

XDP BBO CLIENT SPECIFICATION

NYSE BBO FEED

NYSE AMERICAN BBO FEED

NYSE NATIONAL BBO FEED

NYSE ARCA BBO FEED

Version Date

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PREFACE

DOCUMENT HISTORY

The following table provides a description of all changes to this document.

VERSION NO.	DATE	CHANGE DESCRIPTION
2.3	09/26/2014	Re-branded for ICE/NYSE
2.4	02/04/2015	Added support for Global OTC
2.4a	03/12/2015	Corrected last field in Quote message to Reserved
2.4b	07/10/2015	Updated legal disclaimer for Global OTC on title page
2.4c	07/13/2016	Corrected length of Quote msg for Arca market
2.4d	02/02/2017	Removed trailing reserved field from the Quote message
2.4e	04/11/2017	Corrected website links, trading hours, MKT replaced with American. Clarified the content and format of Bid Size and Ask Size fields.
2.4f	09/25/2017	Corrected general information on page 2
2.4g	01/29/2018	No change to the feed. Spec support for NYSE National.
2.4h	07/12/2018	Removed references to Global OTC (separate spec document now) Adjusted NYSE session start times.

REFERENCE MATERIAL

The following lists the associated documents, which either should be read in conjunction with this document or which provide other relevant information for the user:

- SFTI Information
- NYSE Symbology
- IP Addresses

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FURTHER INFORMATION

- For additional information about the product, visit the XDP BBO Feed Product Page
- For updated capacity figures, visit our <u>capacity pages</u>

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1. **INTRODUCTION**

This real-time low latency product provides top of book quote data for all traded securities on the respective NYSE exchanges. This data is intended for clients who require a direct, unconsolidated feed and timestamps provided directly from the Exchange matching engines.

1.1 PUBLICATION TIMES

Please refer to the market open pre-opening, early trading, core trading and late trading session times on:

https://www.nyse.com/markets/hours-calendars

1.2 CONTROL MESSAGE TYPES USED IN THE DATA FEEDS

MSGTYPE	DESCRIPTION			
1	Sequence Number Reset			
2	Time Reference Message			
3	Symbol Index Mapping			
10	Retransmission Request Message			
11	Request Response Message			
12	Heartbeat Response Message			
13	Symbol Index Mapping Request Message			
15	Refresh Request Message			
31	Message Unavailable			
32	Symbol Clear			
34	Security Status Message			
35	Refresh Header Message			

1.3 REFRESH MESSAGE TYPES USED IN THE REFRESH FEED

MSGTYPE	DESCRIPTION
35	Refresh Header Message
3	Symbol Index Mapping
34	Security Status Message
140	Quote Message

2. QUOTE MESSAGE – MSG TYPE 140

A quote message is sent when any event results in a new top of book value on either side of the market. See the XDP Common Client Specification for details on Symbol Index and Time Reference messages.

FIELD NAME	OFFSET	SIZE (BYTES)	FORMAT	DESCRIPTION
Msg Size	0	2	Binary	Size of the message: 34 bytes Global OTC: 33 bytes
Msg Type	2	2	Binary	The type of message: 140 – Quote Message
SourceTimeNS	4	4	Binary	The nanosecond offset (UTC Time) from the Time Reference message.
Symbolindex	8	4	Binary	The ID of the symbol in the Symbol Index message.
SymbolSeqNum	12	4	Binary	The symbol sequence number.
Ask Price	16	4	Binary	The Ask price. Use the Price scale from the Symbol Index message.
Ask Volume	20	4	Binary	The aggregate round lot size at the ask price, in shares.
Bid Price	24	4	Binary	The Bid price. Use the Price scale from the Symbol Index message.
Bid Volume	28	4	Binary	The aggregate round lot size at the bid price, in shares.
Quote Condition	32	1	ASCII	 Valid values: C - Closing O - Opening Quote R - Regular Quote W - Slow on the Bid and Ask (this symbol is on the Set Slow List) For markets other than NYSE, only condition R is applicable.
RPI Indicator	33	1	ASCII	The side(s) where Retail Price Indication orders (RPI orders) exist. Values correspond to CQS values: '' – Space means no Retail Interest (Default) A – Retail Interest on Bid side B – Retail Interest on Offer side C – Retail Interest on the Bid and Offer side

3. PRODUCT ID

EXCHANGE	PRODUCT ID	DESCRIPTION
NYSE	3	NYSE BBO
NYSE American	52	NYSE American BBO
NYSE National	102	NYSE National BBO
NYSE Arca	152	NYSE Arca BBO