Network Impairment Emulator supporting IEEE standards-based automotive Ethernet.

New rapidly evolving automotive applications utilizing Ethernet-based In-Vehicle Communication Networks (IVNs) have generated exciting possibilities. However, this has also exposed key challenges for developers of automotive systems. Due to the extreme nature of the automotive environment, an increasingly competitive marketplace, growing security threats, and demanding human safety requirements, these challenges simply cannot be ignored. These issues are further complicated by the future promises of external cloud-based applications, Vehicle-to-Vehicle (V2V) and Vehicle-to-Infrastructure (V2I) communications.

How do you design for, and accurately predict performance against the impact of real-world operational conditions of the IVN on these new applications and services in advance?

The earlier in the development lifecycle this is considered, the faster, and more confidently you can deploy robust, secure, and competitive solutions for your customers.

The Aukua MGA8410 allows you to proactively address this by recreating realistic, and repeatable network delay, congestion, and bandwidth restrictions in the lab, in order to better architect solutions and validate them against these 'real-world' conditions with confidence, while backed by empirical test data.

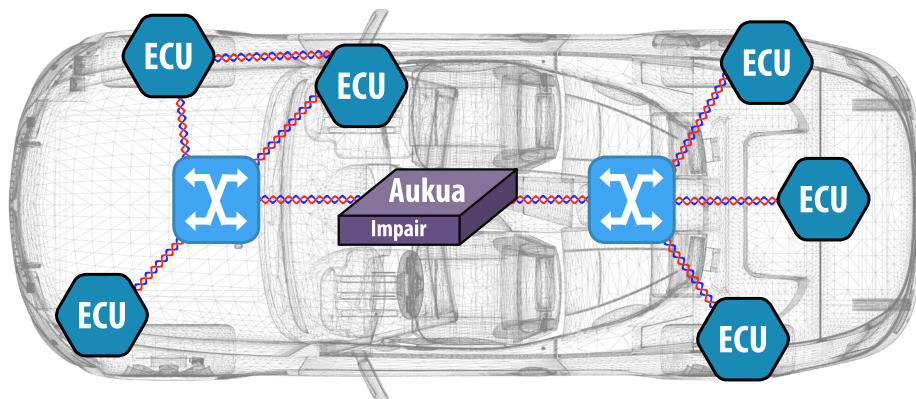
BENEFIT HIGHLIGHTS

Bring "real-world" delay, error, and network congestion scenarios to your lab in order to:

- Reduce time-to-market with greater confidence
- Mitigate risk of unexpected post-production failures
- Demonstrate realistic End-User-Experience
- Increase application or system stability
- Prove minimum required bandwidth and maximum supported application latency
- Reproduce post-production issues in the lab for faster Mean-Time-To-Resolution (MTTR)

*"A must-have tool in every lab!
Because EVERY network has delay and congestion!"*

- Sr. Director Engineering at a leading OEM

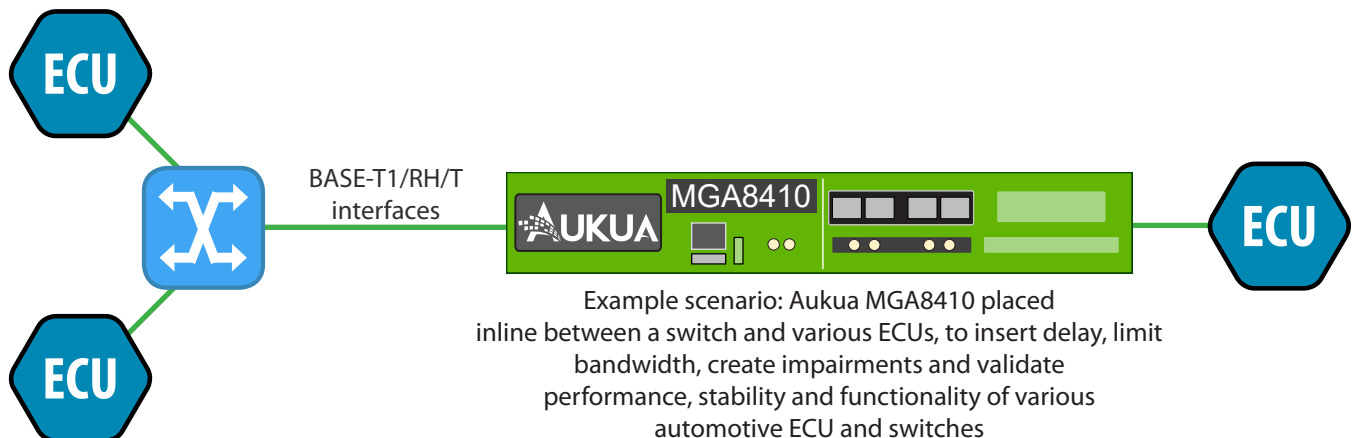


Aukua's MGA8410 Network Impairment Emulator sits inline with other Systems or Devices Under Test to create delay, limit bandwidth, and introduce impairments so you can characterize, validate and prove "real-world" performance

FEATURE HIGHLIGHTS

- Supports new IEEE one pair Ethernet: 100BASE-T1 (802.3bw), 1000BASE-T1 (802.3bp), 2.5G/5G/10GBASE-T1 (802.3ch) and 1000BASE-RH (802.3bv)
- Connect inline to insert fixed and variable packet delays (PDV)
- Dynamic real-time control of delay and impairments
- Classify traffic into separate Network Paths to apply unique delay and impairment conditions to specific traffic flows or applications
- Limit bandwidth in 1kbps increments up to true line rate
- Create link flaps, bit errors, FCS errors
- Generate packet loss, corruption and more...
- Real-time statistics and graphs
- Stats Logging per Network Path
- Complete automation API and HTML5 GUI

HOW IT WORKS



EXAMPLE APPLICATIONS OF THE AUKUA NETWORK IMPAIRMENT EMULATOR

- Characterize how a new automotive application will perform under various bandwidth conditions to determine minimum requirements and helping with network engineering efforts.
- Determine exactly how much fixed or variable delay a system can tolerate while maintaining minimum performance requirements.
- Easily reproduce post-production issues in the lab *with* 'real-world' network conditions to solve problems faster. And help prove a potential resolution actually fixes the issue before deployment for greater confidence.
- Conduct negative testing and discover how active safety systems are impacted by intermittent network impairment conditions such as link flapping or line bit errors causing packet loss.