

ByteBlower®

Surprisingly simple.
Amazingly accurate.

Datasheet

The Excentis ByteBlower® TCP/IP traffic generator/analyzer is a multi-port TCP/IP test system that is perfectly suited to perform advanced testing of networks and network equipment. It can be used to generate traffic and analyze traffic and measures packet loss, latency, jitter, latency distributions, throughput ...

ByteBlower offers unique advantages over other products by its ease of use, flexibility of test configurations and very competitive cost. Engineers from all types of network operators, IT departments, educational institutions and equipment manufacturers can benefit from the versatile feature set of ByteBlower.

SUPPORTED PROTOCOLS

Besides sending and receiving user-defined data packets (UDP, TCP ...), ByteBlower can perform stateful tests using its built-in protocol stack.

ByteBlower supports the following protocols:

- x Ethernet
- x PPPoE
- x VLAN
- x IPv4
- x ICMP
- x DHCPv4
- x IGMP (v1, v2, v3)
- x TCP
- x IPv6 (including stateless auto-configuration)
- x DHCPv6
- x MLD (v1, v2)

Support for additional protocols can be added.

FEATURES

Generic features

- x Support for copper and optical Ethernet interfaces
- x High port density
- x Real-world network behavior on the transport layer
- x Combine multiple ByteBlower systems in one test
- x Share one ByteBlower system with multiple users
- x Common platform for wide range of tests
- x Fixed port addresses or dynamic addressing using DHCP or stateless auto-configuration
- x Fully flexible scripting capabilities with platform independent Tcl API
- x Fully configurable MAC addresses
- x Packet loss measurements
- x Latency, latency distributions and jitter measurements
- x Testing NAT-ed devices.
- x Simulation of large number of hosts on one or multiple physical interfaces

User interface features

- x Time-saving and intuitive platform-independent graphical user interface (GUI)
- x Scheduled execution using batches
- x Full control of start and stop times of each flow
- x Automated project creation using Wizards
- x Automatic frame creation and addressing or control at bit level
- x Clear report in HTML format and in Microsoft® Excel or CSV format
- x Automatic project backup

Automation

- x Execution of GUI configurations from command line
- x Extended TCL API
- x NI LabVIEW API



USE CASES AND TARGETED USERS

- x Creating simple but often used test scenarios like back-to-back and throughput tests
Users: Engineering and QA groups, Internet Service Providers, medium and large enterprises ...
- x Creating complex traffic patterns with multiple protocol mixtures for both IPv4 and IPv6
Users: Engineering and QA groups, Internet Service Providers, medium and large enterprises ...
- x Measuring IPTV channel 'zap' times
Users: Internet Service Providers, Digital Broadcasters ...
- x Troubleshooting critical performance issues on network segments and devices
Users: Engineering and QA groups, Internet Service Providers, medium and large enterprises ...
- x Large scale testing
Users: Certification and interoperability labs, hardware manufacturer ...
- x Testing triple play services
Users: Certification and interoperability labs, hardware manufacturers, Service Providers ...
- x Testing in production facilities
Users: hardware manufacturers

GENERAL SPECIFICATIONS

A ByteBlower consists out of a server for generation and analysis of the traffic, and a dedicated switch to increase the number of ports.

Size	<i>Server</i> 17.2"w x 1.7"h x 19.8" (43.7cm x 4.27cm x 50.31cm) <i>Switch</i> Varies with requirements
Weight	<i>Server</i> 31lbs (14.1kg) <i>Switch</i> Varies with requirements
Power	<i>Server</i> 1x 600W <i>Switch</i> Varies with requirements
Timing source	Internal or synchronized using GPS
Operating system	Real-time Linux
Hardware platform	<i>CPU</i> : 2x Intel® Xeon® CPU 5620 <i>Memory</i> : 4GB main memory <i>Hard Drive</i> : 250GB SATA-II DVD/CD drive
Humidity	Operation : 20% to 80% Storage : 5% to 95%
Temperature	Operation: 10 to 35°C (50 to 95°F) Storage: -40 to 65°C (-40 to 149°F)
Connectors	15pin VGA connector PS/2 keyboard connector PS/2 mouse connector 2x Serial DB9 connector (1 front, 1 back) 4x USB Type A (2x front, 2x back, 1 Management network card 10/100/1000 Ethernet RJ45
Physical traffic interfaces	Per interface: 1Gbps (Depends on link speed) Total speed limit: 250,000pps (Depends on used hardware)