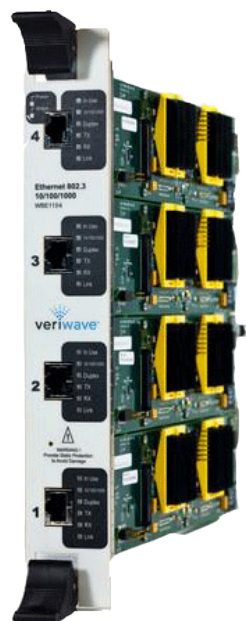


## WaveBlade Ethernet

The VeriWave Ethernet Server WaveBlade provides a complete Layer 2-7 test product to evaluate the functionality and performance of Ethernet based networking products. Designed for testing network infrastructure devices such as Access Points, Broadband Home Gateways, Controllers, Switches, and Routers the Ethernet WaveBlade integrates traffic generation and analysis capabilities on a single platform.

Each Ethernet WaveBlade port generates fully-interleaved, multi-protocol IP traffic from hundreds of independent Ethernet clients or servers at wire-speed. It is a line-card that fits into VeriWave's WT90 and WT20 chassis and interworks seamlessly with the WaveBlade WiFi 802.11n and WaveBlade WiFi 802.11a/b/g line-cards. It provides the essential tools necessary to complete any type of testing ranging from functional testing to large scale testing. While its inter-working with the WiFi WaveBlades offers unique WLAN infrastructure testing capabilities, it can also be used for testing of Ethernet only networks and network devices.



## Benefits

- Up to 500 fully independent Ethernet clients/subscribers or servers per port enable precise measurement of critical performance metrics at data rates reaching up to 1 Gbps
- Capable of generating wire-speed stateful TCP traffic and other traffic including raw Ethernet frames, UDP, RTP etc.
- Complete control over MAC and IP address scheme; including automatic addressing and incremental addressing per user-defined step sizes
- Wire-speed interleaved flow generation with unique ID, rate, timestamps, sequence numbers, data integrity signature, and flow group identifiers
- Real-time statistics to track up to 131,072 traffic flows and 16 user customizable latency histogram buckets
- Industry-best simultaneous bi-directional (TX/RX) wire-speed packet capture support of up to 256MB on each port
- Ease-of-use through simplified set-up in a wide-array of VeriWave Test Suites and WaveAutomation

## Specifications

	WBE1104	WBE1101
Connector type	RJ45	
Number of ports per WaveBlade	4	1
Maximum ports per chassis	36	9
Ethernet PHY rates	10/100/1000 Mbps	
Capture buffer (per port)	256 MB	
Number of clients / subscribers (per WaveBlade)	2,000	500
Number of interleaved flows (per WaveBlade)	4,000	1,000
Transmit capability	Wire-speed hardware frame generation with timestamps, sequence numbers, data integrity signature, and flow group Identifiers	
Receive capability	Wire-speed frame filtering, data integrity, and sequence checking, capture, real-time latency measurement on each flow	
User defined field modifier (per flow)	Increment or decrement by user-defined step; up to 256 bytes from start of frame	
Frame length control	Fixed, increment by user-defined step or automatic	
Statistics and rate counters	Link State, Line Speed, Frames Sent, Signature Valid Frames Received, Signature Error Frames Received, Bytes Sent/Received, Fragments Received, Undersize, Oversize, VLAN Tagged Frames, Per User Priority QoS counters, FCS errors, Bad Sequence Errors, Bad Payload Checksum, ARP, DHCP and Ping requests and replies, IP/ICMP/UDP/TCP checksum errors, IP Multicast packets, Sent/Received IP Packets	
Flow analysis	Real-time statistics to track up to 131,072 flows	
Time-stamp accuracy	50 ns resolution	
IPv4, UDP, TCP	Hardware checksum generation	

## Ordering Information

<b>VeriWave 4 port Ethernet Blade</b>	WBE1104
<b>VeriWave 1 port Ethernet Blade</b>	WBE1101
<b>VeriWave Chassis</b>	WaveTest 90 or WaveTest 20