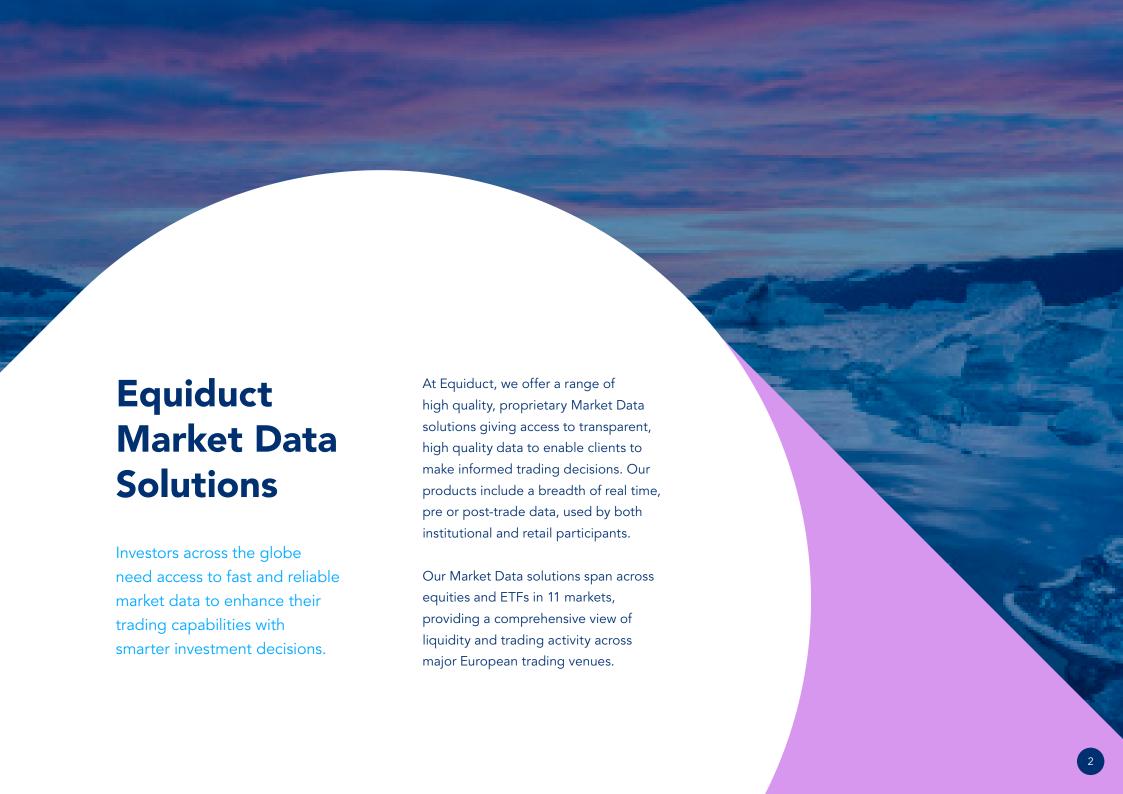


Powering smart trading of pan-European equities



# Why license one of our feeds?

## **Time Specific Data**

Select between our range of real-time or historic market data



## **Depth of Book**

Robust depth of book with detailed trade activity, which can inform investors on potential future price movements



## Reliable

Robust depth of book with detailed trade activity, which can inform investors on potential future price movements





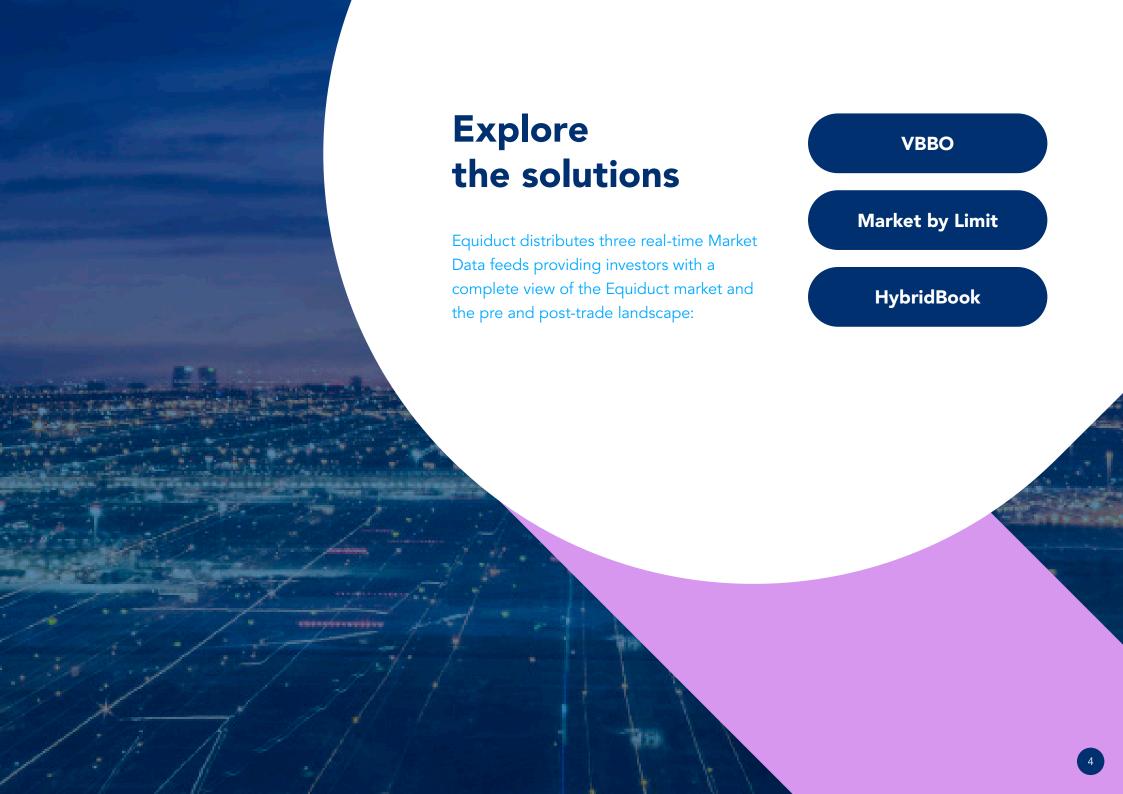
### **Pre- and Post-Trade**

Our range of packages allow you to choose between pre- and post-trade data, or a combination of both



# High Quality & Consolidated

Consolidated market data feed reporting all aggregated securities' price and volume data



## **VBBO**

The Equiduct VBBO is a pre-trade real-time data feed providing the Volume-weighted Best Bid and Offer (VBBO) across all relevant European markets for a given instrument.

The calculation of the VBBO is based on the virtual consolidated order book created from visible pre-trade book depth data from the relevant markets. This feed provides pre-trade transparency for Equiduct's Best Execution services: Apex, and Zenith.

Why license this feed?

1 Retail Market Size (RMS)

As defined by Equiduct

2 Standard Market Size (SMS)

Based on annual AVT published by the European Securities and Markets Authority (ESMA)

3 Apex

The largest quantity being offered by Equiduct's LPs in the retail Apex service per instrument

4 Zenith

The largest quantity being offered by Equiduct's LPs in the Zenith service per instrument

In addition to pre-trade transparency for trading on Equiduct, the VBBO provides a real-time view of the best prices available across major European markets and can be used for benchmarking, pricing of financial instruments, among other uses.

### Below is an illustration of the VBBO as displayed in Market Viewer

BID			OFFER				
MARKET SIZE	VALUE	SIZE	VBB	VBO	SIZE	VALUE	MARKET SIZE
Retail	€ 6986	689	10.1400	10.1450	689	€ 6986	Retail
Standard	€ 6986	689	10.1400	10.1450	689	€ 6986	Standard
Apex	€ 253763	25026	10.1400	10.1473	25026	€ 253945	Apex
Zenith	€ 4999	493	10.1400	10.1450	493	€ 5001	Zenith
User Entered	€ 23972	1378	10.1400	10.1450	1378	€ 13979	User Entered

# Market by Limit

Equiduct's Market by Limit is a real-time market depth feed created from the consolidated pan-European order book.

The Market By Limit feed shows the top 10 price levels, with aggregated volume across relevant European markets (pre-trade data) combined with aggregated trades from the consolidated book (post-trade data).

## This aggregated data feed includes:

Pre-trade data

Ten best limits (bid/offer) with quantities across all relevant markets aggregated at each price level

Post-trade data

Time and Sales with volume aggregated over a sample period with trade prices volume weighted over that same period - usually set at a default configuration of one second

The Market by Limit feed is already widely used by brokers and other retail participants wishing to provides retail investors with a consolidated view of available liquidity on the

The two images are illustrations of, respectively, the detailed consolidated order book built by Equiduct, and the Market By Limit data feed derived from the consolidated order book.

BID			OFFER			
SI	PLIT 100%		S	PLIT 1009	%	
	SIZE	PRICE	PRICE	SIZE		
	4270	12.335	12.340	970	TRQX	
CHIX	1040	12.335	12.340	898	BATE	
TRQX	830	12.335	12.340	756	CHIX	
ВАТЕ	251	12.335	12.345	16938		
	10057	12.330	12.345	7315	CHIX	
CHIX	9106	12.330	12.345	6592	TRQX	
TRQX	7393	12.330	12.345	3106	BATE	
ВАТЕ	5096	12.330	12.345	1543	XEQT	
XEQT	2000	12.330	12.350	16719		
	13616	12.325	12.350	9878	CHIX	
CHIX	8171	12.325	12.350	8356	TRQX	
TRQX	7270	12.325	12.350	5415	BATE	
BATE	6809	12.325	12.350	2450	XEQT	
XEQT	2000	12.325	12.355	21820		
	11973	12.320	12.355	7692	CHIX	
CHIX	6027	12.320	12.355	6998	TRQX	
TRQX	5234	12.320	12.355	6303	BATE	
BATE	3873	12.320	12.355	2000	XEQT	
XEQT	2	12.320	12.360	8703		
	26901	12.315	12.360	7100	TRQX	
CHIX	8334	12.315	12.360	6943	BATE	

BID		OFFER		
SIZE	PRICE	PRICE	SIZE	
6,391	12.335	12.34	2,624	
33,652	12.330	12.345	35,494	
37,866	12.325	12.350	42,818	
27,109	12.320	12.355	44,813	
35,235	12.315	12.360	22,746	

most relevant markets in Europe.



# **HybridBook**

The HybridBook feed is a real-time pre and post-trade data feed from Equiduct's Central Limit Order Book.

It provides full order-by-order detail of the Equiduct book along with all trades occurring on Equiduct, including those from Apex and Zenith.

#### It includes:

1 Pre-trade data

Full order book depth ("Market-by-Order")

Post-trade data

All executions on Equiduct including trades at the VBBO (from Apex and Zenith)

2 Level 1 data

Best Bid/Offer, Open, High, Low, Close, Volume and Last Trade via FIX

Why license this feed?

The HybridBook feed could benefit brokers and other retail participants wishing to access full book depth for Equiduct trades.

Here is an illustration of the HybridBook pre-trade data

BID			•	OFFER	
SPLIT 100%			SPL	IT 100%	
	SIZE	PRICE	PRICE	SIZE	
XEQT	450	11.995	12.010	2250	XEQT
XEQT	300	11.990	12.015	2000	XEQT
XEQT	2000	11.985	12.020	2000	XEQT
XEQT	110	11.950	12.030	100	XEQT
XEQT	8300	11.945	12.100	92	XEQT
XEQT	50	11.920	12.140	706	XEQT
XEQT	92	11.910	12.150	40	XEQT
XEQT	145	11.890	12.170	1500	XEQT
XEQT	92	11.910	12.150	40	XEQT
XEQT	145	11.890	12.170	1500	XEQT

# Which solution is right for me?

FEATURE	VBBO	MARKET BY LIMIT	HYBRIDBOOK
Real-time data	✓	✓	✓
Historical data	✓	✓	✓
Pre-trade data	✓	✓	✓
Post-trade data		✓	✓
Depth of book		✓	✓
Consolidated book		✓	
Protocol	Equiduct ITCHMD (point-to-point TCP)	Equiduct ITCHMD (point-to-point TCP)	Equiduct ITCHMD (point-to-point TCP)

# What else should you know?

### **Terms of license**

Our Market Data feeds are provided pursuant to the terms of the Equiduct Product License Agreement (EPLA). To request a copy of the agreement, you can email our sales team.

### Access to feeds and ITCH technical specifications

Equiduct data feeds are available via our Market Data Vendor partners or direct from Equiduct via the ITCH protocol. You can also find more information on the details of the technical specification through the Resources on our website.

### **Fees**

Fees are detailed in the EPLA Schedules. To request a copy of the agreement, you can email our sales team.

### **Proprietary information**

All Equiduct market data products described in this document are proprietary Equiduct products.

# Client Specific Market Data Feed

Equiduct offers a real time level 1 (L1) pre-trade transparent market data feed that provides users of Apex and Zenith with a view of the liquidity that is available specifically to them at the EBBO.

Prices and quantities are determined by comparing the volume at the EBBO to the combined volume offered by Liquidity Provider(s). Volume from a Liquidity Provider is only included where a relationship has been established between the Order Flow Provider and a Liquidity Provider.

Where the combined volume offered by the Liquidity Provider(s) is less than the volume at the EBBO, the combined volume will be displayed. Where the combined volume offered by the Liquidity Provider(s) is greater than the volume at the EBBO, the EBBO volume will be displayed.

The calculation of the EBBO (price and volume) is based on the virtual consolidated order book created from visible pre-trade book depth data from the relevant markets.

	BID			OFFER	
VENUE	SIZE	PRICE	PRICE	SIZE	VENUE
XPAR	4,270	12.335	12.340	970	TRQX
CHIX	1,040	12.335	12.340	898	BATE
TRQX	830	12.335	12.340	756	CHIX
BATE	251	12.335	12.345	16,938	XPAR
XPAR	10,057	12.330	12.345	7,315	CHIX

<u> </u>	PRICE	PRICE	SIZE
6,391	12.335	12.340	2,624

This volume is then compared to the combined volume offered by Liquidity Providers to a broker.

### **Buy Side Liquidity**

Relationship	Relationship Status	No. of Shares	System Priority
Broker v LP1	Liquidity Offered	300	#4
Broker v LP2	Liquidity Not Offered	-	-
Broker v LP3	Liquidity Offered	1,000	#2
Broker v LP4	Liquidity Offered	2,000	#1
Broker v LP5	Liquidity Offered	500	#3

**3,800 shares** are available as a combined volume offered by the Liquidity Providers

### **Sell Side Liquidity**

Relationship	Relationship Status	No. of Shares	System Priority
Broker v LP1	Liquidity Not Offered	-	-
Broker v LP2	Liquidity Offered	2,500	#1
Broker v LP3	Liquidity Offered	1,000	#2
Broker v LP4	Liquidity Not Offered	-	-
Broker v LP5	Liquidity Offered	850	#3

**4,350 shares** are available as a combined volume offered by the Liquidity Providers

The client specific data feed is available directly from Equiduct via the ITCH protocol and is available for Apex and Zenith trading members.

# **Combined Result**

**Buy Side Liquidity** – there is more volume at the EBBO (6,391 shares) than the combined volume offered by the Liquidity Providers (3,800 shares)

**Sell Side Liquidity** – there is less volume at the EBBO (2,624 shares) than the combined volume offered by the Liquidity Providers (4,350 shares)

### The client specific market data feed will therefore display the following:

SIZE	PRICE	PRICE	SIZE
3,800	12.335	12.340	2,624

Equiduct offers a real time level 1 (L1) pre-trade transparent market data feed that provides users Zenith with a view of the liquidity that is available specifically to them at the EBBO.



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## Who we are

Equiduct is an innovative, client driven pan-European trading venue enabling retail brokers and institutional clients to achieve Best Execution in the most liquid and fragmented cash equities and ETFs.

Focused on providing solutions for our members in the post MiFID environment, Equiduct has developed unique products designed to revolutionise retail trading which facilitate order execution against the pan-European consolidated order book.

Equiduct provides true pan-European trading across 11 markets covering the underlying assets from 16 European headline indices.

# Get in touch

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