



# ByteBlower Traffic generator

## DATASHEET

ByteBlower Models	1300	3100 Gen3	3200 Gen2	4100
	2x 1 Gbps	2x 10 Gbps	4x 10 Gbps	2x 10 Gbps
Max port density 1G	96 (2 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 <sub>NBASE-T</sub> + 96 <sub>BASE-T</sub> ( 6 x 8 + 2 x 48 )	96 <sub>NBASE-T</sub> + 192 <sub>BASE-T</sub> ( 12 x 8 + 4 x 48 )	48 <sub>NBASE-T</sub> + 96 <sub>BASE-T</sub> ( 6 x 8 + 2 x 48 )
Max multiplexer switches	2	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

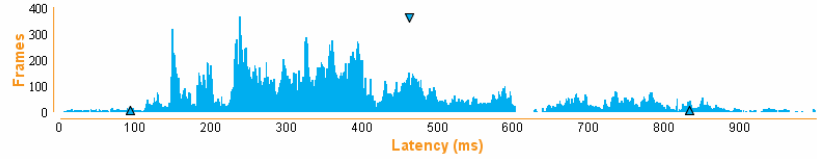
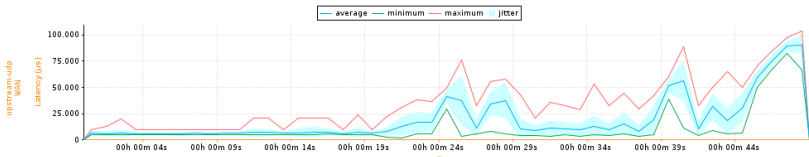
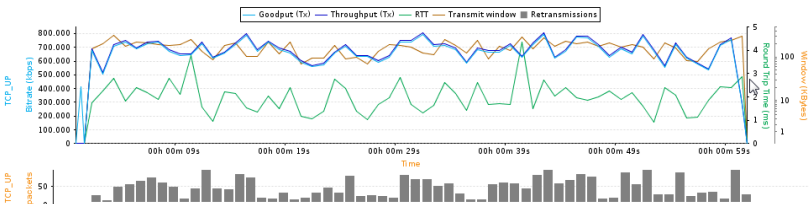
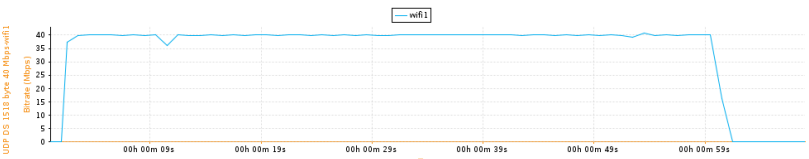
- Time-saving and intuitive platform-independent graphical user interface ( GUI )
- Scheduled execution using batches
- Import of PCAP files
- Full control of start and stop times of each flow
- Automated project creation using wizards
- Automatic frame creation and addressing or control at bit level
- 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><b>Latency distribution</b></p>  <p><b>Latency over time</b></p>  <p><b>TCP throughput over time</b></p>  <p><b>Frameblasting throughput over time</b></p> 
Protocols	<ul style="list-style-type: none"> <li>• Raw Ethernet packet</li> <li>• PPPoE (PPP, PAP), VLAN, Q-in-Q</li> <li>• IPv4, ARP, IPv6</li> <li>• ICMPv4, ICMPv6, IGMP, MLD, TCP, UDP</li> <li>• DHCPv4, DHCPv6</li> <li>• HTTP Telnet client</li> </ul>
Features/Tools	<ul style="list-style-type: none"> <li>• Capture Rx and Tx for debugging</li> <li>• TCP tunneling</li> <li>• Import PCAP frames</li> </ul>



## PERFORMANCE

ByteBlower series	1300	3100 Gen3	3200 Gen2	4100
Unidir 64bytes (*)	1.0 M pps	14.1 M pps	14.1 M pps	14 .1M pps
Bidir 64bytes (*)	2.0 M pps	28.2 M pps	28.2 M pps	28.2M pps
Latency precision	100us	100us	100us	20ns

(\*) Performance per server interface

## GENERIC SPECIFICATIONS

ByteBlower series	1300	3100 Gen3	3200 Gen2	4100
Physical Interface types (server)	2 x 10/100/1000 BASE-T	2 x SFP+	4 x SFP+	2 x SFP+
Supported 1G SFP modules (server)				
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
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	3100 Gen3	3200 Gen2	4100
Size	W: 17.2" (437mm) H: 1.7" (43mm) D: 19.8 (503mm)	W: 17.2" (437mm) H: 1.7" (43mm) D: 19.8" (503mm)	W: 17.2" (437mm) H: 1.7" (43mm) D: 25.6" (650mm)	W: 17.2" (437mm) H: 1.7" (43mm) D: 25.6" (650mm)
Weight	22.7lbs (10.3kg)	17.6lbs (8kg)	24lbs (10.9kg)	27.7lbs (12.12kg)

## ENVIRONMENT

ByteBlower series	1300	3100 Gen3	3200 Gen2	4100
Power	Redundant 400W 100—240V 50-60 Hz	Redundant 400W 100—240V 50-60 Hz	Redundant 500W 100—240V 50-60 Hz	Single 600W 100—240V 50-60 Hz
Operational temp.	50 - 95° F 10 - 35° C	50 - 95° F 10 - 35° C	50 - 95° F 10 - 35° C	41 - 104° F 5 - 40° C
Operational Hum.	8 to 90 % ( non-condensing)			



## End of Life Models

### DATASHEET

ByteBlower series	2100	3100 Gen2	3200 Gen1
EoL Date	1 jan 2019	1 aug 2019	1 aug 2019
Unidir 64bytes (*)	1.0 M pps	14.1 M pps	14.1 M pps
Bidir 64bytes (*)	2.0 M pps	23.0 M pps	23.0 M pps
Latency precision	20ns	100us	100us

(\*) Performance per server interface

## DIMENSIONS

ByteBlower series	2100	3100 Gen2	3200 Gen1
Size	W: 17.2" (437mm) H: 1.7" (43mm) D: 25.6" (650mm)	W: 17.2" (437mm) H: 1.7" (43mm) D: 29.0" (737mm)	W: 17.2" (437mm) H: 1.7" (43mm) D: 29.0" (737mm)
Weight	27.7lbs (12.12kg)	29.5lbs (13.4kg)	29.5lbs (13.4kg)

## ENVIRONMENT

ByteBlower series	2100	3100 Gen2	3200 Gen1
Power	Single 600W 100—240V 50-60 Hz	Redundant 750W 100—240V 50-60 Hz	Redundant 750W 100—240V 50-60 Hz
Operational temp.	41 - 104° F 5 - 40° C	50 - 95° F 10 - 35° C	50 - 95° F 10 - 35° C
Operational Hum.	8 to 90 % ( non-condensing)		