

## PacketStorm6XG Technical Specifications

### Physical

#### AC Power

Voltage:	115-240 VAC
Frequency:	50/60 Hz
Power:	400 Watts (maximum)

#### Operating Environment

Temperature:	10° to 55° C (50° to 131° F)
Humidity:	10% to 90%, non-condensing
Warm-Up Time:	5 minutes recommended for optimal performance

#### Dimensions and Weight

Height:	6 inches
Width:	19 inches
Depth:	15 inches
Weight:	30 pounds

### Performance

Maximum Throughput	14.8 million Packets Per Second (PPS)
Residual Minimum Delay:	2 $\mu$ s
Minimum Packet Size:	64 bytes
Maximum Packet Size:	9600 bytes

### Packet Filters

The system supports one filter in each direction. Each filtered emulation link is an independent impairment profile.

The available packet filter parameters are:

<b>MAC:</b>	Source Address
(option)	Destination Address
<b>IPv4:</b>	Source Address
	Destination Address
	Protocol
<b>UDP/TCP:</b>	Source Port Number
	Destination Port Number
<b>VLAN:</b>	Type
(option)	User Priority (UP)
	Canonical Format Indicator (CFI)
	Identifier (Tag)
<b>MPLS:</b>	Label
(option)	Class of Service
	Stacking Bit
<b>IPv6:</b>	Source Address
	Destination Address

**Universal:** Starting at MAC Address fields  
(option) Offset 1 – 60 Bytes  
Value Four Bytes

**RTP:** Version  
Padding  
Extension  
CSRC Count  
Marker  
Payload Type  
Sequence Number  
Timestamp  
SSRC  
CSRC

**MPLS Offset:** 0 – 3 labels

**VLAN Offset:** 0 – 2 tags

## Impairments

### Low Latency Delay

Range: 0 to 400 us  
Resolution: 10 ns  
Accuracy 50 ns  
Distribution: Fixed

### Low Latency Jitter

Range: 0 to 200 us  
Type: Non-Reordering  
Resolution: 10 ns  
Accuracy: 40 ns  
Distribution: Exponential

### Low Latency Drop

Range: 0 to 100 %  
Accuracy: 0.01 %  
Distribution: Uniform

### Delay

Range: 0 to 1,000ms  
Resolution: 100 ns  
Accuracy 400 ns  
Distribution: Fixed

### Jitter

Range: 0 to 500ms  
Type: Non-Reordering  
Resolution: 100 ns  
Accuracy: 400 ns  
Distribution: Exponential

### Decimate

Interval (1/N): 1 – 65,535 packets

**Drop**

Range: 0 to 100 %  
Accuracy: 0.01 %  
Distribution: Uniform

**Re-order**

Packet Hops: 0 to 254  
Range: 0 to 33 %  
Accuracy: 0.01 %  
Distribution: Uniform

**Throttle**

Data Rate: 56 kbps - 10,000 Mbps  
4,578 – 14,880,952 PPS

**Bit Error**

Range:  $10^{-18}$  to  $10^{-3}$   
Error location: Payload, Payload and Header

**Duplicate**

Range: 0 to 100 %  
Accuracy: 0.01 %  
Distribution: Uniform

**Packet Modifiers****Ethernet** (option):

Source MAC Address  
Destination MAC Address

**IPv4:**

TOS  
TTL  
Protocol  
IP Source Address  
IP Destination Address

**UDP/TCP:**

TCP Source Port  
TCP Destination Port  
UDP Source Port  
UDP Destination Port

**VLAN** (option):

VLAN PRI  
VLAN CFI  
VLAN ID

**IPv6:**

Traffic Class  
Flow Label  
Hop Limit  
Source Address  
Destination Address

## Other Functions:

Bandwidth Probe: Mbps.

Toggle:

Paths: Four per Link  
Impairments Delay, Jitter, Drop, Decimate, Throttle, Reorder, Duplicate, Bit Error,  
Modifiers  
Path Triggers: Packet Counter Max =  $2^{32}$   
Timer Max = 17 hours

## Physical Network (I/O) Interfaces

Single 10 Gigabit Ethernet

Data Rate: 10000 Mbps  
Interface: SFP+ (Multimode, SingleMode)

## Ordering Information

PacketStorm6XG-10G IP Network Emulator – (2) Ports of 10 Giga Ethernet (sfp+)

### Options:

XG-606	1 Gigabit Ethernet Interface Mode
XG-608	Add Three Filters Per Direction
XG-610	MAC Filter & Modifier
XG-612	VLAN Filter & Modifier (IPv4 only)
XG-614	MPLS Filter (IPv4 only)
XG-616	Universal Filter
XG-618	RTP Filter
XG-620	FEC Aware & Active Video Filter
XG-624	Hitless Impairment
XG-630	Low Latency Mode

