



# Deutsche Börse's high-speed CEF<sup>®</sup> data feeds

## Overview

### CEF data feeds

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

\* 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.

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