

## **Crypto Currency Mining**

### **Method 1 : Cloud Mining**

Cite: <https://coinledger.io/learn/cloud-mining>

#### **Ecos**

[Ecos](#) is a cloud mining company that serves customers all over the world! The company has an agreement with Hrazdan Thermal Power Plant — which gives Ecos cheap electricity for Bitcoin mining. Currently, Ecos is rated 3.8 stars on Trustpilot — however, some users have complained about excess fees upon withdrawal.

#### **Binance Cloud Mining**

Binance, the world's biggest cryptocurrency exchange, announced support for [Cloud Mining](#) in 2023. The platform allows users to buy different cloud mining products based on its electricity/historical output ratio. The higher the ratio, the higher the reward when the price of cryptocurrency goes up (and the higher the risk during price crashes). Unfortunately, Binance cloud mining is not available for customers based in the US.

#### **BeMine**

[BeMine](#) is a cloud mining provider that allows users to buy shares of ASIC-miners with low service fees! The platform is also known for its generous referral program. Currently, BeMne is rated 4.2 stars on Trustpilot with more than 100 reviews.

#### **StormGain**

[StormGain](#) is a United Kingdom-based cryptocurrency exchange that offers cloud mining to users! The platform allows users to receive rewards up to 0.03 BTC per day. Unfortunately, StormGain and its associated cloud mining services are not available for customers based in the US.

## Method 2 : Mining Software + Hardware

### 2.1 Hardware Mining

#### ชิป CPU / GPU / ASIC สำหรับ Mining

##### CPU



##### GPU





ASIC



### คำนวณความคุ้มค่าในการขุด Crypto Currency

การใช้ไฟ 1 หน่วย(Unit) = อุปกรณ์ไฟฟ้าขนาด 1000 watts ต่อ 1 ชั่วโมง

สูตรการคำนวณประเภทที่ 1 บ้านอยู่อาศัย คือ กำลังไฟฟ้า (watts) x (จำนวนอุปกรณ์ไฟฟ้า) / 1000 x (ชั่วโมง) ต่อ 1 วัน

ตัวอย่าง

$45 \text{ (watts)} \times 1 \text{ (เครื่อง)} / 1000 \times 12 \text{ (เปิดชั่วโมงต่อวัน)} = 0.54 \text{ หน่วย (Unit)}$

เพราะฉะนั้น 1 เดือนจะใช้ไฟฟ้า  $0.54 \times 30 = 16.2$  หน่วยต่อเดือน

- หากใช้ GPU ของ Quadro P200 ขุดได้ 14.66 MH/s ภายใน 1 วันจะได้ 1 USD
- หาก 30 วัน = 30 USD – (Fee) 6 USD/Transition คงเหลือ 24 USD

หมายเหตุ : Hash Power คือ ค่ากำลังของอุปกรณ์ระบบคอมพิวเตอร์ที่ต้องใช้ในการดำเนินธุรกรรมภายในเครือข่าย

Blockchain โดยมีความเร็วเป็น ต่อวินาที (per-second) มีหน่วยวัดต่าง ๆ ดังนี้ kH/s, MH/s, HG/s, TH/s, PH/s หรือ EH/s

DAILY / MONTHLY

Model	Price	ETH	EXP	UBQ	RVN	BEAM	Profit	Payback
NVIDIA RTX 3090	\$2299.00	125.0 MH/S	125.0 MH/S	125.0 MH/S	58.0 MH/S	55.0 H/S	\$8.83	260 days
NVIDIA RTX 3080	\$1300.99	100.0 MH/S	100.0 MH/S	100.0 MH/S	42.0 MH/S	0.0 H/S	\$7.07	184 days
AMD VII	\$1099.00	89.4 MH/S	89.4 MH/S	89.4 MH/S	30.0 MH/S	33.2 H/S	\$6.32	173 days
NVIDIA RTX 3070	\$799.00	60.0 MH/S	60.0 MH/S	60.0 MH/S	31.0 MH/S	32.0 H/S	\$4.24	188 days
NVIDIA RTX 3060 Ti	\$670.00	60.0 MH/S	60.0 MH/S	60.0 MH/S	0.0 MH/S	0.0 H/S	\$4.24	158 days
AMD RX 5700 XT	\$700.90	56.5 MH/S	56.5 MH/S	56.5 MH/S	21.0 MH/S	20.5 H/S	\$3.99	175 days
AMD RX 5700	\$680.90	56.0 MH/S	56.0 MH/S	56.0 MH/S	20.0 MH/S	19.0 H/S	\$3.96	172 days
NVIDIA RTX 2080 Ti	\$1020.73	55.5 MH/S	55.5 MH/S	55.5 MH/S	33.9 MH/S	32.0 H/S	\$3.92	260 days
NVIDIA RTX 2080 SUPER	\$749.00	44.3 MH/S	44.3 MH/S	44.3 MH/S	30.2 MH/S	30.0 H/S	\$3.25	230 days
NVIDIA RTX 2060 SUPER	\$600.00	44.3 MH/S	44.3 MH/S	44.3 MH/S	20.0 MH/S	18.5 H/S	\$3.13	191 days
NVIDIA RTX 2070	\$650.00	44.3 MH/S	44.3 MH/S	44.3 MH/S	21.5 MH/S	19.0 H/S	\$3.13	207 days
NVIDIA RTX 2080	\$719.54	44.3 MH/S	44.3 MH/S	44.3 MH/S	26.5 MH/S	26.5 H/S	\$3.13	229 days
NVIDIA RTX 2070 SUPER	\$700.00	44.3 MH/S	44.3 MH/S	44.3 MH/S	24.1 MH/S	24.1 H/S	\$3.13	223 days
NVIDIA GTX 1080 Ti	\$470.00	43.5 MH/S	52.5 MH/S	52.5 MH/S	22.2 MH/S	25.5 H/S	\$3.07	152 days
AMD RX 5600 XT	\$469.99	42.2 MH/S	42.2 MH/S	42.2 MH/S	12.6 MH/S	0.0 H/S	\$2.98	157 days
AMD RX Vega 64	\$469.90	40.0 MH/S	40.0 MH/S	40.0 MH/S	23.5 MH/S	21.0 H/S	\$2.83	166 days
AMD RX Vega 56	\$435.90	36.5 MH/S	36.5 MH/S	36.5 MH/S	22.0 MH/S	19.5 H/S	\$2.58	169 days

ตารางเปรียบเทียบ การคำนวณ/แรงขุด/รายได้เฉลี่ยต่อวัน

หากดู GPU profitability ranking เข้าที่ URL

<https://whattomine.com/>

## 2.2 Software Mining

### 2.2.1 Packaging software

Cite : <https://www.finnomena.com/planet46/what-is-bitcoin-mining/>

Tool Name	Best For	Platform	Our Ratings *****
<b>SHAMINING</b>	Efficient cloud mining with state-of-the-art equipment.	Completely cloud-based	★★★★★★
<b>GMINERS</b>	Beginner and skilled medium-term investors.	Cloud-based	★★★★★★
<b>ECOS</b>	Legit and transparent service.	Windows, Mac, Linux.	★★★★★★
<b>Pionex</b>	Setting up automated deposits to an external wallet depending on what you want to spend Bitcoin on.	Cloud-based	★★★★★★
<b>Minedollars</b>	Offering the efficient tools that help with earning cryptocurrency with a small investment.	Online and mobile.	★★★★★★
<b>Kryptex Miner</b>	Beginners as well as pros.	Windows	★★★★★★
<b>Cudo Miner</b>	First-time miners who want to earn Bitcoins from their desktop or laptop.	Windows, Linux, Mac, etc.	★★★★★★
<b>BeMine</b>	Cloud mining.	Web-based	★★★★★★
<b>Awesome Miner</b>	Users looking for centralized management of their mining activity.	Windows	★★★★★★
<b>BFGMiner</b>	Advanced users who want to customize the mining process.	Windows, Mac, Linux	★★★★★★
<b>MultiMiner</b>	Beginners looking for an easy-to-use mining software.	Windows, Mac, Linux	★★★★★★
<b>EasyMiner</b>	Users who want to manage different cryptocurrencies from the same place.	Windows, Ubuntu	★★★★★★
<b>CGMiner</b>	Miners who want an open-source mining software	Windows, Mac,	★★★★★★

\*\*\* ปี 2024 รางวัลจากการขุด Bitcoin คือ 3.125 BTC ต่อ 1 บล็อก

Cite : <https://www.finnomena.com/planet46/what-is-bitcoin-mining/>

### 2.2.2 Web Browser

- Cryptotab URL : <https://cryptotab.net/en/>

### 2.2.3 P2P

- <http://p2pool.in>