



OKX

Account mode comparison

— Multi-currency margin vs. Portfolio margin



1. Overview of multi-currency margin and portfolio margin:

Account mode	Multi-currency margin	Portfolio margin	
		Portfolio margin 1.0 (Derivatives-only)	Portfolio margin 2.0 (Derivatives risk offset)
Instruments	All instruments (spot, margin, futures, perpetual swaps, and options)		
Asset requirement	Net assets > 10,000 USD		
Applicable collateral	<ol style="list-style-type: none"> All assets in your trading account can be used as collateral, valued as USD equity based on the discount rate table. Unrealized PnL in derivative positions can be used as equity of the corresponding assets (realized PnL hedging). 		
Core features	<ol style="list-style-type: none"> Positions can be valued in USD for combined margin calculations. The maintenance margin requirement (MMR) and initial margin requirement (IMR) are based on position tiers. Together, MMR and IMR meet user needs for relatively small positions/position strategies spread across multiple currencies. PnL hedging between different cryptocurrencies valued in USD is supported. 	<ol style="list-style-type: none"> Positions can be valued in USD for combined margin calculations. Optimized MMR calculation model: The "risk unit" concept is included, utilizing the maximum loss of different trading pairs under respective stress tests as MMR collection indicators (includes 8 risk factors: MR1-MR8). <p>For details, refer to Portfolio margin mode</p> <ol style="list-style-type: none"> MMR is lower and capital utilization is higher when you have relatively large positions, robust hedging strategies, and spot-derivative hedging strategies. PnL hedging between different cryptocurrencies valued in USD is supported. The effect of offsetting margin is evaluated within the same risk unit, and risks cannot be offset between different risk units. Risk offsetting is supported. You can hedge your risk exposure to reduce MMR and improve capital utilization. <p>Supported modes:</p> <ol style="list-style-type: none"> Derivatives-only Spot-derivatives risk offset (includes the derivatives hedging feature) <p>You can choose the hedging mode that meets your needs.</p>	

1. Overview of multi-currency margin and portfolio margin:

Account mode	Multi-currency margin	Portfolio margin	
		Portfolio margin 1.0 (Derivatives-only)	Portfolio margin 2.0 (Derivatives risk offset)
Specific approach for options	Long option positions are included in isolated margin mode. In multi-currency margin mode, only short option positions count toward free margin.	Both long and short option positions can be assessed in portfolio margin mode; therefore, the value of options in both directions needs to be considered for free margin.	
MMR	The MMR for positions of different instruments is calculated separately based on position tiers. Position tiers	Derivative positions are grouped by risk unit; risks are assessed holistically in different risk scenarios (Portfolio margin mode); and MMR is calculated based on the maximum loss in all scenarios.	The spot-derivatives risk offset mode is included. The delta position of spot holdings can be included in the corresponding risk unit (USDT-margined risk unit or crypto-margined risk unit). For example, BTC spot assets in your account can be included in the BTC-USD or BTC-USDT risk unit to offset delta risks.

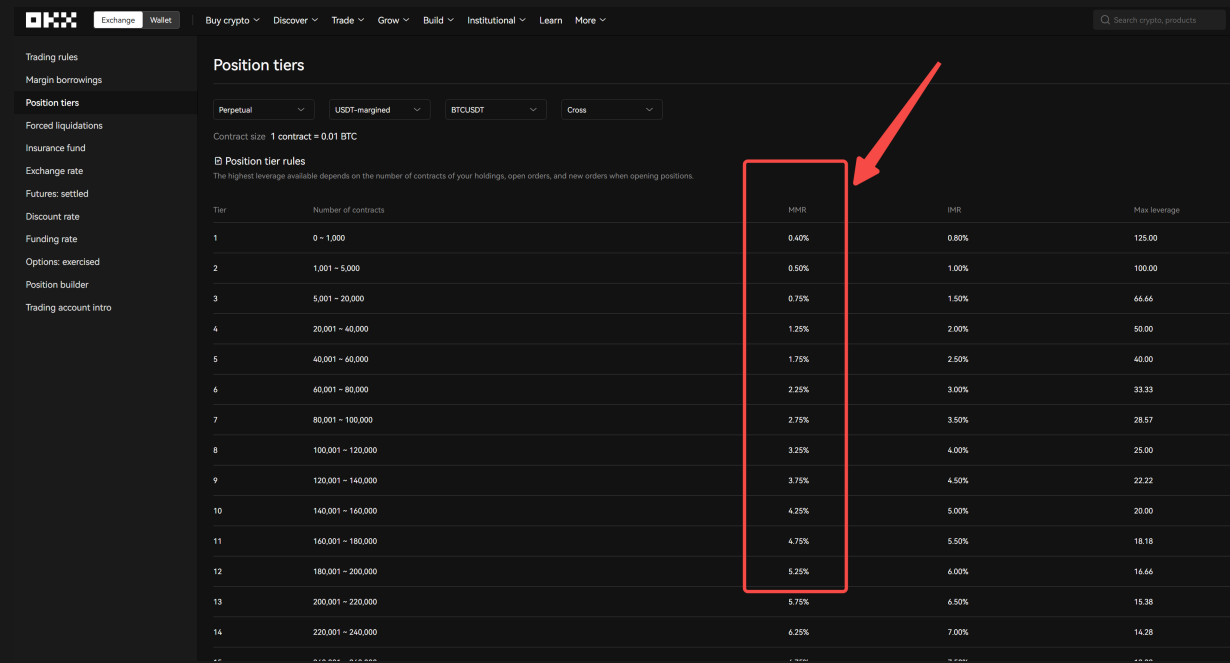
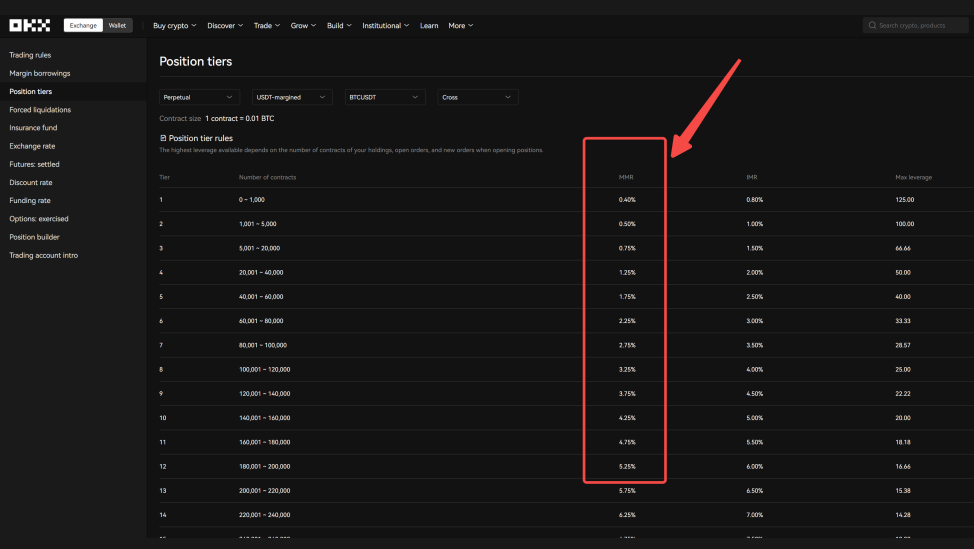
Examples

Tier	Number of contracts	IMR	MMR	Max leverage
1	0 - 1,000	0.40%	0.80%	125.00
2	1,001 - 5,000	0.50%	1.00%	100.00
3	5,001 - 20,000	0.75%	1.50%	66.66
4	20,001 - 40,000	1.25%	2.00%	50.00
5	40,001 - 60,000	1.75%	2.50%	40.00
6	60,001 - 80,000	2.25%	3.00%	33.33
7	80,001 - 100,000	2.75%	3.50%	28.57
8	100,001 - 120,000	3.25%	4.00%	25.00
9	120,001 - 140,000	3.75%	4.50%	22.22
10	140,001 - 160,000	4.25%	5.00%	20.00
11	160,001 - 180,000	4.75%	5.50%	18.18
12	180,001 - 200,000	5.25%	6.00%	16.66
13	200,001 - 220,000	5.75%	6.50%	15.38
14	220,001 - 240,000	6.25%	7.00%	14.28

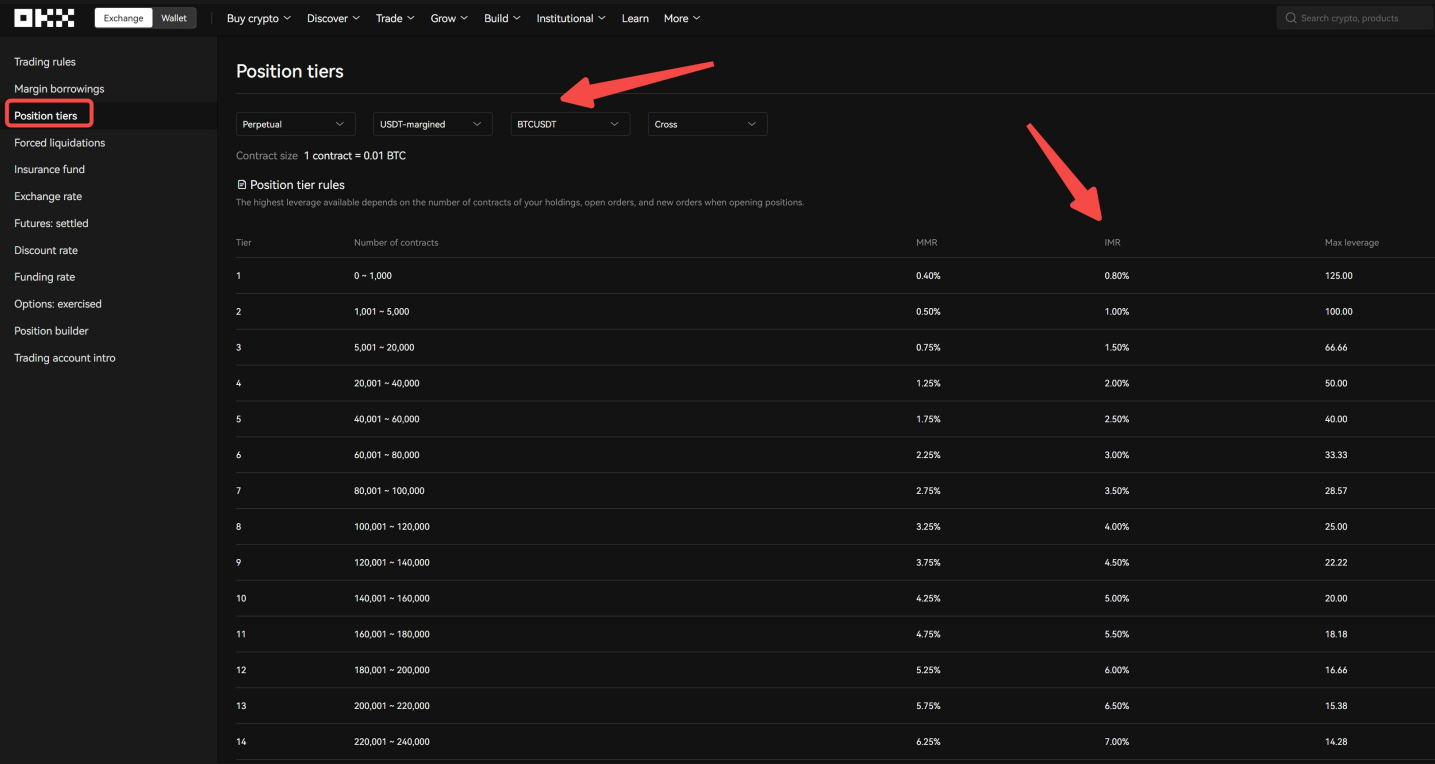
Examples

Instrument	IMR(BTC)	MMR(BTC)	Delta	Gamma
Instrument	0.1619	0.1166	0.3144	0.0001
BTCUSD PER		0.0004	--	--
BTCUSD-202 42000-C		0.0000	--	--
BTCUSD-202 37500-C		0.0005	0.3696	0.0001
BTCUSD-202 62500-C		0.0374	-0.0551	0.0000

2.Margin formula and principles:

Account mode	Multi-currency margin	Portfolio margin												
<p style="text-align: center;">MMR calculation</p>	<p>The MMRs for positions of different instruments are calculated separately based on position tiers.</p> <p style="text-align: center;"><u>Position tiers</u></p>  <p>MMR_{multi-currency margin mode} = Corresponding position size × Contract size × MMR of corresponding position tier</p>	<p>Derivative positions are grouped by risk unit; risks are assessed holistically in different risk scenarios (<u>Portfolio margin mode</u>); and the MMR is calculated based on the maximum loss in all scenarios.</p> <p>Spot-derivatives risk offset: Spot and margin assets are included in MMR calculations to offset risks.</p> <p>The delta position of spot assets can be included in the corresponding risk unit (USDT-margined risk unit or crypto-margined risk unit).</p> <p>For example, BTC spot assets in your account can be included in the BTC-USD or BTC-USDT risk unit to offset delta risks.</p> <table border="1" data-bbox="1732 872 2482 1153"> <thead> <tr> <th>Mode</th> <th>SOL-USDT Risk Unit</th> <th>SOL-USD Risk Unit</th> </tr> </thead> <tbody> <tr> <td>Derivatives-only</td> <td>SOL-USDT Perpetual swaps, futures</td> <td>SOL-USD perpetual swaps, futures, options</td> </tr> <tr> <td>Spot-derivatives (usdt)</td> <td>SOL-USDT Perpetual swaps, futures & SOL</td> <td>SOL-USD Perpetual swaps, futures, options</td> </tr> <tr> <td>Spot-derivatives (crypto)</td> <td>SOL-USDT Perpetual swaps, futures</td> <td>SOL-USD Perpetual swaps, futures, options & SOL</td> </tr> </tbody> </table>  <p>MMR = Sum of USD value of each risk unit's derivatives MMR + account-level borrowing MMR</p> <div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <p style="text-align: center;">Note</p> <p>USD value of each risk unit's derivatives MMR = Max { [Max (Spot shock, Theta decay risk, Extreme move) + Basis risk + Vega risk + Interest rate risk], Adjusted minimum charge }</p> <p>Abstract formula: MMR_{risk_unit} = Max (Max (MR1, MR2, MR6) + MR3 + MR4 + MR5, MR7)</p> <p><u>Portfolio margin mode</u></p> </div>	Mode	SOL-USDT Risk Unit	SOL-USD Risk Unit	Derivatives-only	SOL-USDT Perpetual swaps, futures	SOL-USD perpetual swaps, futures, options	Spot-derivatives (usdt)	SOL-USDT Perpetual swaps, futures & SOL	SOL-USD Perpetual swaps, futures, options	Spot-derivatives (crypto)	SOL-USDT Perpetual swaps, futures	SOL-USD Perpetual swaps, futures, options & SOL
	Mode	SOL-USDT Risk Unit	SOL-USD Risk Unit											
Derivatives-only	SOL-USDT Perpetual swaps, futures	SOL-USD perpetual swaps, futures, options												
Spot-derivatives (usdt)	SOL-USDT Perpetual swaps, futures & SOL	SOL-USD Perpetual swaps, futures, options												
Spot-derivatives (crypto)	SOL-USDT Perpetual swaps, futures	SOL-USD Perpetual swaps, futures, options & SOL												

2.Margin formula and principles:

Account mode	Multi-currency margin	Portfolio margin
<p>IMR calculation</p>	<p>The IMRs for positions of different instruments are calculated separately based on position tiers.</p> <p><u>Position tiers</u></p>  <p>IMR_multi-currency margin mode = Corresponding position size × Contract size × IMR of corresponding position tier</p>	<p>The IMR and MMR for different risk units have a fixed ratio relationship.</p> <p>$IMR = 1.3 \times \text{Max (Positive-delta derivatives MMR, Negative-delta derivatives MMR, total derivatives MMR)} + \text{Borrowing IMR}$</p> <div data-bbox="2392 847 2542 891" style="background-color: #00FF00; border-radius: 10px; padding: 2px; display: inline-block; font-weight: bold;">Note</div> <ul style="list-style-type: none"> • Positive-delta derivatives MMR = MR required for all derivative positions + MR required for all open derivative orders with a positive delta (+ MR required for all derivative orders in RFQ on Liquid Market Place) • Negative-delta derivatives MMR = MR required for all derivative positions + MR required for all open derivative orders with a negative delta (+ MR required for all derivative orders in RFQ on Liquid Market Place) • Total derivatives MMR = MR required for all derivative positions (+ MR required for all derivative orders in RFQ on Liquid Market Place)

Market makers, professional traders, and institutional traders can enjoy 75% or 50% lower MMRs and IMRs in portfolio margin mode. For more details, contact our customer service ([OKX Help](#))

3.Calculation examples:

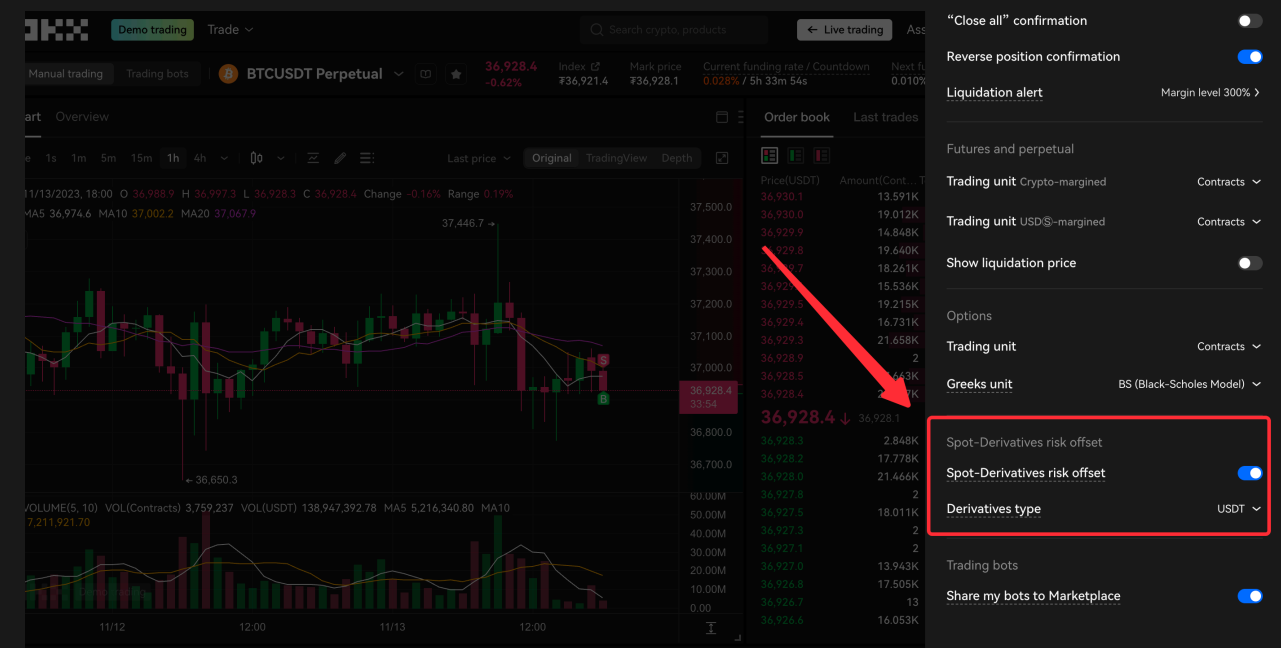
★ Summary ★

1. In scenarios with small positions, no clear hedging strategy, or PnL hedging across risk units, the margin (based on position tiers) is lower and more streamlined in multi-currency margin mode than in portfolio margin mode.
2. In portfolio margin mode, users with large-scale assets (for reference, value of positions in both directions > 5 million USD, depending on the hedging strategy), hedged position strategies, and spot holdings benefit from lower MMR and more flexible capital utilization.
3. In certain scenarios, portfolio margin mode 2.0 (spot-derivatives risk offset mode) has lower MMRs than multi-currency margin mode, and it also addresses issues related to small-scale assets.

Small positions :

Account mode	Multi-currency margin	Portfolio margin	
		Derivatives-only	Spot-derivatives risk offset
Assets	5.65 BTC, 15 ETH, 35000 USDT		
Leverage	5x		
Positions	-30 ETH-USDT-SWAP contracts 20 ETH-USDT-231006 contracts 10 BTC-USD-SWAP contracts		
Formula	MMR = Sum [MMR for open positions in cross margin mode of each cryptocurrency × Cryptocurrency price] MMR for open positions of each cryptocurrency = Position value of each cryptocurrency × MMR	MMR = Sum [MMR_risk_unit for open positions of each risk unit] + Account-level borrowing margin MMR_risk_unit for open positions of each risk unit = Max (Max (MR1, MR2, MR6) + MR3 +MR4 +MR5, MR7)	

Small positions :

Account mode	Multi-currency margin	Portfolio margin	
		Derivatives-only	Spot-derivatives risk offset
Calculation process	<ol style="list-style-type: none"> Obtain the MMR and IMR based on the number of contracts and the position tier of the corresponding trading pair. Determine the free margin based on your assets and positions. 	<ol style="list-style-type: none"> Calculate the MMR of different risk units based on the corresponding risk unit groups. Calculate the MMR of your account by adding the MMRs of different risk units. 	<ol style="list-style-type: none"> Based on the "Derivatives type" (USDT or crypto) you select, include your spot holdings in the corresponding USDT/crypto risk unit. Calculate the MMR of your account by adding the MMRs of different risk units.
Calculation result	MMR = 6.14 USD	MMR = 67.08 USD	 <p>Spot-derivatives risk offset mode (crypto): MMR = 67.08 USD</p> <p>Spot-derivatives risk offset mode (USDT): MMR = 44.88 USD</p>
Used for	<ul style="list-style-type: none"> Small positions 		

Large positions (no hedging strategies/no hedging across risk units):

Account mode	Multi-currency margin	Portfolio margin	
		Derivatives-only	Spot-derivatives risk offset
Assets	150 ETH and 100 BTC		
Leverage	5x		
Positions	30,000 ETH-USDT-SWAP contracts 20,000 ETH-USDT-231229 contracts 1,000 BTC-USD-231229 contracts		
Formula	MMR = Sum [MMR for open positions in cross margin mode of each cryptocurrency × Cryptocurrency price] MMR for open positions of each cryptocurrency = Position value of each cryptocurrency × MMR	MMR = Sum [MMR_risk_unit for open positions of each risk unit] + Account-level borrowing margin MMR_risk_unit for open positions of each risk unit = Max (Max (MR1, MR2, MR6) + MR3 +MR4 +MR5, MR7)	
Calculation process	<ol style="list-style-type: none"> Obtain the MMR and IMR based on the number of contracts and the position tier of the corresponding trading pair. Determine the MMR based on your position strategy and position value. 	<ol style="list-style-type: none"> Calculate the MMR of different risk units based on the corresponding risk unit groups. Calculate the MMR of your account by adding the MMRs of different risk units. e.g., ETH-USDT and BTC-USD risk units 	<ol style="list-style-type: none"> Based on the "Derivatives type" (USDT or crypto) you select, include your spot holdings in the corresponding USDT/crypto risk unit. Calculate the MMR of your account by adding the MMRs of different risk units. e.g., ETH-USDT and BTC-USD risk units

Large positions (no hedging strategies/no hedging across risk units):

Account mode	Multi-currency margin	Portfolio margin	
		Derivatives-only	Spot-derivatives risk offset
Calculation results	MMR = 16,868 USD	MMR = 132,064 USD	<p>Spot-derivatives risk offset mode (crypto):</p> <p>When you do not have applicable hedging strategies, the result in spot-derivatives risk offset mode is the same as in derivatives-only mode.</p> <p>MMR = 132,064 USD</p> <p>Spot-derivatives risk offset mode (USDT):</p> <p>When you do not have applicable hedging strategies, the result in spot-derivatives risk offset mode is the same as in derivatives-only mode.</p> <p>MMR = 132,064 USD</p>
Used for	<ul style="list-style-type: none"> • Large positions • No derivative hedging strategies; some unilateral Greeks exposure 		

*The above examples are from [Position builder](#), which you can use for simulation.

Large positions (with hedging strategies):

Account mode	Multi-currency margin	Portfolio margin	
		Derivatives-only	Spot-derivatives risk offset
Assets	150 ETH and 100 BTC		
Leverage	5x		
Positions	-30000 ETH-USDT-SWAP contracts 25000 ETH-USDT-231229 contracts -10 BTC-USD-231229 contracts		
Formula	$\text{MMR} = \text{Sum} [\text{MMR for open positions in cross margin mode of each cryptocurrency} \times \text{Cryptocurrency price}]$ $\text{MMR for open positions of each cryptocurrency} = \text{Position value of each cryptocurrency} \times \text{MMR}$	$\text{MMR} = \text{Sum} [\text{MMR_risk_unit for open positions of each risk unit}] + \text{Account-level borrowing margin}$ $\text{MMR_risk_unit for open positions of each risk unit} = \text{Max} (\text{Max} (\text{MR1, MR2, MR6}) + \text{MR3} + \text{MR4} + \text{MR5, MR7})$	
Calculation process	<ol style="list-style-type: none"> Obtain the MMR and IMR based on the number of contracts and the position tier of the corresponding trading pair. Determine the MMR based on your position structure/strategy and position value. 	<ol style="list-style-type: none"> Calculate the MMR of different risk units based on the corresponding risk unit groups. Calculate the MMR of your account by adding the MMRs of different risk units. e.g., ETH-USDT and BTC-USD risk units 	<ol style="list-style-type: none"> Based on the "Derivatives type" (USDT or crypto) you select, include your spot holdings in the corresponding USDT/crypto risk unit for offsetting. Calculate the MMR of your account by adding the MMRs of different risk units. e.g., ETH-USDT and BTC-USD risk units

Large positions (with hedging strategies):

Account mode	Multi-currency margin	Portfolio margin	
		Derivatives-only	Spot-derivatives risk offset
Calculation results	MMR = 23842.91 USD	MMR = 17156.90 USD	Spot-derivatives risk offset mode (crypto): MMR = 16,784.28 USD Spot-derivatives risk offset mode (USDT): MMR = 60,31.53 USD
Used for	<ul style="list-style-type: none"> • Large positions • Derivative hedging strategies: Contracts of the same symbol but with different instruments are placed within the same risk unit. • Spot-derivative hedging strategies: The direction of your spot holdings is opposite to your net position within a risk unit. You can choose a corresponding risk offset mode: crypto/USDT. 		

*The above examples are from [Position builder](#), which you can use for simulation.

4. Reference strategies:

Overview of applicable scenarios: Scenarios suitable for multi-currency margin mode

A. Positions with unclear hedging strategies



- e.g., Single-direction positions

B. Small positions



- When calculating the margin of each risk unit in portfolio margin mode, a minimum amount is charged based on historical data. This amount is not cost-effective for small positions. For example, a position value of 15% is charged for MR1, and a basis risk of 0.6% is charged as margin for MR4.

C. Positions hedged between different risk units



- For example, BTC-USDC-Swap and BTC-USD-Swap fall under different risks units and cannot have offsetting margin.

Note: Hedging between USDC and USDT risk units is not currently supported.

D. Calculations related to order placement. Currently, order to order hedging and order to position hedging are not supported

E. Extensive cryptocurrency borrowing



- Borrowed cryptocurrency can be hedged against long derivative positions, reducing the margin for the derivatives. However, borrowing MMR will still be charged.

4. Reference strategies:

Overview of applicable scenarios: Scenarios suitable for portfolio margin mode

For portfolios with adequate hedging between derivatives, margin in portfolio margin mode is significantly more cost-effective than in multi-currency margin mode.

A. Calendar spread with relatively low basis risks

B. Portfolios with large positions and relatively robust hedging strategies (adequate delta, theta, vega, and rho hedging): e.g., bilateral positions (hedged portfolios) within the ETH-USDT risk unit, with a value of 5 million USD

C. Orders with high leverage, or strategies with significantly more orders than positions



- In portfolio margin mode, positions have a relatively fixed IMR%, e.g., ETH-USDT: $15\% \times 1.3 = 19.5\%$
- If the leverage of positions in multi-currency margin mode exceeds 5x, $\text{IMR\%} = 1 / \text{leverage} < 19.5\%$

4. Reference strategies:

Primary position type	Secondary position type	Position details	Multi-currency margin MMR	Portfolio margin MMR	Multi-currency/Portfolio margin <MMR> Multi-currency MMR / Min (Portfolio margin MMR)	Others
Basic scenario: Portfolio margin mode						
Scenario 1: Positions across different currencies/ contract types (long and short)	<ol style="list-style-type: none"> Spot Futures and perpetual swaps Spot-derivative hedging strategies (e.g., ETH/ETH-USDT-SWAP) 	<p>6.24 BTC 19,742 USDT 15 ETH</p> <p>1,000 ETH-USDT-SWAP contracts -2,000 ETH-USDT-SWAP contracts 5,000 LTC-USDT-SWAP contracts</p>	297.64 USD	<p>Derivatives-only mode (No crypto-margined spot-derivative hedging strategies. The result is the same when using spot-derivatives risk offset mode (crypto). 6,340.93 USD</p> <p>Spot-derivatives risk offset mode (USDT) 2,759.39 USD</p>	10.8%	<p>Positions spread across various trading pairs, multi-currency PnL hedging/spot-derivative hedging</p> <p>Due to the different risk unit groups in portfolio margin mode, margin cannot be offset by hedging different trading pairs/contract types.</p> <p>e.g.,:</p> <ol style="list-style-type: none"> ETH-USDT/ETH-USDT hedging is not supported. ETH-USDT/LTC-USDT hedging is not supported. <p>The following example uses controlled variables, i.e., positions within the same risk unit.</p> <p>You can create a hedging strategy by opening positions in opposite directions in portfolio margin mode to offset margin.</p>

4. Reference strategies:

Primary position type	Secondary position type	Position details	Multi-currency margin MMR	Portfolio margin MMR	Multi-currency/Portfolio margin <MMR> Multi-currency MMR / Min (Portfolio margin MMR)	Others
Basic scenario: Portfolio margin mode						
Scenario 2: Hedged orders/ positions (hedging to offset MMR is not supported)	<ol style="list-style-type: none"> 1. Futures and perpetual swaps 2. Hedged derivative orders and positions <p>Note: The following strategy only includes hedged positions. Hedging between orders and positions is not supported.</p>	10 orders to buy ETH/USDT -1000 ETH-USDT-SWAP contracts	127.7 USD	Derivatives-only mode/ spot-derivatives risk offset mode (USDT)/ spot-derivatives risk offset mode (crypto) 2,388.98 USD	5.3%	<p>Both modes currently do not support hedging between orders and positions.</p> <p>In portfolio margin mode, margin can be offset with a corresponding spot-derivative hedging strategy.</p> <p>The pros and cons of margin collection depend on your position size. For details, refer to the following scenarios.</p>
Note: The following example uses controlled variables, i.e., position strategies within the same risk unit.						

4. Reference strategies:

Primary position type	Secondary position type	Position details	Multi-currency margin MMR	Portfolio margin MMR	Multi-currency/Portfolio margin <MMR> <small>(Multi-currency MMR / Min (Portfolio margin MMR))</small>	Others
Delta one products (futures/perpetual swaps)						
Simple position/ hedging strategies	MR1/MR6 1. Single-direction futures and perpetual swaps 2. Relatively small positions (label)	-1,000 ETH-USDT-SWAP contracts Value: 158,000 USD	127.67 USD	2394.51 USD	5.3%	Portfolio margin mode is suitable for accounts with good hedging strategies. Multi-currency margin mode features more cost-effective margin in scenarios with only 1 risk exposure and limited position sizes. Portfolio margin mode also poses stricter limits on position sizes.
	MR4: This strategy can be used to offset price move risks 1. Futures and perpetual swaps — fully delta-hedged 2. No spot-derivative hedging strategy (10 BTC/10 BTC-USDT-SWAP) 3. Relatively small positions (label) Additional note: Result of extra delta risk exposure	-1,000 ETH-USDT-SWAP contracts Value: 158,000 USD	208.14 USD	192.10 USD	108.3%	With a hedging strategy, you can fully offset the price move impact, thereby eliminating the impact of MR1. This is the incentive offered by portfolio margin mode to users with robust hedging strategies, and it demonstrates the margin benefits of offsetting risks.

4.Reference strategies:

Primary position type	Secondary position type	Position details	Multi-currency margin MMR	Portfolio margin MMR	Multi-currency/Portfolio margin <MMR> Multi-currency MMR / Min (Portfolio margin MMR)	Others
Delta one products (futures/perpetual swaps)						
Calendar spread hedging(basis risks)	MR4 1. Futures and perpetual swaps — fully delta-hedged 2. No spot-derivative hedging strategies 3. Relatively large positions or relatively low basis risks (MR4)	-15,000 ETH-USDT-SWAP contracts 15,000 ETH-USDT-231229 contracts Value: 4.7 million USD	9,020.56 USD	2878.69 USD	313.4%	When the basis is relatively small, the margin charged is significantly lower than in fully delta-hedged strategies.
	MR7 1. Futures and perpetual swaps — fully delta-hedged 2. No spot-derivative hedging strategies 3. Relatively large positions or relatively high basis risks (> 5 million USD)	-50,000 ETH-USDT-SWAP contracts 50,000 ETH-USDT-231229 contracts Value: 16 million USD	78,251.55 USD	9,593.22 USD	815.7%	The OKX platform increases the cost of reducing large positions, thereby mainly charging MR7. Other factors such as price movements are not prevalent in this scenario. In this scenario, some exposure to delta risks can lead to more flexibility when opening positions.

4. Reference strategies:

Primary position type	Secondary position type	Position details	Multi-currency margin MMR	Portfolio margin MMR	Multi-currency/Portfolio margin <MMR> Multi-currency MMR / Min (Portfolio margin MMR)	Others
Spot-derivative hedging (spot-futures/perpetual swaps)						
spot - derivative hedging	<ol style="list-style-type: none"> Spot holdings (positive delta) Futures and perpetual swaps Hedging strategy: <ol style="list-style-type: none"> Select the correct hedging mode Create an opposite net delta direction 	150 ETH -30,000 ETH-USDT-SWAP contracts 10,000 ETH-USDT-231229 contracts	8,396.56 USD	Derivatives-only mode/spot-derivatives risk offset mode (USDT) 4,9770.27 USD Spot-derivatives risk offset mode (crypto) 13,763.56 USD (= derivatives + borrowing margin) Derivatives margin = 13,763.56 USD Borrowing margin = 0 (no borrowings, no additional margin charged)	61%	<p>The categorization used by spot-derivatives risk offset mode is similar to risk units, which are based on the type of trading currency.</p> <p>You can include spot holdings in USDT-margined contracts "or" crypto-margined contracts to offset margin.</p> <p>You can choose the mode based on your hedging strategy.</p>
	<ol style="list-style-type: none"> Spot holdings (negative delta, meaning you borrow cryptocurrency) Futures and perpetual swaps Hedging strategy: <ol style="list-style-type: none"> Select the correct hedging mode Create an opposite net delta direction 	-50 ETH 10,000 ETH-USD-SWAP contracts -5,000 ETH-USD-231229 contracts	3,109.97 USD	Derivatives-only mode/spot-derivatives risk offset mode (USDT) 10,589.74 USD Spot-derivatives risk offset mode (crypto) 3,095.44 (= derivatives + borrowing margin) Derivatives margin = 696.01 USD Borrowing margin = 2,399.43 USD	100.6%	<p>In spot-derivatives risk offset mode, you can use borrowed cryptocurrency to hedge long derivative positions, reducing the margin for those derivatives. However, MMR for borrowing is still charged.</p>


4. Reference strategies:

Primary position type	Secondary position type	Position details	Multi-currency margin MMR	Portfolio margin MMR	Multi-currency/Portfolio margin <MMR> <small>(Multi-currency MMR / Min (Portfolio margin MMR))</small>
Options hedging (options-futures/perpetual swaps) Delta neutral					
Simple options hedging strategy	Options-futures/perpetual swaps (fully delta-hedged)	-200 ETH-USD-1124-1700-C contracts (delta -6.4) 1,050 ETH-USD-SWAP contracts (delta 6.5) Value: 47,000 USD	3,615.07 USD	2,004.98 USD	180.3%

4. Reference strategies:

Primary position type	Secondary position type	Position details	Multi-currency margin MMR	Portfolio margin MMR	Multi-currency/Portfolio margin <MMR> Multi-currency MMR / Min (Portfolio margin MMR)
Options hedging (options-futures/perpetual swaps) Vega neutral					
Bullish call ratio spread	 <p>Sell a 1-month ATM call option Buy a call option with the same expiry and 2x leverage for hedging</p>	ETH-USD-231124-1800-call contracts -100 ETH-USD-231124-1600-call contracts	<p>Seller in cross-margin mode 2,073.58 USD</p> <p>Multi-currency margin mode only supports option buyers in isolated margin mode, and no additional margin is generated.</p>	968.78 USD	214%

4. Reference strategies:

Primary position type	Secondary position type	Position details	Multi-currency margin MMR	Portfolio margin MMR	Multi-currency/Portfolio margin <MMR> Multi-currency MMR / Min (Portfolio margin MMR)
Options hedging (options-futures/perpetual swaps) Vega neutral					
Call calendar spread	 <p>Sell a 1-month ATM call option Buy a 3-month ATM call option Hedge the extra delta exposure to perpetual swaps</p>	<ol style="list-style-type: none"> -1000 ETH-USD-231124-1600-call contracts 1000 of ETH-USD-231229-1600-call contracts 3200 ETH-USD-SWAP contracts <p>Delta = 20 Delta = -20.1</p>	<p>Seller in cross-margin mode 20,934.48 USD</p> <p>Multi-currency margin mode only supports option buyers in isolated margin mode, and no additional margin is generated.</p>	5375.33 USD	389.5%

*If you have more position-related queries, you can use "simulation tools" to make your own calculations, or contact us for customized calculations

5.Simulation tools:

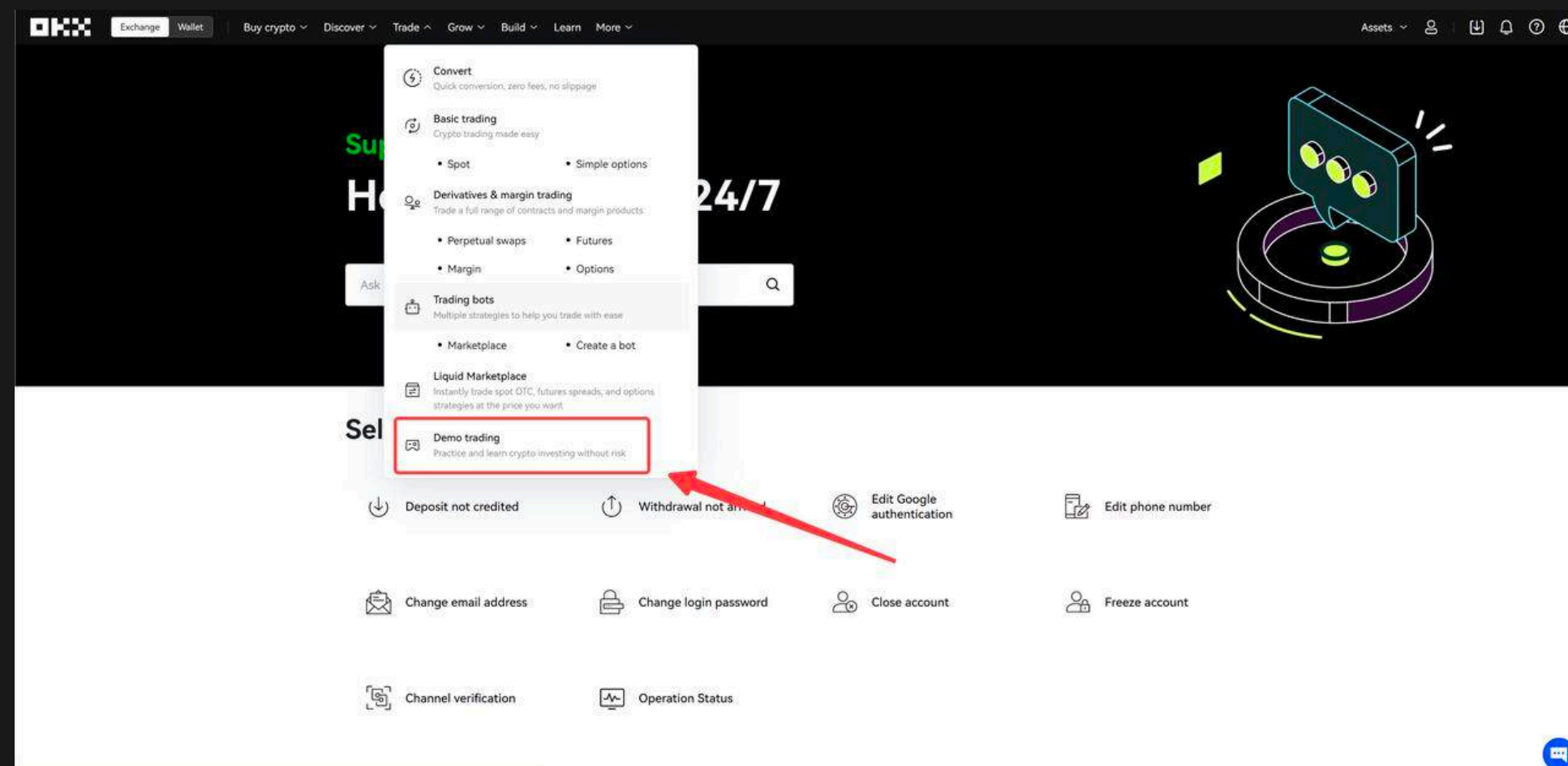
1. [Position builder](#) (currently does not support comparisons between single-currency and multi-currency margin modes)
2. [Demo trading](#)
3. Backend calculations through customer service ([OKX Help](#))



5.Simulation tools:

1.Demo trading

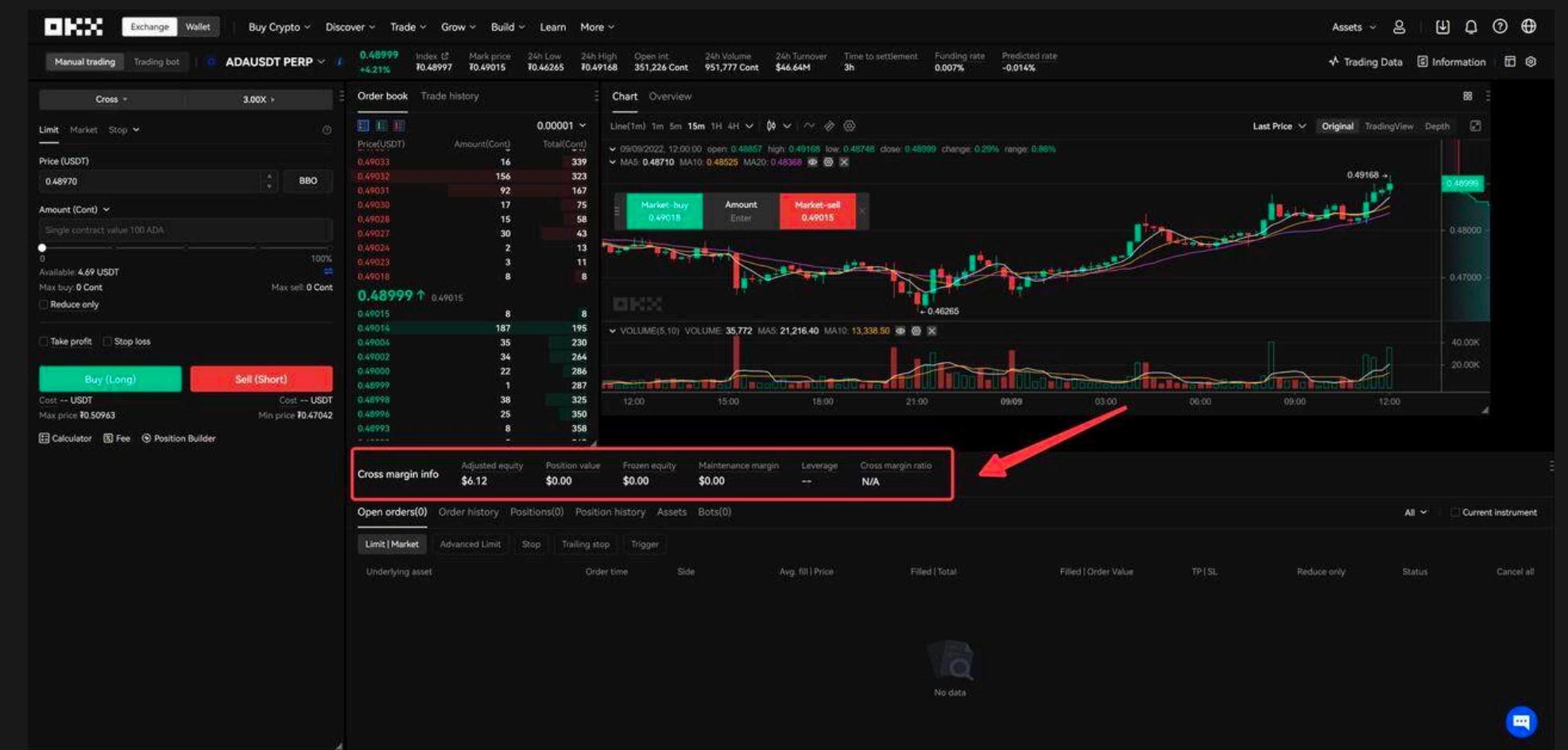
Trade > Settings > Demo trading



Link: [Demo trading](#)

2.Multi-currency margin mode

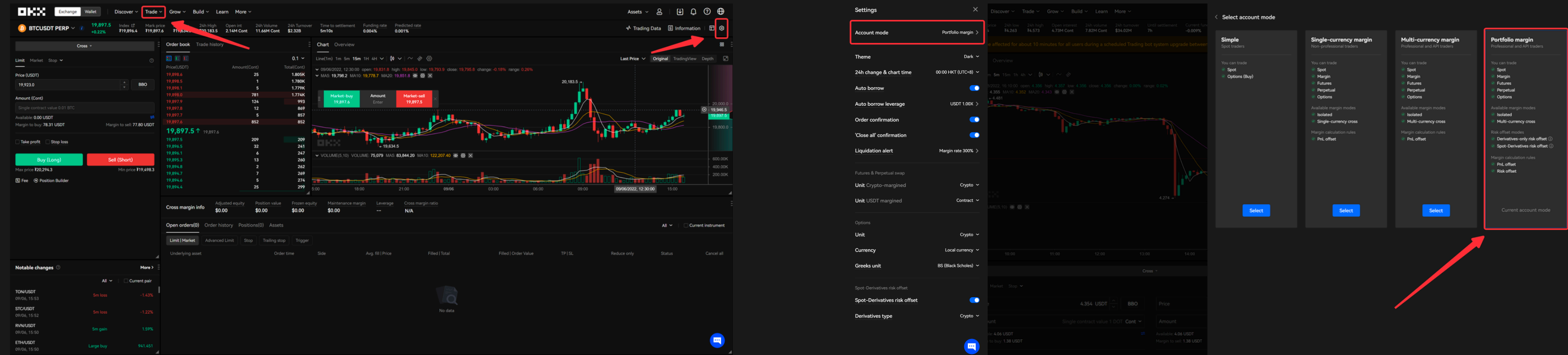
Trade > Settings > Account mode > Multi-currency margin mode



For details, refer to: [Multi-currency margin mode](#)

5.Simulation tools:

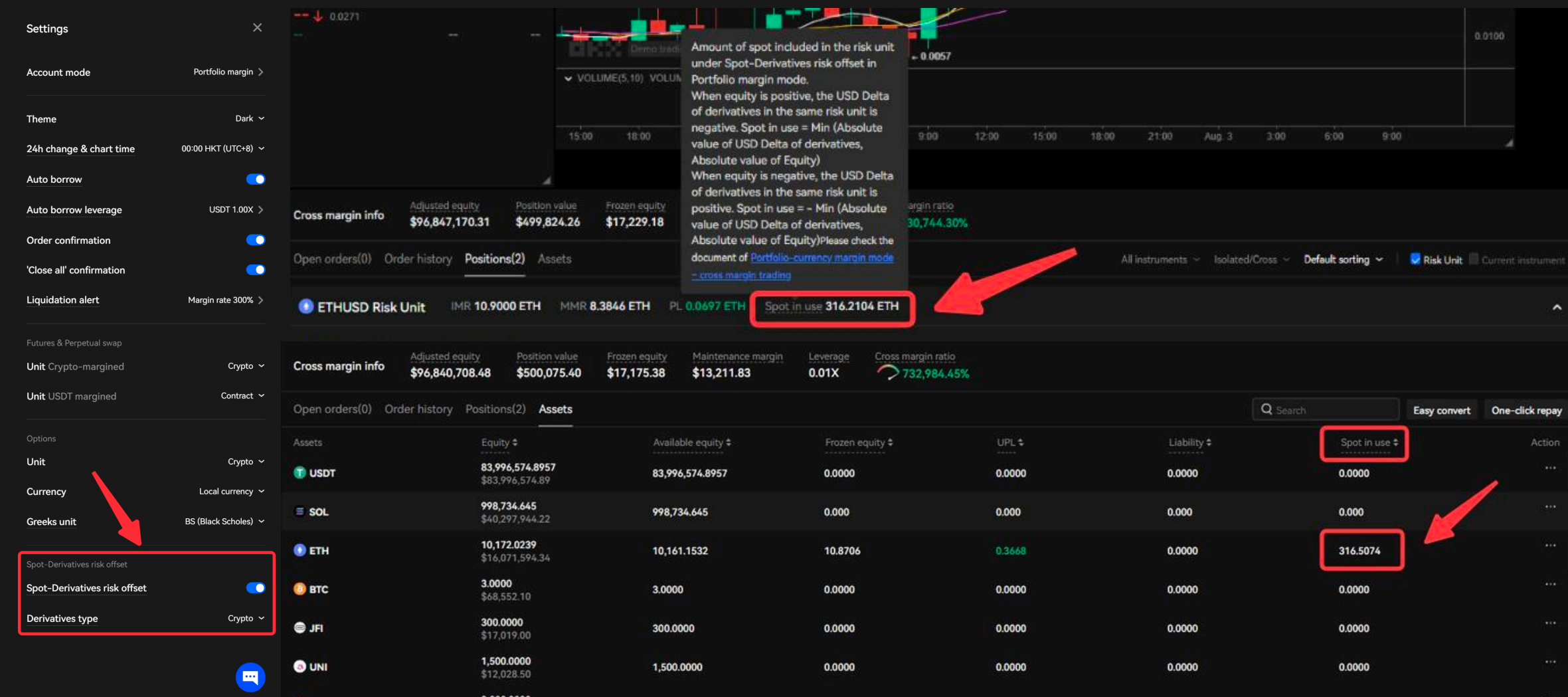
3.Portfolio margin mode 1.0



•• For details, refer to: [Portfolio margin mode](#)

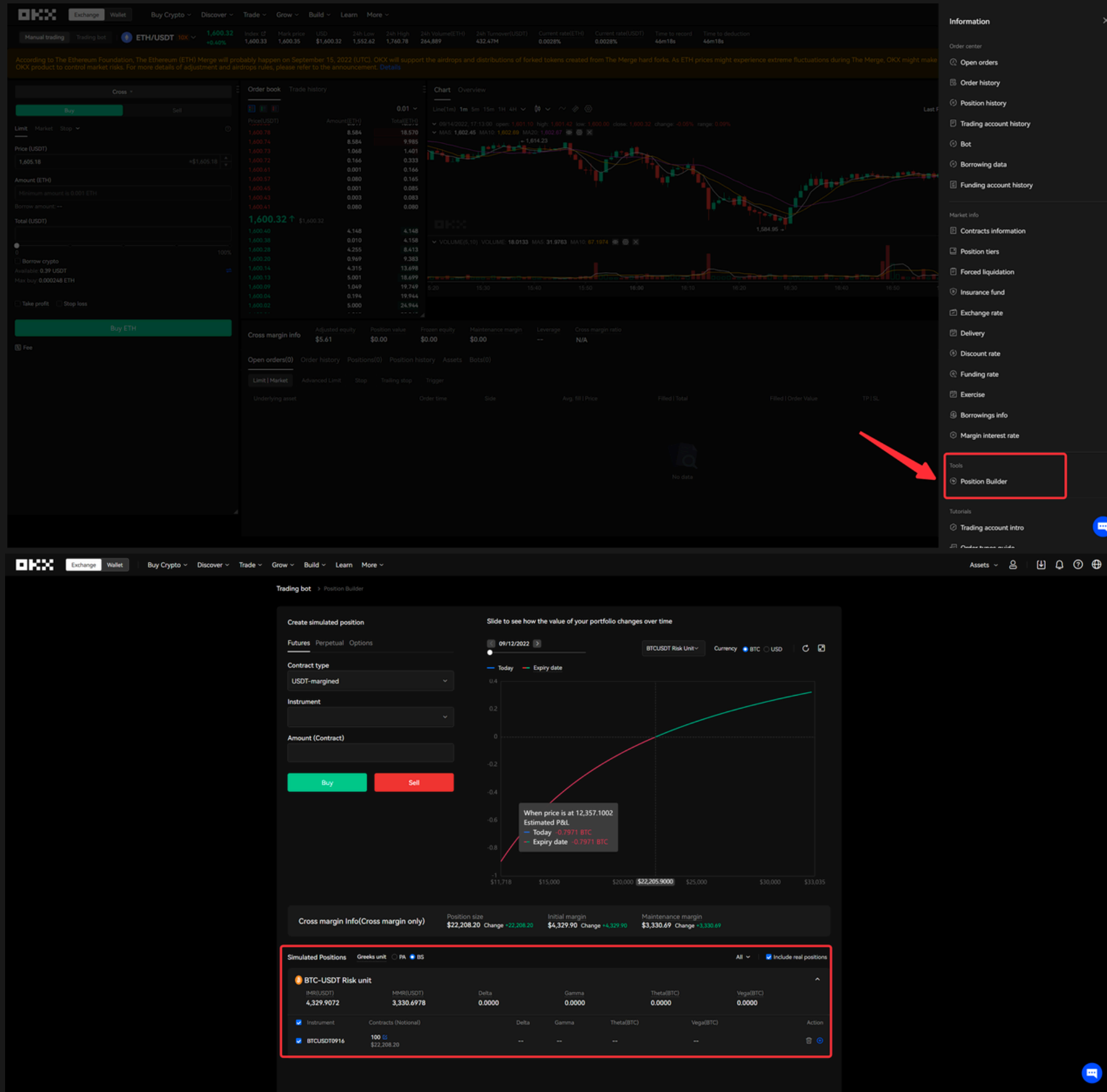
4.Portfolio margin mode 2.0

Turn on the Spot-Derivatives risk offset toggle (The default mode is USDT). Monitor the value of the Spot in use column on the Assets page and Open positions page.



5. Simulation tools:

• Position Builder



Link [Position Builder](#)



You can simulate new positions on Position builder to view IMR and MMR scenarios, as displayed below.

Additionally, you can combine positions from live trading with simulated positions to see the impact on IMR and MMR.

Cross margin Info(Cross margin only)	Position size	Initial margin	Maintenance margin
	\$107,233.50 Change +62,233.50	\$6,715.90 Change -913.03	\$5,166.08 Change -702.33

Simulated Positions	Greek unit	PA	BS	All	Include real positions	
BTC-USD Risk Unit	IMR(BTC)	MMR(BTC)	Delta	Gamma	Theta(USD)	Vega(USD)
	0.1619	0.1246	0.3144	0.0001	-9.8338	4.6803

Instrument	Contracts (Notional)	Delta	Gamma	Theta(USD)	Vega(USD)	Action
BTC-USD Risk Unit		0.1619	0.1246	0.3144	0.0001	
BTCUSD PER		--	--	--	--	
BTCUSD-20242000-C		--	--	--	--	
BTCUSD-20237500-C				0.3696	0.0001	Real positior
BTCUSD-20262500-C				-0.0551	0.0000	Real positior

MMR value under Portfolio margin account mode

Stress testing value of spot & volatility 0.1166 BTC

Stress testing value of time value of money (TVM) 0.0004 BTC

Stress testing value of volatility span 0.0000 BTC

Stress testing value of basis 0.0076 BTC

Stress testing value of interest rate risk 0.0005 BTC

Stress testing value of extremely volatile markets 0.1124 BTC

Stress testing value of cost of reducing a position 0.0374 BTC