

BATS System Performance

World-class, sustained low latency

The BATS Exchange system excels during heavy load and has proven itself on the busiest days in the history of the U.S. equities market. This innovative and technology-leading market center provides the following latency numbers based on *order latency* and *order to quote latency*. The term “latency” for each process is defined below.

Order Acknowledgement Latency

- the time it takes to accept, process, and acknowledge **or fill** a Member order
- the complete round trip from firewall to FIX handler to matching engine and back
- measured from outside the BATS firewall
- sustained under heavy load
- measured during the entire day, including open and close

Order Latency	
Average	250 microseconds
80% of all orders within	250 microseconds
99% of all orders within	585 microseconds
99.9% of all orders within	1.3 milliseconds

Order to Quote Latency

- the time it takes to accept, process, and deliver a visible Member order via Multicast PITCH
- measured from outside the BATS firewall
- sustained under heavy load
- measured during the entire day, including open and close

Multicast PITCH Latency	
Average	265 microseconds
80% of all orders within	265 microseconds
99% of all orders within	555 microseconds
99.9% of all orders within	1.4 milliseconds

Technology professionals at BATS Exchange constantly engineer the BATS Exchange platform to handle heavier and heavier loads while maintaining what they believe to be the lowest firewall-to-firewall latency numbers in the industry.

More System Statistics		
Messages per second	Average: 19,670	Peak: 441,507
PITCH events per second	Average: 8,437	Peak: 288,612
Max Volume to date	Matched: 2.123 billion	Touched: 2.504 billion
CYCLE Smart Routing	Share Fill Rate: >70%	Average Order Lifetime: 8 milliseconds

BATS Exchange offers world-class system performance via FIX (the only ubiquitous financial protocol in the world) which supports all BATS features unlike many of BATS Exchange’s competitors.

For more information on BATS Exchange latency, contact your Director of Sales or the BATS Exchange Trade Desk at 913.815.7001.

Links

[FIX Specification](#): FIX (Financial Information Exchange) protocol information.
[Data Feed Specifications](#): Direct market data feed specifications.

Contacts

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