- Products for Global Networks -

# **Ethernet Network Delay Emulators**

## Models: WanRaptor™ Product Line and EDS-BGP

Our Ethernet Network Delay Emulators are an easy to use, cost effective solution for the test and validation of Ethernet based WAN communications prior to system deployment. These products range in complexity and are available as Rack Mount, Bench Top or Portable WAN emulators. The products simulate bandwidth, latency, loss, jitter and other impairments at a price to fit your budget. The versatile WanRaptor™ supports Copper or Fiber Ethernet for 10/100/1000, 1/10/25GbE and 40GbE in a single platform. For COTS hardware, the unit supports the highest Packet Per Second(PPS) throughput on the market.

If you need to support a routed BGP network, the EDS-BGP is an excellent choice with integrated BGP capabilities.

The product incorporates the BGP Quagga Software Router and puts you in control of your network testing adding routed BGP network delay emulation capabilities.



#### **Models: RDS-PLUS and UDC-RDS**

Our serial and Telco Network Delay Emulators have been manufactured since 2001. The products support 19 different serial and Telco interfaces. The United States Military and leading Defense companies rely on the RDS-PLUS delay simulator as a modular, network link error and delay emulator that provides a realistic simulation of physical network behavior. The RDS-PLUS supports a wide range of serial interface types such as RS-232, RS-530, RS-422/449, X.21 and data rates ranging from 1200bps to over 52Mbps. The unit is very popular for CRYPTO data link emulation inserting delays to match satellite and land lines. Additionally, the RDS-PLUS supports TELCO line latency testing with popular interfaces such as T1, E1, DS3 and STS-1.

This type of network emulation is critical for the validation of some of the most secure networks in the world. East Coast Datacom, Inc offers reliability, dependability and integrity

### **About East Coast Datacom, Inc.**

#### **Products for Global Networks**

East Coast Datacom, Inc. was formed in 1994 to design, manufacture and support Data Communication and Network Latency Equipment. We manufacture one of the broadest line of Network Latency Emulators or commonly referred to as WAN Emulators in the network test equipment market.

Our growing product range consists of over 130 unique products that include IP Traffic Generators, Data Broadcast Units, Digital Sharing Devices, Interface Converters, Modern Eliminators, Serial Adapters, Sync to IP Converters, FIFO Re-Timing Buffers and A/B Switches.

East Coast Datacom, Inc. sells its products direct and through select distribution channels worldwide. The company has an active GSA Contract for US Government agencies through 2021. The GSA Advantage allows government agencies to take advantage of direct purchasing with the company at a substantial discount coupled with a 3-year warranty and support. East Coast Datacom, Inc. offers reliability, dependability and integrity.

Main Features	WanRaptor™	BGP-EDS	RDS-PLUS	UDC-RDS
Latency Set Per Port	0 - 8 sec	0 - 10 sec	0 - 4 sec	0 - 1 sec
Delay Units	Milliseconds	Milliseconds	Milliseconds	Milliseconds
Emulation Data Rates	300bps - 40Gbps	300bps - 1 GbE	1.2k - 52M	300bps - 3.072Mbps
Emulation Capacity	8 Ports, 4 Pairs	16 Ports, Routed	2 Ports, 1 Pair	2 Ports, 1 Pair
Interface	Copper/Fiber	Copper/Fiber	Serial/Telco	Serial
Data Format	UDP / TCP IP, ect	UDP / TCP IP, ect	Sync / Async	Sync
Error Insertion	×	×	✓ - Full BERT	×
Jitter	<b>✓</b>	<b>✓</b>	N/A	N/A
Loss	<b>~</b>	<b>✓</b>	<b>✓</b>	×
Re-Ordering	<b>~</b>	<b>✓</b>	N/A	N/A
Changes-On-The-Fly	<b>✓</b>	<b>✓</b>	N/A	N/A
Duplication	<b>✓</b>	<b>✓</b>	N/A	N/A
Data Corruption	<b>✓</b>	×	N/A	N/A
Decimal Input	<b>~</b>	<b>→</b>	N/A	N/A
Auto Profile Scheduler	×	<b>✓</b>	×	×
Data Logger	<b>~</b>	<b>✓</b>	×	×
Config Port(s)	10/100/1000	10/100	10/100 or Serial	Dip Switches
Full Command Line	×	×	<b>→</b>	×
GUI Support	<b>~</b>	<b>✓</b>	<b>→</b>	×
Multiple Users	×	<b>✓</b>	×	×
Jumbo Frames	<b>~</b>	<b>✓</b>	N/A	N/A
Clock Source	N/A	N/A	Int/Ext	Internal
Test Interfaces	EDS-10G/1G	BGP-EDS	RDS-PLUS	UDC-RDS
10/100/1000	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>
10/100/1000 1/10/25/40GbE		×	×	×
	×			
1/10/25/40GbE	<b>~</b>	×	×	×
1/10/25/40GbE RS-232	×	× ×	×	×
1/10/25/40GbE RS-232 V.35	× ×	× × ×	× × ×	× × ×
1/10/25/40GbE RS-232 V.35 RS-530	× × ×	× × × ×	× × × ×	× × ×
1/10/25/40GbE RS-232 V.35 RS-530 RS-422	× × × ×	× × × × ×	× × × × ×	× × × ×
1/10/25/40GbE RS-232 V.35 RS-530 RS-422 X.21	× × × × ×	× × × × × × ×	× × × × × ×	× × × × × ×
1/10/25/40GbE RS-232 V.35 RS-530 RS-422 X.21 RS-485	× × × × × ×	× × × × × × × ×	× × × × × × ×	× × × × × × ×
1/10/25/40GbE  RS-232  V.35  RS-530  RS-422  X.21  RS-485  HSSI  EIA-644 LVDS	× × × × × × ×	× × × × × × × × ×	× × × × × × × × ×	x x x x x x
1/10/25/40GbE  RS-232  V.35  RS-530  RS-422  X.21  RS-485  HSSI	× × × × × × × × ×	x x x x x x x x x x x	x x x x x x x x x x x	x x x x x x x x x
1/10/25/40GbE  RS-232  V.35  RS-530  RS-422  X.21  RS-485  HSSI  EIA-644 LVDS  TTL	× × × × × × × × × × ×	x x x x x x x x x x x x x	× × × × × × × × × × × × ×	x x x x x x x x x x x
1/10/25/40GbE  RS-232  V.35  RS-530  RS-422  X.21  RS-485  HSSI  EIA-644 LVDS  TTL  T-1	× × × × × × × × × × × × ×	x x x x x x x x x x x x x x x x	x x x x x x x x x x x x x x x	x x x x x x x x x x x x
1/10/25/40GbE  RS-232  V.35  RS-530  RS-422  X.21  RS-485  HSSI  EIA-644 LVDS  TTL  T-1  E-1	× × × × × × × × × × × × × × ×	x x x x x x x x x x x x x x x x	x x x x x x x x x x x x x x x x	x x x x x x x x x x x x x