

REAL-TIME OPTION GREEKS & ANALYTICS FEED

Introduction

Globally listed Options are one of the largest traded financial instruments. The availability of Option Greeks in real-time is critical for the market participants to trade options efficiently. The calculation of Option Greeks in real time by the market participants requires maintaining robust and expensive infrastructure.

In order to support the market participants, NSE has launched Real-time Option Greeks & Analytics feed which would help participants including trading members, investors, algorithmic traders, risk managers, researchers, etc. to trade options efficiently.

Use Cases

- Integration of Option Greeks Feed in trading terminals
- Ready to use Option Greeks for delta hedge portfolios / structured products
- Integration of system-based strategies dependent on Option Greek value verification before execution
- Real-time risk management systems

Key Features/Calculations

- Real-time / 1 min data Feed
- Weekly Option Greeks with Synthetic Futures
- Long dated Option Greeks with discounted futures
- Illiquid Option Greeks on bid-ask spreads
- Practical Option Greeks calculation approach with theta decay
- IV triggers for ready to use analytics
- Analytics such as VWAP, TWAP for implied volatility
- Higher order Option Greeks
- Option Greek ratios for direct trading opportunities based on ratios

Option Greeks & Analytics

The Option Greeks & Analytics feed is calculated based on Futures as an underlying for practical implementation. Available Option Greeks and Analytics Feed are:

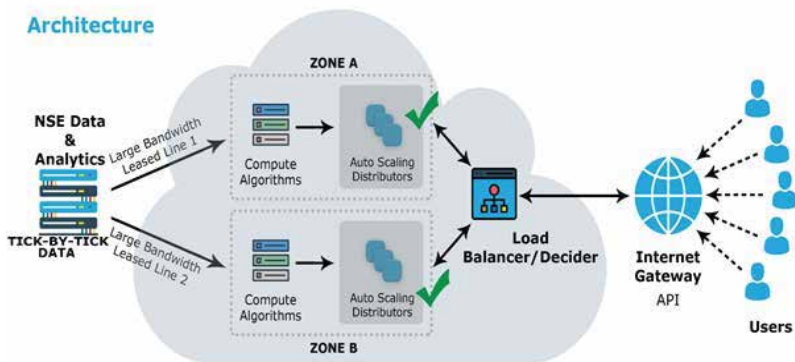
- Base Greeks – Delta, Theta, Vega & Gamma
- Implied volatility
- Implied volatility Trigger Max
- Implied volatility Trigger Min

- Implied volatility time weighted average
- Implied volatility volume weighted average
- Higher Order Option Greeks – Vanna, Charm, Speed, Zomma, Color, Volga, Veta
- Theta Gamma Ratio
- Theta Vega Ratio

Benefits

- Ready to use analytics feed
- Optimized & low latency
- Feed for all Options - Active, Weekly, Long dated
- Reliable source of data
- Eliminating infra cost of computation/maintenance on client side
- Data over internet resulting in cost saving of Leased Lines
- High availability infrastructure on the cloud

Architecture Diagram



Clients can access the data over the internet via. TCP sockets based APIs.

Contact



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