



## Free Market Data Solutions

Standard Data Sources

BATS Exchange's free market data is available to fit every Member's need. BATS Exchange provides a variety of market data options to ensure Members receive the data they need to trade efficiently. Among the options are:

### Multicast PITCH – Depth of Book Low Latency

*Bandwidth recommendation: Gig Version – minimum of 1 GB cross connect; WAN Version – 100 Mbps*

Multicast PITCH provides real-time depth of book quotations and execution information with nearly half the latency of TCP PITCH and 20% fewer PITCH events. This is achieved by using binary messages (PITCH 2.0). BATS Exchange offers a WAN-shaped and Gig-shaped version of the Multicast feed, both available from BATS Exchange's primary datacenter. Members may choose one or more of the four Multicast PITCH feed options depending on their location and connectivity to BATS Exchange.

### TCP PITCH – Depth of Book

*Bandwidth recommendation: Minimum of 75 Mbps*

BATS Exchange's TCP PITCH data feed offers *uncompressed* depth of book quotations and execution information using ASCII messaging (PITCH 1.0).

### TCP FAST PITCH – Depth of Book Low Bandwidth

*Bandwidth recommendation: Minimum of 25 Mbps*

TCP FAST PITCH data feed offers depth of book quotations and execution information using ASCII messaging (PITCH 1.0). This data feed is *compressed* and packaged by BATS Exchange for Member systems to translate. This requires less bandwidth and decoding of compressed data.

### TOP – Top of Book Low Event Rate

*Bandwidth recommendation: 25 Mbps*

BATS Exchange's TOP market data feed offers up to a 66% reduction in events and an 84% reduction in bandwidth compared to BATS Exchange's standard TCP PITCH market data feed using ASCII messaging (PITCH 1.0). By only showing top of book quotes and trades, TOP offers a significant reduction in required bandwidth and processing. TOP does not send depth of book information and does not show hidden or routed orders.

### DROP – Member Trading Activity

*Bandwidth recommendation: Varies depending on trading activity*

BATS Exchange's DROP data feed is typically used by clearing firms or Members to monitor trading activity. DROP sessions can be used to obtain execution information about a single or multiple Members with proper authorization.

### European Market Data

U.S.-based companies can receive real-time European market data via a local BATS Europe TCP PITCH feed, which saves significant Trans-Atlantic connectivity costs.

## Contacts

Trade Desk	913.815.7001	<a href="mailto:tradedesk@batstrading.com">tradedesk@batstrading.com</a>
Sales	212.378.8527	<a href="mailto:sales@batstrading.com">sales@batstrading.com</a>

## Value-Added Market Data

Innovative Market Data Sources

BATS Exchange's value-add market data offers solutions beyond average trade data offered by BATS. Due to the benefits, BATS charges a fee for the solutions below.

### Last Sale Feed – Matched Trades Only

*Bandwidth recommendation: Minimum 2 Mbps (millisecond spikes may exceed 2 Mbps)*

Last Sale is ideal for market data distributors. It is a real-time, intraday TCP feed that shows *matched* trade price, volume and execution time on the BATS Exchange book. Quotes are not shown which results in much less data than other feeds requiring less technology development for users.

*Fee: \$5,000 a month for a non-redistributable version; \$25,000 a month for a redistributable version*

### Historical Data

#### PITCH / TOP / Last Sale

*File-based downloads available through the log in portion of [www.batstrading.com](http://www.batstrading.com).*

Use the Historical Data of the PITCH, TOP and Last Sale data feeds on a T+1 basis.

Up to three months of data is available via download from the BATS Web site. Additional data beyond three months will be uploaded onto a BATS-provided terabyte drive. There is a single fee per drive no matter how much data is placed on the drive.

*Fee: \$500 download for up to three months; \$2,500 per BATS-provided terabyte drive for more than three months*

## ◆ Links

[FIX Specification](#): FIX (Financial Information Exchange) protocol information.

[Market Data Specifications](#): Detailed connectivity information for each market data feed option.

[Order Types](#): Order types and routing instructions for the BATS Exchange platform.

[Fee Schedule](#): Pricing for accessing liquidity, liquidity rebates, routing and other pricing models.

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