



ByteBlower Traffic generator

DATASHEET

ByteBlower Models	1300	2100	3100	3200	4100
	2x 1 Gbps	4x 1 Gbps	2x 10 Gbps	4x 10 Gbps	2x 10 Gbps
Max port density 1G	96 (2 x 48)	192 (4 x 48)	96 (2 x 48)	192 (4 x 48)	96 (2 x 48)
Max directly NBASE-T ports	-	-	16 (2 x 8)	32 (4 x 8)	16 (2 x 8)
Max ports through daisy-chain (*)	-	-	48 _{NBASE-T} + 96 _{BASE-T} (6 x 8 + 2 x 48)	96 _{NBASE-T} + 192 _{BASE-T} (12 x 8 + 4 x 48)	48 _{NBASE-T} + 96 _{BASE-T} (6 x 8 + 2 x 48)
Max multiplexer switches	2	4	8	16	8

FEATURES AND BENEFITS

Generic Features

- Real-world network behavior on the transport layer
- One client can control multiple servers, independent of the ByteBlower model
- Share one server with multiple users
- Simulation of a large number of hosts on one or multiple physical interfaces
- Fixed port address or dynamic addressing using DHCP or stateless address autoconfiguration
- Packet loss measurements
- Latency, latency distribution and jitter measurements
- Testing NAT-ed devices
- Capture transmitted and received traffic for debugging

User interaction features

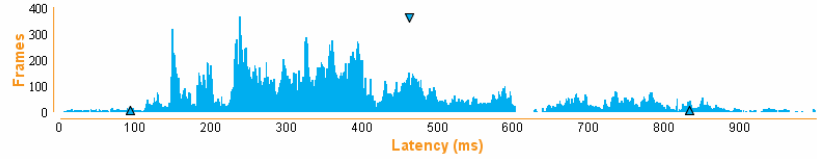
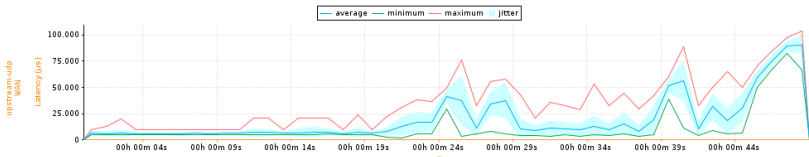
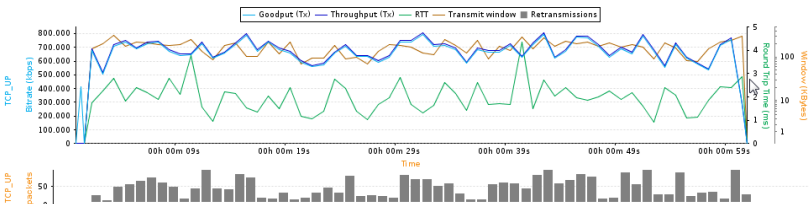
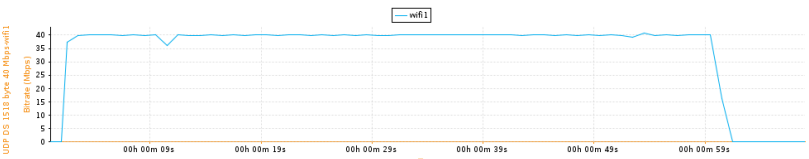
- Time-saving and intuitive platform-independent graphical user interface (GUI)
- Scheduled execution using batches
- Import of PCAP files
- Full control of start and stop times of each flow
- Automated project creation using wizards
- Automatic frame creation and addressing or control at bit level
- Clear report in HTML and in Microsoft® Excel or CSV format
- Automatic project backup
- RFC2544
- Low cost of ownership and ease of use, everything included

Automation

- Execution of GUI configurations from command line
- Fully flexible scripting capabilities with platform independent Tcl API or Python API

(*) More info: <https://www.excentis.com/products/byteblower/add-ons/switches>

GENERATION AND ANALYSIS

Frame size with CRC	64 — 8192 bytes
Flow statistics	<p>Latency distribution</p>  <p>Latency over time</p>  <p>TCP throughput over time</p>  <p>Frameblasting throughput over time</p> 
Protocols	<ul style="list-style-type: none"> • Raw Ethernet packet • PPPoE (PPP, PAP), VLAN, Q-in-Q • IPv4, ARP, IPv6 • ICMPv4, ICMPv6, IGMP, MLD, TCP, UDP • DHCPv4, DHCPv6 • HTTP Telnet client
Features/Tools	<ul style="list-style-type: none"> • Capture Rx and Tx for debugging • TCP tunneling • Import PCAP frames



PERFORMANCE

ByteBlower series	1300	2100	3100	3200	4100
Unidir 64bytes (*)	1.0 M pps	1.4 M pps	14.1 M pps	14.1 M pps	14.1 M pps
Bidir 64bytes (*)	2.0 M pps	2.8 M pps	23.0 M pps	23.0 M pps	28.2M pps
Latency precision	100us	20ns	100us	100us	20ns

(*) Performance per server interface

GENERIC SPECIFICATIONS

ByteBlower series	1300	2100	3100	3200	4100
Physical Interface types (server)	2 x 10/100/1000 BASE-T	4 x SFP	2 x SFP+	4 x SFP+	2 x SFP+
Supported 1G SFP modules (server)		1000BASE-T, 1000BASE-SX, 1000BASE-LX			
Supported 10G SFP+ modules (server)			10GBASE-SR, 10GBASE-LR, 10GBASE-ER, 10GBASE-CR		
Physical interfaces switch	48 x RJ45 10/100/1000				
Physical interfaces NBASE-T extension switch			2 x 1G/2.5G/5G RJ45 6 x 1G/2.5G RJ45		
Supported 1G SFP modules switch (4 shared ports)	1000BASE-T, 1000BASE-SX, 1000BASE-LX				
Timing synchronization		Pulse / second IEEE 1588-2008 PTPv2			Pulse / second IEEE 1588-2008 PTPv2
Software updates	Device software updates over the internet Configuration is retained				



CLIENT SOFTWARE

	Windows®	Linux®	MacOS®
GUI	✓	✓	✓
Tcl API	✓	✓	✓
Python API (2.7/3.x)	✓	✓	✓

DIMENSIONS

ByteBlower series	1300	2100	3100 / 3200	4100
Size	W: 17.2" (437mm) H: 1.7" (43mm) D: 19.8 (503mm)	W: 17.2" (437mm) H: 1.7" (43mm) D: 29.0 (737mm)	W: 17.2" (437mm) H: 1.7" (43mm) D: 29.0 (737mm)	W: 17.2" (437mm) H: 1.7" (43mm) D: 25.6 (650mm)
Weight	22.7lbs (10.3kg)	27.7lbs (12.12kg)	29.5lbs (13.4kg)	27.7lbs (12.12kg)

ENVIRONMENT

ByteBlower series	1300	2100	3100 / 3200	4100
Power	Redundant 400W 100—240V 50-60 Hz	Single 600W 100—240V 50-60 Hz	Redundant 750W 100—240V 50-60 Hz	Single 600W 100—240V 50-60 Hz
Operational temp.	50 - 95° F 10 - 35° C	41 - 104° F 5 - 40° C	50 - 95° F 10 - 35° C	41 - 104° F 5 - 40° C
Operational Hum.	8 to 90 % (non-condensing)			