



High Frequency Trading: Time is Money

The simple reality of High Frequency Trading is that real-time financial data received milliseconds early is a competitive advantage worth several millions of dollars of revenue each year. Currently electronic trading makes up nearly 70% of daily volume on the NYSE, and high-frequency traders generated about \$21B in 2008.

Milliseconds in your favor would enable faster trade execution, ensuring that specific pricing strategies are captured. For a dedicated HFT network, a one millisecond improvement in low-latency connectivity can equate to \$100M per year.

It's the physics!

Minimal latency for microwave is the over-the-air delay: 5.36 microseconds per mile

Minimal latency for fiber optic cable: 8.0 microseconds per mile

Total latency includes additional latency due to data queuing delay, processing delay through gateways, network design, equipment configuration and extra distances due to circuitous routes.

Microwave is Low Latency Champion

Faster Propagation Microwave signals travel through the air about 50% faster than light through optical fiber. Latency in a data communications circuit, or the time difference between sending a request for data and receiving the reply, will consequently be longer over a fiber circuit than a microwave circuit of the exact same length.

Straighter Routes Microwave networks have shorter routes, reducing the total network distance and consequently further improving latency. Microwave links can overcome topographical obstacles such as rivers, mountains and highways while optical networks in many cases have to go around them or follow existing roads or bridges. In general, signals over fiber networks have to travel farther and thus take longer to get to their destination.

Advanced Packet Processing With new advances in packet microwave networking such as low latency, Gigabit Ethernet capacities, and low CapEx now available, microwave transport is rapidly becoming the choice for HFT networks.

Aviat Eclipse: Industry's Lowest Latency Microwave Networking Solution



Aviat Networks is the largest and most experienced independent microwave provider in the world. With our extensive presence and support services in all parts of the world, more than 750,000 Aviat microwave systems have been deployed in 170 countries.

The Eclipse Packet Node is a richly featured, transmission platform for packet networking, with extensive innovations for high performance radio transport and intelligent networking efficiency.

A new plug-in card for Eclipse platform delivers ultra-low delay, for a total network latency that is 40% less than fiber optic networks of comparable distances. This modular "plug-in" solution enables customers to take advantage of a full-featured microwave platform while building the optimum capacity and lowest latency network. Advanced platform features including a full complement of QoS and Layer2 switching features and leading RF performance ensure optimum microwave networking and, ultimately, lowest cost, highest capacity solutions.

Go to www.aviatnetworks.com for more information about low latency connectivity using microwave networking.