



Deutsche Börse's high-speed CEF[®] data feeds

Overview

CEF data feeds

Feed	CEF Ultra+ Order by Order	CEF Ultra+	CEF Core
Key benefits	<ul style="list-style-type: none"> Delivers data with unlimited order book depth Ideal for use in algorithmic trading applications 	<ul style="list-style-type: none"> Delivers pre-trade and trade data as soon as it occurs Particularly suited for use in algorithmic trading applications 	<ul style="list-style-type: none"> Consolidated feed Optimal data stream for vendors, traders and fund managers
Information products disseminated	<ul style="list-style-type: none"> Eurex Order by Order Futures Eurex Order by Order Futures + Options Xetra Order by Order 	<ul style="list-style-type: none"> Eurex Ultra Xetra Ultra Eurex IOC Liquidity Indicator for Options Risk Alerts 	<ul style="list-style-type: none"> Broad range of real-time data products covering Eurex[®], Xetra[®], DAX[®], STOXX[®] as well as cooperation partners
Features	<ul style="list-style-type: none"> Lowest latency Un-netted pre-trade information* Un-netted trade information Every visible order Every executed on-exchange trade 	<ul style="list-style-type: none"> Ultra low latency Un-netted pre-trade information* Un-netted trade information Price aggregated order book data Level 1 or level 2** 	<ul style="list-style-type: none"> Low latency Netted pre-trade information* Un-netted trade information Price aggregated order book data Level 1 or level 2**
Order book depth	<ul style="list-style-type: none"> Unlimited 	<ul style="list-style-type: none"> Up to 10 for equities Up to 15 for futures Up to 5 for options 	<ul style="list-style-type: none"> Up to 10 for equities Up to 15 for futures Up to 5 for options
Technology	<ul style="list-style-type: none"> High speed transmission based on multicast technology Fixed-length binary messages and no data compression 	<ul style="list-style-type: none"> High speed transmission based on multicast technology High performance protocol based on the FIX protocol and FAST compression 	<ul style="list-style-type: none"> Reliable broadcast and recovery functions Dynamic message compression prevents data delay during peak load times
Access	<ul style="list-style-type: none"> Access via 10 Gbit/s co-location connection and on request via leased line 	<ul style="list-style-type: none"> Access via leased lines, co-location 	<ul style="list-style-type: none"> Access via leased lines, co-location, internet via VPN

* Netted pre-trade information provides bids and offers at specified time intervals; un-netted pre-trade information provides all bids and offers as soon as they occur.
 ** Level 1 contains best bid, best ask, last traded price and the respective quantity; level 2 information provides increased order book depth.

www.mds.deutsche-boerse.com