

Indicative Opening Price and Quantity

The Indicative Opening provides market participants with a probable price and quantity at which the market will open or re-open, given the current book and order activity. Indicative Opening Price and Quantity are calculated by the trading engine during the [Pre-Open](#) and [Reserve states](#) based on the orders in the book.

During these two states orders can be entered or modified, but no matching will occur. This can cause the order book to be locked or crossed, which produces an Indicative Opening Price and Quantity. Indicative opening details are published using the [Market Data Incremental Refresh](#) message.

The Market Data Incremental Refresh message - Opening Data Block carries the Indicative Opening Price and Quantity and is published during the *Pre-open* and *Reserve* states. The Market Data Incremental Refresh message - Opening Data Block is sent when:

- A new order is entered that changes the Indicative Opening Price or Quantity
- A book update changes the Indicative Opening Price or Quantity

The Market Data Incremental Refresh message - Book Update Data Block is published to inform users of the limit prices available in the order book and is sent when:

- An inbound order or modification changes the prices or quantities of the bid or ask price levels.
- A cancel removes orders from the bid or ask price levels.
- Tag 346-NumberOfOrders included in the Indicative Opening Price shows only the Displayed (booked) quantity on the Market Data Incremental Refresh message - Book Update Data Block even though the Indicative Opening Price was calculated using the entire order size for the Display Quantity Order.
- Indicative Opening is calculated for [outright futures](#), [futures spreads](#), [options spreads](#), and options series.

The following include additional information on Indicative Opening: