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A variety of expiry months are available.

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Options can be exercised at any time up to 6:45 p.m. on any business day and including the last trading day. Investors are advised to check with their brokers for the arrangement.

Risks of Trading Stock Options
Options involve a high degree of risk. Losses from options trading can exceed your initial margin funds and you may be required to pay additional margin on short notice. Please be sure to do your own analysis before you trade. You must understand the risks of trading in options and should assess whether they are right for you. You are encouraged to consult a broker or financial adviser on your suitability for options trading in light of your financial position and investment objectives before trading.

HKEx STOCK OPTIONS
Introductory Guide to the Stock Options Corner

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LEVERAGE YOUR INVESTMENT POWER
www.hkex.com.hk/stockoptions/eng

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HKEx Stock Options Average Daily Volume 1995-2013

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1. Strong leverage effect
   Investors only need to pay a small portion of the contract value for option premium or collateral (margin) to enter into an option position.

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   Stock options can be utilized in all sorts of market situations, including a bullish market, bearish market or even a stagnant market.

3. Good risk management
   Options can be used as a tool to manage risks. (e.g. Longing a put option can protect an asset against its price drop)
HKEx Website’s Stock Options Corner

Please visit www.hkex.com.hk/stockoptions/eng to enter the HKEx Stock Options Corner. Alternatively you can visit the HKEx website (www.hkex.com.hk). Select Products & Services, choose Derivatives Products and then Stock Options to reach this page.

www.hkex.com.hk/stockoptions/eng

The corner consists of 12 categories. This booklet will focus on new option tools and functions highlighted in six colours below:

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Category: Stock Options Search

Stock Options Search
Investors can use different selection criteria to search for stock options and sort the results accordingly.

- Select underlying stock (by stock code/name or HKATS code), option type (call/put) and expiry month.
- Refine search criteria by choosing moneyness and option premium levels and press "Search".
- Search results are sortable by various columns.
- Shortcuts to Options/Warrants Calculator, Chart, and Stock Option Details Page.

GLOSSARY
Gives explanations of different option terms such as moneyness, implied volatility, delta, theta and vega, and more.
Stock Option Details
The “Stock Option Details” page contains price and key option contract information such as contract notional value, contract size and option premium (in % of underlying price). Other data such as delta and implied volatility are also available for more advanced investors.
Underlying Price versus Option Price
This chart demonstrates the trend and relationship between the price of a stock and its related option.

Implied Volatility versus Option Price
This chart demonstrates the trend and relationship between the stock option selected and its implied volatility.

Export to CSV function allows users to easily re-plot the graph for reports.

OPTION KNOWLEDGE

Relationship between underlying price and option price
Assuming all other factors remain constant, a call (put) option value increases when its underlying price increases (decreases).

OPTION KNOWLEDGE

Usage of implied volatility
Implied volatility is a barometer to assess the expensiveness of a stock option.
Historical Volatility versus Implied Volatility
This chart demonstrates the trend and relationship between the implied volatility of a selected stock option and historical volatility of its underlying stock.

Investors are advised to study the historical volatility of the underlying stock before entering a stock option trade.

Relationship between implied volatility and option price
Assuming all other factors remain constant, the value of an option increases (decreases) when its implied volatility increases (decreases).
Category: Top 10 Traded Stock Option Series

Top 10 Traded Call Option Series
This page displays information of the most traded call option series of the day (in number of contracts).

Top 10 Traded Put Option Series
This page displays information of the most traded put option series of the day (in number of contracts).

**OPTION KNOWLEDGE**

Option premium (%)
It is the amount paid/received expressed in % of spot underlying stock price when an investor buy/sell an option.
Category: Options Tools

Options / Warrants Calculator

The theoretical price of an option is affected by various parameters including the price / level of its underlying stock / index, strike price, volatility, interest rates and time to expiry. Investors can utilise the "Options / Warrants Calculator" available on the HKEx website to estimate the theoretical price of stock options / warrants in various market conditions by changing the parameters.

User guide for the option calculator for pricing an option.

Users may click different tabs for correspondence types of options or warrants they want to calculate.

Click here to load default data or user can choose to input his own parameters.

IMPORTANT

Please note that this calculator is an educational tool intended to help individuals learn how options and warrants work. The actual market environment may not be the same as what the theoretical models assume. Users of this calculator should not make investment decisions based upon values generated by it only.

Theoretical prices and other useful options/warrants figures.

Click here if you wish to backward-calculate Implied Volatility by keying in option prices.

The Price/Volatility matrix table gives user one summary for option price changes with different volatility assumptions.
Portfolio Analyser
With the Portfolio Analyser, investors can analyse the impact on the value/delta of an options portfolio caused by change in underlying asset price and time to expiry. The tool can cater for portfolio consisting up to combinations of four different options and one underlying. It is especially useful for those setting up covered call strategy.

Settings Page
IMPORTANT
Please note that the analyser only demonstrates theoretical outcomes under different assumptions about market scenarios. Theoretical outcomes can deviate from the actual market environment. Investors are not advised to make investment trading decisions based on this tool only.

Analysis Results Page

Choose analysis type, graph type and adjust variables such as remaining days of option and underlying price to analyse the change in portfolio value and delta.

Portfolio gain/loss and delta change are shown in chart.

Portfolio gain/loss and delta change are shown in table.

OPTION KNOWLEDGE

Delta

Delta of an option refers to the sensitivity of an option price to the change in its underlying asset price. It is used as an assessment of impact on an option portfolio caused by a change in underlying asset price for a certain unit.
Category: Options Education

Online Courses
This section consists of various tutorials for users to easily acquire knowledge in relation to stock options.

Options ABC
A total of eight chapters of interactive basic options education are covered in this section. They are suitable for those who are not familiar with stock options.

Remember to try the quiz at the end of each chapter to test your knowledge!
Options Strategies
In this section, a series of common options strategies are introduced. Their applications and characteristics are all covered.

**OPTION KNOWLEDGE**

Diversity of options strategies
Investors can profit from an up market, down market or a consolidation market with a correct market view.

There are over 25 options strategies for 4 different market views here. Users can select and click the strategies to understand the details and check the payoff profiles.

Explaination of the options strategy.

Illustrate the strategy by an example and the profit and loss graph at expiry.

**Bull Call Spread**

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Bulls Call Spread</th>
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</thead>
<tbody>
<tr>
<td>Component</td>
<td>Buy lower strike price-level call, sell higher strike price-level call of the same month</td>
</tr>
</tbody>
</table>
| Potential Profit | * When the stock price index level is above the break-even point  
* Limited to the difference between the two strike price levels minus the net premium paid |
| Maximum Loss | Net premium paid |
| Time Value Impact | Neutral |
| Break-even | Lower strike price-level plus net premium paid |
| Remarks | As different from a Bull Put Spread which would result in net premium received, a Bull Call Spread would result in net premium paid, as the premium for the lower strike price-level call is higher than that of the higher strike price-level call |

**Example**

<table>
<thead>
<tr>
<th>Source/Price</th>
<th>170</th>
<th>180</th>
<th>190</th>
<th>200</th>
<th>210</th>
<th>220</th>
<th>230</th>
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<tbody>
<tr>
<td>Underlying Price</td>
<td>200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profit/loss</td>
<td>$-20</td>
<td>$-10</td>
<td>$0</td>
<td>$10</td>
<td>$20</td>
<td>$30</td>
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</table>

| Net Position | $200 |
| Component | Buy ABC May $190 Call, pay $30, and sell ABC May $220 Call, receive $10 |
| Net Premium | $30 |
| Break-even | $190 ~ $210 |
| Profit when | Stock price is above $210 |
| Potential Profit | ($220 - $190) - $20 = $30 |
| Potential Loss | $30 |
Category: Trading Information

Margin Data Search

Margin Data Search can be used to find out the minimum margin requirement per contract for a single short position in the corresponding option series.

Underlying:
Search by stock code/stock name or HKATS code.

Date:
Select date and press “Search”.

TRADING TIP

The maximum loss of buying an option (call or put) is the premium paid, hence there will be no margin call. Investors who enter a short option position may be required to top up their maintenance margin when the movement of underlying stock(s) or volatility moves against the short position. For details, please consult your broker or visit HKEx Stock Options Corner (www.hkex.com.hk/stockoptions/eng).
Gross Margin Estimator

The gross margin estimator allows investors to estimate minimum margin requirement for multiple option positions.

**TRADING TIP**

No margin is needed for a long position in stock option contracts. Investors need to pay only the option premium upfront.

**TRADING TIP**

Investors owning the underlying stock of the derived stock option may use shares of the underlying stock to replace cash for the margin of writing the call (as long as the value of the long stock position is equal to or more than the notional value represented by the stock option short position). There will be NO margin call to short a call option in this case. For details please refer to the covered call strategy in the Options Strategies section in the HKEx Stock Options Corner.
Category: Statistics

Stock Options Exercised

A one-stop location for stock options exercised information. Data can be displayed in either a table or graphical format for easier viewing. Users can check historical records on early exercise here.

Details of stock options exercised are shown in table format. Results can be sorted by different columns.

Results are displayed in interactive charts.
Open Interest Distribution

Open interest information of any listed stock option can be obtained in this section in either table or graphical format. Users can easily discover which option series the market is focusing on.

Option strike with the largest open interest can be spotted on the interactive chart easily.

Open interest (OI) figures and OI changes are shown in table format.
Put/Call Ratio

Put/Call ratio up to the previous trading day is available in this section.

Trend of Put/Call Ratio can be observed from the chart in a user-friendly way.

Option traded volume and Put/Call Ratio data are displayed in table format.

OPTION KNOWLEDGE

Some investors use the put/call ratio as an indicator of the market direction.
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