

Wireless Client Test Bench



The Wireless Client Test Bench is an integrated solution ideally suited for state-of-the-art testing of 802.11 clients. This highly integrated hardware and software solution allows clients to be tested and optimized for real-world wireless environments and “what-if” scenarios in a controlled environment.

Highlights

- End-user experience on the DUT (forwarding rate, loss, latency, etc.) measured and reported
- Very small footprint (<64kbytes) does not interfere with normal operation of DUT
- Supported OSs include: Windows Mobile 6, Windows XP, Windows Vista, Linux



Figure 1: Wireless Client Test Bench

Key Features

- Provides wireless client (DUT) RF isolation for accurate measurements of DUT behavior with varying degrees of controlled interference
- Creates path and distance emulation between DUT and one or multiple APs to measure rate adaptation and roaming capabilities
- Wireless Client Test Bench Contains:
 - Client isolation enclosure
 - RF Management Unit
 - Patch panels (for 8 AP and 12 AP systems)
- The Wireless Client Test Bench is part of a complete integrated solution which also contains WaveAgent, WaveClient and WaveDynamix
- The RF Management Unit offers a centralized wiring hub for connectivity between DUT and all APs and IxVeriWave Traffic
- Generation and monitoring system; houses all RF connection components including splitters, combiners, and path and distance emulation circuitry

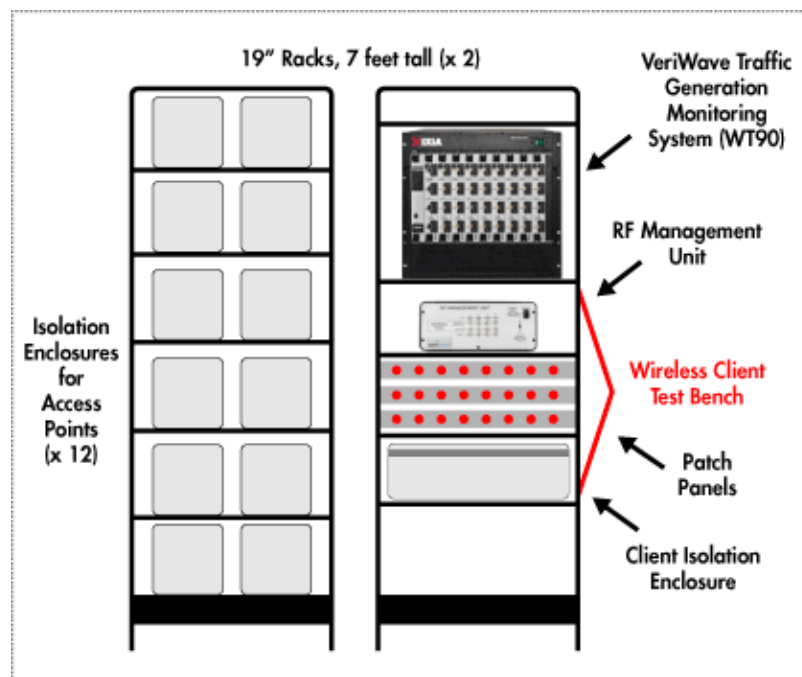


Figure 2: Rack configuration – 12 access point system

WaveAgent

[WaveAgent](#) is a test utility loaded onto a networking device that provides device-specific measurements of forwarding rate, throughput, loss, round-trip latency, and jitter when enabled by IxVeriWave's WaveDynamix and WaveClient applications.

Features

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Benefits

- Enables performance testing of the client's 802.11 subsystem (device driver and integration) independently of the application
- Enables performance testing during silicon qualification (on eval boards), post driver integration on client hardware, and on integrated client during troubleshooting
- Allows testing to occur earlier in the development cycle

WaveClient

[WaveClient](#) allows clients to be tested and optimized for real-world wireless environments and “what-if” scenarios in a controlled environment.

Features

- Dashboard to run tests
- Controls Client Test Bench for path and distance emulation
- Ecosystem traffic created
- Complete, easy-to-understand test reports produced
- Performance and impact of ecosystem on DUT measured

Benefits

- Client devices' real-world performance quantified and qualified
- Clients' real-world operational issues uncovered before deployment
- Quality of experience ensured
- Test efficiency improved through easy setup and execution of tests
- Scenarios repeatable

Specifications

Feature	Description
Available in various configurations	• Test with up to 4 APs – desktop • Test with up to 8 APs – rack mountable • Test with up to 12 APs – rack mountable
Coverage	Minimum of 2- 6 GHz
Insertion loss	Less than 7 dB
VSWR	2.2:1 or less
Switching time	Less than 20 microseconds
Cables	Double shielded
Power	AC powered, worldwide voltages – connector on back panel

Ordering Information

980-2022

IxVeriWave Client Test Bench/8-AP (Small Client); performs client testing with up to 8 access points using a small-sized client (such as PDA); fully configured and cabled unit includes: client RF Isolation chamber (outside dimensions 12"h x 17"w x 24"d, inside dimensions 11"h x 16"w x 23"d, with top access) and built in programmable attenuation; configured to be rack-mounted

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