

Ethernet Network Impairment Emulator

Applications

- ◆ Real-world application performance assessment
- ◆ Realistically reproducing 'field' or 'production network' issues in the lab
- ◆ Negative Functional Testing

Feature Highlights

- ◆ 25G, 10G, 5G, 2.5G, 1G Ethernet capable network impairment emulator - CPRI and Fibre Channel delay emulation also available
- ◆ Delay generation (fixed and variable / PDV)
- ◆ Packet drop, corrupt, FCS, link fail/flap and other impairments
- ◆ Bandwidth limit controls
- ◆ Uniform, Gaussian and custom impairment distributions
- ◆ Selective impairments with powerful L2-L7 protocol filters
- ◆ Intuitive browser-based GUI and complete automation API
- ◆ Impairment libraries make it easy to build and recall common network scenarios
- ◆ Optional Traffic Generator and Packet Capture features

Overview

Aukua Systems' Ethernet Network Impairment Emulator is an easy to use purpose-built test system for R&D, Test and Support engineers building Ethernet based IT, storage networking and communications systems.

Aukua Ethernet Network Impairment Emulators are used to precisely recreate the delays, congestion and packet or link impairments found on all real-world data and storage networks. This helps our customers to quickly and accurately verify the performance of applications under real-world situations in a simple and repeatable way in the lab. Realistically recreating production network conditions in the lab also helps to efficiently reproduce and troubleshoot issues found on customer networks. And with an extensive set of impairment features Aukua Network Impairment Emulators are also used for creating an almost unlimited variety of negative testing scenarios for validating device and system functionality under non-ideal situations.

Ethernet data rates up to 25Gbps, including 2.5Gbps and 5Gbps Ethernet rates (IEEE 802.3bz) are supported. Also, important to many TSN and 5G mobile fronthaul applications, Aukua's Network Impairment Emulators are designed to support SyncE operation while not breaking physical layer synchronization delivery. The powerful Aukua hardware-based architecture delivers true line-rate performance regardless of configuration as well as unmatched nanosecond precision delay generation.

Other important features include real-time statistics, alarms and graphical analysis, external reference clock inputs, and a full RESTful API enabling complete automation capability, further enhances productivity and integration with other development and testing tools. The library-based workflow makes it easy to build and recall common network emulation scenarios. And the optional Ethernet Generator and inline capture modes add even more flexibility and value to the system.

Our hyperfocus on creating a truly intuitive user experience ensures that the Network Emulator is immediately useful — even for the occasional user. First time users are productively testing within the first 10 minutes, even without training or assistance. This is in part thanks to a single, simple user interface that is served up from the system without any software installations required. No complex initial chassis configuration or setup required.



25Gb Ethernet Network Impairment Emulator

Applications include: 5G Mobile Fronthaul, O-RAN, TSN, Cloud Computing, Storage Networking, SD-WAN, and more

**Contact Aukua Systems to request the full
Product Brief!**

Click to Request Full Product Brief

Contact: www.aukua.com sales@aukua.com +1 866 533-2215 Austin, TX U.S.A.

Product description, features and specifications are subject to change without notice.
© 2015-2025 Aukua Systems, Inc. All rights reserved.

EXNEPB-05025AW

