Guide on buying hashing power to cloud mine popular coins such as Bitcoin, Ethereum, Zcash, Dash, Monero,...
# TABLE OF CONTENTS

1. Introduction to buying hashing power.................................................................02
2. Detailed instructions on how to get started......................................................03
   2.1. Getting started...........................................................................................03
   2.2. Which coin to choose?..............................................................................03
   2.3. Choose your favourite pool provider.......................................................04
   2.4. Register at a pool......................................................................................05
   2.5. Save your chosen pool in your NiceHash dashboard...............................05
   2.6. Creating and placing an order.................................................................07
   2.7. Monitoring the order...............................................................................08
   2.8. Check your income from purchased hashing power...............................11
3. A quick summary on How to Buy Hash Power...............................................12
4. Advice from our user.........................................................................................13
INTRODUCTION TO BUYING HASHING POWER
for mining Bitcoin, Zcash, Ethereum, and other coins.

NiceHash is a marketplace that connects buyers and sellers of hashing power. You (as a buyer) can buy any amount of hashing power for a competitive price. Hashing power is provided by the sellers of hashing power (miners).

Buying hashing power at NiceHash has several benefits. The most notable are the massive hashing power available and fast delivery time. Unlike classical cloud mining, where you buy long-term contracts on private mining farms that usually yield no return, NiceHash offers dynamic and fully autonomous on-demand cloud mining on your terms. You dictate the price of hashing power and decide for how long and where you want to use it. It’s a bit like having your own personal on-demand mining farm.

In the following table, we present the main differences between classical cloud mining contracts and buying hashing power at NiceHash.

<table>
<thead>
<tr>
<th>Type</th>
<th>Classical cloud mining</th>
<th>Buying hashing power at NiceHash</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Contracts</td>
<td>Fixed and standard (bidding) orders</td>
</tr>
<tr>
<td>Duration</td>
<td>Months, years or lifetime (i.e. as long as electricity costs are not larger than income)</td>
<td>From a few minutes to max. 10 days</td>
</tr>
<tr>
<td>Payment</td>
<td>Upfront</td>
<td>On the go</td>
</tr>
<tr>
<td>Price</td>
<td>Determined by the cloud mining provider</td>
<td>Determined by the marketplace (NiceHash doesn’t have any say in the price)</td>
</tr>
<tr>
<td>Strategy</td>
<td>Small amount of hashing power for long period of time</td>
<td>Large amount of hashing power on any pool for unfixed time</td>
</tr>
</tbody>
</table>
Detailed instructions on how to get started:

In this guide we have prepared different tips and knowledge you need when buying hashing power for mining your favourite coin.

1. Getting started

Log into your account and deposit some bitcoins to your NiceHash Wallet address.

![Example of where to deposit bitcoins to NiceHash wallet.](image)

Deposits to NiceHash wallet are subject to a deposit fee which varies depending on the amount deposited. Learn more about this here: [https://www.nicehash.com/help/fees#depositFee](https://www.nicehash.com/help/fees#depositFee)

You can withdraw the balance from your NiceHash Wallet whenever you like.

2. Which coin to choose?

One of the most common questions we get is which algorithm/coin to choose. We cannot give you any advice on your investments, but we suggest you research the general market and decide what you want to achieve and buy hashing power accordingly.

You can find the minimum prices for some hashing power, prices for maximum hashing power and prices for fixed orders for each algorithm on our pricing page: [https://www.nicehash.com/pricing](https://www.nicehash.com/pricing).

If you are also a seller of hashing power and you are planning on buying hashing power, we suggest you mine to your NiceHash Wallet directly. That way, you will avoid additional transaction fees and will be able to spend mined bitcoins to buy more hashing power.
Each coin can be mined on the pools that support the coin's algorithm. Here is a list of more popular coins and algorithms for mining them (correct at the time of writing of this Guide).

<table>
<thead>
<tr>
<th>Coin</th>
<th>Algorithm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bitcoin (BTC)</td>
<td>SHA256</td>
</tr>
<tr>
<td>Ethereum (ETH)</td>
<td>DaggerHashimoto</td>
</tr>
<tr>
<td>Litecoin (LTC)</td>
<td>Scrypt</td>
</tr>
<tr>
<td>Dash (DASH)</td>
<td>X11</td>
</tr>
<tr>
<td>Monero (XMR)</td>
<td>CryptoNight</td>
</tr>
<tr>
<td>Dogecoin (DOGE)</td>
<td>Scrypt</td>
</tr>
<tr>
<td>Zcash (ZEC)</td>
<td>Equihash</td>
</tr>
<tr>
<td>Decred (DCR)</td>
<td>Decred</td>
</tr>
</tbody>
</table>

When you're mining crypto coins, you also have to look at the long-term profitability, not only the current one.

There are two major cases for successful cloud mining by renting hashing power:
- do it for fun, because you like to mine and want to own some crypto coins or
- do it for profit. In the latter case you have to monitor new altcoins, monitor profitability and monitor opportunities for a particular coin to rise in future - mine it when difficulty is low and sell it when price is high – this enables you to gain greater profits.

You can also just hold the coins for long-term investment and cash out or use them for buying goods in the future.

There are of course more coins and algorithms available for which you can buy hashing power. You can read more about that here: https://www.nicehash.com/buy#Choose-between-multiple-coins-to-mine

Make sure to find the most suitable pools: those that support stratum and have high enough difficulty. You can check the required difficulty and verify the pool here: https://www.nicehash.com/compatible-pools

3. Choose your favourite pool provider

We are working hard to deliver excellent service for our buyers of hashing power. Here: https://www.nicehash.com/compatible-pools you will find a list of pools that are known to work well with our service. You can use them with peace of mind.
when mining coins with hash power, bought through our service. You can, of course, also use any other pool of your choice. However, please choose your pools at your own risk and judgment.

Please note that NiceHash is not affiliated with any of the pools listed on this page, and takes no responsibility for a particular pool should it not fulfill your demands or expectations.

4. Register at a pool

After you register, you need to create a worker for mining your coin, whereby you need to set the worker’s name and password.

5. Save your chosen pool in your NiceHash dashboard

The first thing to do before placing a new order is to set up your favourite pools in NiceHash dashboard. You can do that by following navigation For buyers > My pools (https://www.nicehash.com/pools) > Add new pool. Here, you need to enter your pool settings.
When you have entered the correct pool settings, we suggest you **verify your settings** with pool verificator: https://api.nicehash.com/poolver.jsp.

If pool is compatible with NiceHash, you should get this result:

```
Notice: Pool verificator may not be 100% accurate and may report pool being compatible while in fact it is not compatible or vice versa. Always discuss with pool operator if you encounter any issues with the pool verificator.

Pool host: eth.myfavouritepool.com
Pool port: 5001
Pool user: NiceHashBuyer.ETH
Pool pass: x
Algorithm: DaggerHashimoto

Resolving pool host eth.supernova.cc... OK
Establishing connection with proxy... OK
Establishing connection with pool 149.202.76.194:5001... OK
Sending mining subscribe... OK
Sending mining authorize... OK
Received mining notify subscription... OK
Received mining.set_difficulty... OK: difficulty=128
Received mining.notify work... OK
Received authorization result... OK

Pool verification process is complete: **Tested pool is compatible!**
```

*Results for successfully verify pool.*
6. Creating and placing an order

Once you have deposited bitcoins on your NiceHash wallet and saved your pools, you are ready to place your first order. You can do that by going to the Live Marketplace: https://www.nicehash.com/marketplace.

Select the appropriate algorithm for your chosen coin from the drop-down list. Depending on your pool location, choose the closest marketplace - Europe or USA.

You have two types of orders on NiceHash marketplace: fixed order type and standard (bidding) order type. The main difference between the two is that the fixed type will provide you with a dedicated fixed price and dedicated hashing power, while the standard/bidding type of order can be outbid by other bidders at any time. Our advice is to place a fixed order when the prices are increasing and you have a chance of getting a low price – in that way you will be able to mine for 24 hours at an affordable price. When you want a dynamic mining and ongoing competition with other buyers, you should consider going for the standard order type.

There are three important variables that you need to set to place your order: price, limit, and amount.

Price: Price is the number that puts you on the marketplace. If it is too low, you won’t get any hashing power. Note that the price does not determine the total
amount you will spend on the order – this is determined by a variable amount. So, if it says, for example 1.5431 BTC/GH/day, that doesn't mean that you will be charged 1.5431 BTC. When you select fixed order, the price is already set and you cannot change it. When you select standard order, a minimum price that would get you some miners is suggested to you. Note, once again, that for standard order type you can always increase or decrease the price later on.

**Limit:** Limit is the number that determines the maximum speed of your order. Standard order type has a lower limit (different for each of the algorithms) value. If you don't want to limit your speed, you can enter 0.00 in the limit field and your speed will have no limit. The fixed order type has an upper and lower limit value. You can enter any value between these two in the limit field.

**Amount:** Amount is the variable expressed in bitcoins and determines how much will you spend for the given order.

When you set all three variables, the duration of your order is calculated accordingly. The duration of fixed order is capped to 24 hours while maximum duration of standard/bidding order is 10 days. In case the order is cancelled before it is completed, the remaining unspent amount is returned to your NiceHash wallet.

Note that you can always cancel the order and no cancellation fees will be applied. We do, however, charge a non-refundable 0.0001 BTC fee for each new order to prevent order spam. We also take a 3% fee only on the spent balance. If you cancel the order, we will return all the remaining balance to NiceHash wallet and no fee will be applied to that remaining balance.

**7. Monitoring the order**

After you place your order, you can see a small dashboard for your order.

*Example of where you can monitor the order.*
On the left, you have a **mining graph** – if there are a lot of red-coloured areas, then you should check why the speed at the pool is not accepted.

For standard order types, you can **increase and decrease price** and limit by clicking on the arrows beside the numbers or by clicking the edit button and changing one or both values. To **refill your order**, click on the button for refill and enter the amount you wish to add to your order. To **cancel your order**, click on the cancel button. You can click on the last button to get more order details.

![Edit order](example.png) ![Refill order](example.png)

*Example of where to edit your order.*  
*Example of where to refill your order.*

Note that if your **placed order is coloured in red, then it is dead**. This could be due to different reasons, but the most common is because the connection to the pool cannot be established.

You can also find all of your active orders and finished orders from the previous month by following **For buyers > My orders** (https://www.nicehash.com/orders).

In **order details page**, you will find your **order ID number, type, algorithm, pool, username and the password for your order**. In the **balance section**, you will find the **date when your order started and what its lifetime is** (how much time is available for you to complete this order) and the **remaining time** (how much time is left for your order if it is continues at the current speed). You can see the **price** you placed on that order, how much have you already **spent**, how much **remains** of your deposited amount and **completion percentage**.

This information is followed by a **history chart with live updates**, which is split into three major parts:
1. The **upper part** will show you the **hashing speed of your order**. To see anything here, your order has to be successfully connected to the selected pool. If connection is successful and the order is paying highly enough (according to current NiceHash market prices), miners starts connecting and the order gains hashing power.

2. The **middle section** shows eventual **issues with pool rejects**. There shouldn’t be any pool rejects if the pool is working correctly and the pool is close enough to the chosen NiceHash marketplace location.

3. The third, **lower part** shows the **difference between the actual reported pool speed and the speed that you are paying for** – also called **delta**. Please keep in mind that delta can swing up and down depending on your pool’s luck. The graphs are shown by using data from accepted shares and this only evens out after at least 24 hours of mining – for shorter intervals it is not possible to make exact graphs.

In the table below, you can see what is going on with hashing power and how is it accepted by the pool. Keep in mind that **you only pay for accepted shares** and if you see any kind of **rejected shares**, you should take a look at your selected pool performance. If you don’t see any rejects, but still you see **low delta**, this is only related to **low pool luck** on your selected order pool – in case of significant negative delta, you should contact the pool operator of your chosen pool.

"How to properly read and understand graphs under your order details."

All statistics regarding mined coins can be found at the pool you selected in your order. **NiceHash only holds information for the sent hashing power and cannot know anything about mined coins at the pool.**
8. Check your income from purchased hashing power

When you purchase hashing power (place order), NiceHash distributes hashing power to your chosen pool. Your chosen pool generates your income according to their payout scheme and/or found blocks. To view or collect your income, you have to refer to your chosen pool.

NiceHash also does not guarantee that you will make any income at the targeted pool. NiceHash only guarantees to deliver the hashing power that you purchased. The hashing power may not always be fully accepted by the chosen pool due to technical obstacles of the chosen pool.
A quick summary on How to Buy Hash Power:

1. Find the **coin** you want to mine and the **pool** you want to mine that coin in. You can get help yourself from these two links: https://whattomine.com and https://www.coinwarz.com/cryptocurrency

2. **Register** at your chosen pool provider (https://www.nicehash.com/compatible-pools) and create a worker.

3. Copy your **pool settings** into your **NiceHash dashboard**: https://www.nicehash.com/pools
   - Algorithm, Stratum, Port (some pools have special NiceHash port but usually you can find it at the end of stratum server), Username (the name of the worker that you have created at pool), Password (password from your worker at pool, usual that is x).

4. **Verify** the pool with the **pool verificator**: https://api.nicehash.com/poolver.jsp.
   - Please note that some pools have the option to custom set the worker’s difficulty. Usually that is the worker’s password. In that case, you need to enter d=16383 in the password window if the pool verificator shows you that the minimum pool difficulty is 16383.
   - Example:
     - Pool difficulty too low (provided=2048, minimum=16383)
     - Worker = nicehashminer
     - Workers password: d=16383

5. Go to **Live marketplace** and create a new order.
   - How to create a new order: https://goo.gl/qHDy1s
   - Difference between a fixed and standard order: https://goo.gl/cvporD
   - How does order sorting work: https://goo.gl/66jgJb
   - If your order difficulty is high, then you should set a higher speed limit and the order should last longer (24 hours or more).

6. Check your **income at your chosen pool**
   - https://www.nicehash.com/help/where-is-my-income-from-purchased-hashing-power
   - Please note, that the **pool is responsible for your mining rewards**. NiceHash only guarantees you to **deliver hashing power that you purchased**. The hashing power may not always be fully accepted by the chosen pool due to technical obstacles of the chosen pool.
Advice from our user

First rule. Not all algorithms are profitable all the time (or even some of the time). It’s important to realize that if the math does not add up, just walk away. Patience is important.

Second rule. Always do the math.

Third rule. Always monitor the current price of the coin you’re mining. It’s really easy to go to bed with it running, and wake up losing money because the price of the coin dropped.

Fourth rule. Look for the best opportunities and jump on them. Don’t be anxious and feel like you have to buy right now, as that will lead to poor decisions. Again, be patient.

Fifth rule, don’t buy underfunded. Buying in small orders can lead to loss of some, or even all of your order. Read up on the payment schemes, particularly PPLNS. The gist is that if you buy a small amount that runs to completion very quickly you are at the mercy of luck. A round that goes long can wipe out your entire investment (I’ve had it happen).

Sixth rule. You’re going to lose money at first, as you learn. Just accept that. It’s an expensive education. But what you learn will help you to become profitable. In many ways, you learn more from losing than winning.

The math is incredibly easy, if you use a tool like Whattomine or Cryptocompare. All you have to do is look at what the price is going for on NiceHash, and make note of the hash unit being used (MH/GH/PH) and then enter that into Whattomine or Cryptocompare and find out what the coin is currently paying in rewards for 1 unit of the NiceHash price. If the NH price is significantly lower than the rewards, then it’s possible to make a profit... but I must caution you again... do not buy small or short orders. And do not "chase" after the hash.

Here’s an example from right now: Cryptonight.
The current price on NiceHash is 0.2258 BTC/MH/Day, so at that price you will pay 0.2258 BTC for 1MH/s for 24 hours.

Now, let’s go over to Whattomine and enter into the CryptoNight box 1000000 (one million H/s). Make sure you change the Sort by to "current profit" and the "difficulty for current revenue" to "current difficulty". And click Calculate.

Now, find the coin you want (in this case, probably Monero) and check the "Rev BTC" column, the top value. As of right now, this value is 0.25308. Now, 0.25308 - 0.2258 = 0.02728.

So, this means that if you spent .2258 for 1MH/s for 24 hours, and the price of Monero stays steady (which it won’t, but we’ll just say for examples sake) then you will make 0.02728BTC or about $166.
That sounds great, but what if you don’t have .2258BTC? Well, you can spend less, but you have to calculate the ratio. For instance, if you spend half (.1128) then that just means the order will last 12 hours instead of 24. And your rewards will also be half. I’m sure you can do the math for whatever ratio of reward to spend you want. Another option would be to drop the limit to 500KH/s, and it would still make the half amount, but take 24 hours instead.

Why would you want to do that? Why not just crank it up to infinity? I asked the same question when learning. And there are several reasons why you don’t want to. If you set your hash too high, you will suck up all the available hash, and other buyers will get mad at you and outbid you, possibly even to the point of being unprofitable.

The shorter your order, the more you are affected by luck. Depending on the payment scheme used, luck can destroy you. The only solution is to spread your order out over a long time (hours, maybe days) to try and average out the luck (this is called Variance).

Finally, the only way to make profit is to bid low and sell high. Bidding low endangers you of being outbid, and running out of hash. You may be tempted to raise your price to "chase" after it. This often starts a bidding war and drives the price way up.

Secondly, while you can increase the price to whatever you want, you can only decrease the price (as of the last few days) by .0001 every 10 minutes. The only way to lower your price more than that is to cancel your order and rebuy, but doing so will cost you .0001BTC in un-refundable fee.

It makes sense to simply find a price that you’re comfortable with, and camp on it. If you lose hash, don’t chase after it. wait for it to lower again. It may take hours or even days, but chances are it will happen.

Bidding at a price that ensures you have hash all the time will not be profitable in the long run. You are in much more danger of the price of the coin dropping below profitable levels.

Also, be wary of pools and remember to calculate pool fees into your prices. Some charge 2%, some 1%, some less.. some even have 0 pool fees. NiceHash also charges a fee, .0001 + 3%. So, your spread (the difference between the rewards spent and those received) needs to be greater than the fees, and your order length needs to be long enough to counter Variance.

Some pools are also dishonest, and you won’t get your full rewards from them. But, more likely, if you aren’t earning what you expect, it’s more likely luck (or bad luck). And remember that the reward estimations are just that, estimations.

And... you have to watch the price, because in the real world, the price changes. If the price goes down, you may have to lower your price (taking into account that .0001 per 10 minutes rule), cancel your order... or... another tactic is to lower your speed to the minimum speed and wait for the price to return to profitability.
Another tactic I’ve seen is to place several orders at different price points. Then you raise the speed limit on the price point that has hash, and lower all the others to the minimum. When you see a bunch of other orders at the minimum, that’s probably what they’re doing.

Finally, why are some people paying way more for their hash than the rewards they receive? The answer is likely that they are solo mining, and are willing to pay more in the hopes that they will find a block before they’ve spent the equivalent of a full block’s rewards. It’s basically gambling.

/r/NiceHash, man_of_mr_e

Thank you for using our services.