

www.marcoin.cc



MARC

Whitepaper of
Market Arbitrage Coin

Table of Contents

Introduction	3
History	3
MARC as a Cryptocurrency	3
Blockchain Technology Overview	3
Proof-of-Stake	4
Masternodes	4
MARC as a Arbitrage Trading Bot	4
Arbitrage – How It Works	4
Advantages	5
KEY Aspect	5
Pre-Sale	5
Who Can Benefit From MARC?	6
Utilizing Market Arbitrage Coins	7
Logic	7
User Portal – MARC WEB Wallet & Investment	8
Returns	9
Reward Diagram	10
See You Soon	11

INTRODUCTION

The goal of our mission is to create an alternative cryptocurrency that have real use-case, not just for making P2P secure payments, but also to generate its own profit through investment in arbitrage between cryptocurrency exchanges.

Market Arbitrage Coin will be helping investors get the returns on their investments with minimum effort, managed risk, and completely with intuitive reporting.

Harnessing the unique possibilities to profit from the volatility of cryptocurrency market, we are able to explore numerous exchanges, with additional trust for financial security that benefits every investor, as well as maintaining low friction and easy accessibility to the masses.

We are convinced that investing in cryptocurrency doesn't have to be confusing and time consuming. MARC, does all the heavy lifting for you, just choose the right strategy of investment: Invest in Arbitrage with manageable risk, launch MARC masternode or start staking MARC coins, while our expertly managed portfolio balancing algorithm between exchanges manages the risk for you. Our Market Arbitrage Coins ensure privacy, with added value and exclusivity.

HISTORY

The relatively recent emergence of cryptocurrency has given birth to a worldwide financial paradigm shift closing in on a trillion dollar market cap. MARC was formed to put the benefits of cryptocurrency investing within the reach of everybody. Innovative products in the cryptocurrency space have been nearly as rapid and impressive as the currencies themselves, and as such, thousands of solutions exist for a myriad of problems. When building the functionality and services of MARC, it was crucial that we combined solutions to a number of pressing issues into a single turnkey platform that offers multiple benefits to users, avoiding the need for someone to be involved with, and monitor multiple products, just to meet these same ends. It is assumed at this juncture that most people who will view this white paper have a solid base understanding of cryptocurrency and POS/masternode coins and as such the technical and historical background will be described in the next chapter.

MARC AS AN CRYPTOCURRENCY

BLOCKCHAIN TECHNOLOGY OVERVIEW

Blockchain is a way of storing data or a digital record of transactions. Record is immutable and cannot be changed. Digital records are combined into blocks and then these blocks are cryptographically and chronologically linked together in a "chain" using complex mathematical algorithms. Each block is linked with the previous block and contains a complete set of all records that came before it. New blocks are always added to the end of the chain. Computers running on the same network perform the encryption process known as hashing. When all computers in the network complete their calculations and receive the same result, a confirmation is made. Then the block is given a unique digital signature. This block is then added to the digital register, which is updated across all computers in the network. Once this is complete, the block cannot be altered, and it is virtually impossible to fake or change once added to the blockchain. Only new entries or data can be added to subsequent blocks. This makes it impossible to hack the network - as each computer in the network would need to be hacked simultaneously.

With traditional relational database systems, data can be Created, Read, Updated, and Deleted (i.e., CRUD). With respect to a blockchain database, data can only be Created, Read, Appended, and Burned (CRAB). This is what distinguishes traditional databases from blockchain-based databases. Moreover, traditional databases are usually centralized. However, blockchain databases are decentralized and can be distributed on a global scale, which ensures that the network is always available.

This technology also allows the potential to store personal data securely as the hashing process is irreversible. If a malicious actor attempts to change the registry, it will not match the registries held by other computers. This builds consensus within the network as the longest chain in the network is the one that is used and results in any altered registries or any other shorter chains in the network being disregarded.

PROOF-OF-STAKE

At the heart of the proof-of-stake algorithm is the storage of all the operations in the MARC wallet with the distributed database. Synchronization of the wallet nodes of MARC running on proof-of-stake is carried out through the peer-to-peer network, P2P. Thanks to proof-of-stake, it is possible to implement cryptocurrency with high security conditions to avoid hacker attacks and fraudulent actions. Moreover, it is more efficient and environmentally friendlier than proof-of-work, which utilizes lots of energy with application specific integrated circuit (ASIC) machines.

The system using the proof-of-stake method is based on the principles of decentralized management in the absence of a single controlling authority, which does not allow a malicious actor to know exactly which version of the block is valid. In simple terms, the definition of the principle of the proof-of-stake algorithm can be given as follows: The more MARC possessed in a wallet, the more credibility that wallet node will be given in the permission-less network. Thus, the wallet will likely receive a block reward because of the relative weight that wallet contributes to the protection of the network. The amount of time a wallet participates in protecting the network is also a factor. From a security standpoint, proof-of-stake is not only mining, but the wallet also stakes the MARC amount to ensure against the validity of the transactions placed in blocks. By having a wallet with a large amount of MARC and staking that amount, this decreases the probability that the owner of the wallet is acting in a malicious manner to harm the network. Thus, wallets with high MARC amounts are given a greater preference in confirming transactions than wallets with smaller MARC amounts. An MARC wallet node serves in the first layer of the hybrid cryptocurrency network by confirming transactions on the blockchain, selecting a network of masternode for instant transactions, and creating the next block for storing future transactions. A discussion of the second layer MARC network is described next.

MASTERNODES

Masternodes play an important part of the MARC network. A masternode network is the second layer of the MARC network that donates processing power to confirm transactions instantly utilizing the SwiftTx technology inherited from PIVX. A masternode then receives a reward for the work performed – one reward per block every 60 seconds. These rewards are directly paid to a MARC wallet that is linked to the masternode. Using masternodes also ensures the stability and security of the entire network. These nodes serve a special purpose within the network to mix various transaction amounts to increase fungibility and anonymity of transactions. This is done by the process of obfuscation, which is also inherited through the open source PIVX codebase.

MARC AS AN ARBITRAGE TRADING BOT

ARBITRAGE – HOW IT WORKS

Cryptocurrency market is still a new and inefficient market. Several crypto exchanges exist around the world and the bid/ask prices they propose can be slightly different from one exchange to another. The purpose of our Arbitrage Platform is to automatically profit from these temporary price differences while being market-neutral.

Here is a real example where a Bitcoin arbitrage opportunity exists between Bitstamp (long) and Bitfinex (short):

At the first vertical line, the spread between the exchanges is high so trade bot buys Bitstamp and short sells Bitfinex. Then, when the spread closes (second vertical line), bot exits the market by selling Bitstamp and buying Bitfinex back.



ADVANTAGES

Unlike other arbitrage systems, MARC doesn't sell but actually short sells cryptocurrency on the short exchange. This feature offers two important advantages:

- The strategy is always market-neutral: the crypto market's moves (up or down) don't impact the strategy returns. This removes a huge risk from the strategy. For example – Bitcoin market could suddenly lose half its value that this won't make any difference in the strategy returns.
- The strategy doesn't need to transfer funds between crypto exchanges. The buy/sell and sell/buy trading activities are done in parallel on two different exchanges, independently. Advantage: no need to deal with transfer latency issues.

KEY ASPECT

Market Arbitrage Coin is the automated smart trading platform, that trades on many cryptocurrency exchanges. This platform is not a single bot or strategy, but rather a carefully curated and tested set of arbitrage automated bots – all designed and programmed 100% in house. None of the logic or strategies designed and used by MARC have ever been sold or given to anyone outside MARC. It supports running different modes which are a combination of numerous of exchanges optimized for specific tasks.

Arbitrage Platform has a set of risk strategies it follows and could be manually switched to a different set of strategies in user portal. The modes of the individual instances operate independently of each other with no cross communication; however, all performance is recorded in a central repository for continued analysis of all arbitrage situation.

Each instance trades only one pair, on two exchanges, on one account at a time, there are always multiple instances running. As stated, each instance is independent, however multiple numbers of instances, structures, and logics are always running and this overall strategy is also set via automation.

There are comprehensive security measures overseeing the safety of MARC and the trading carried out by the bot. There are automatic and manual protections in place for, but not limited to, API issues, connectivity, exchange, and operating system issues.

PRE-SALE

Investors during the first stage of pre-sale buys 1000 MARC, (1 MN collateral) for 0.3 BTC. Pre-sale price at the second stage is 0.5 BTC per 1000 MARC. On the presale we will accept only cryptocurrency with all transaction being done via Blockonomics. The transaction fee for all purchases will be covered by MARC and not effecting the amount of MARCs distributed to participants.

Before an investor makes any payment on site via Blockonomics, he/she has to install MARC wallet and generates a receive address. Fill same address on Blockonomics buying form.

Stage 1 – 10,000 MARC on sale (10 MN)

Stage 2 – 20,000 MARC on sale (20 MN)

Following the completion and closing of Pre-Sales, there will be Crypto-Bridge exchange listing.

WHO CAN BENEFIT FROM MARC?

1. Those seeking stable investments with minimal maintenance/residual revenue generation.
2. Those who want to combine the benefits of algorithm trading with the benefits of holding (Hodl) a coin that increases in value into a single product.
3. Those that want the benefits of a heavily diversified cryptocurrency portfolio with the low maintenance of a single coin.
4. Those who want protection from the current air of volatility surrounding crypto currency exchanges and the coins themselves.
5. Those who want to invest in the blooming crypto market, but do not have:
 - a. Large investable capital: there are a number of issues preventing the entrance of investors with low initial capital into the crypto market such as the \$25k USD minimum often required to day trade, the \$10k limit proposed for many crypto exchanges, up to the private advisor whose clients must typically invest a minimum of \$1MM.
 - b. Basic trading knowledge: while a majority of the population would like to earn additional income, they don't have a basic understanding of trading in general, and even fewer the particulars of the Cryptocurrency markets. Without at least a basic understanding, the odds are heavily against being able to earn profit or break even.
 - c. Advanced trading knowledge: even with advanced TA, charting, and trading strategy training, the traditional success rate for those entering the field of day trading varies based on source, but it is agreed to be under a 5% success rate. This is not because profit cannot be generated from trading, but often caused by human factors in which our automated platform is immune to such as loss aversion, over confidence, and over trading.
 - d. Time to constantly monitor markets: unlike traditional commodities and assets, the cryptocurrency market trades around the clock and around the globe.
 - e. A risk threshold for trading or even hodling: risk has always been a key determining factor in all investment and trading plans. The risk of trading any assets near top of the spectrum like cryptocurrencies, even high to the point where buying and holding for a long period (hodling) poses risk above the threshold of many investors.
6. Those who do have advanced trading skills, time, and capital and wants to hedge their crypto investment portfolio with a low maintenance and safe assets.
7. Those who want to invest by hodling as well as to continually add a steady earning revenue stream to their portfolio.
8. Those who want to maintain their privacy in investments.
9. Those who do not wish to partake in robo investing that still want to support and benefit from this growing sector of the market via holding the coin used as an integral mechanism of the operation.
10. Those who want to setup investments for the benefit of another, such as a first start investment for their children.

UTILIZING MARKET ARBITRAGE COINS

All investment transaction into and out of the automated arbitrage system requires the use of Market Arbitrage Coins exclusively to maintain a number of beneficial features of the infrastructure. The first opportunity for people to own MARCs will be by participating in the MARC masternode network. Following the completion of the pre-sale they will only be available via trading on exchanges in the near future. There are plans in the future to offer buying, selling, and trading directly via the user portal including support for fiat. As it is a concern to many participants of the crypto space, mandating the use of MARCs for all in and out operations, as well as support for accepting privacy centric coins in the pre-sale phase, enables those who are inclined to protect their anonymity provided they take the pertinent steps to do so.

LOGIC

Arbitrage platform alone is able to ensure impressive returns utilizing smart bot learning trading and a number of proven arbitration strategies. Through substantial testing, we have developed a number of bots that perform to the utmost efficiency in their respective market conditions. This does not mean simply running logic against back data and using an optimizer for all possible variable values in the code of the bot. This would, without a doubt, return less than stellar results going forward in live trading, high scale, environments. This has become commonplace in the crypto space with bots showing too good to be true results on back data, only to flop in live exchange trading.

All logic was designed and tweaked to return the best possible combination of characteristics past simply the largest paper return. Another common downfall of bot design is allowing it to make many small trades, anywhere from 10,000 to 800,000 trades per month on a coins pair which on back test data may show a great return. In live trading, this volume of trades will net a loss when slippage, fees, volume, and scale are present. Better data will always allow for better results – another major downside of back data testing is the quality of the data itself. Historical data often shows prices based on time intervals such as 1 minute or 5 minutes which leaves a lot of true trades missing the testing.

During initial design we spent considerable time gathering long reaching, full executed order data which allows for the consideration of every trade made. This is only a small factor used in the development of our arbitration logic sets. The real benefit comes from our live exchange trading data for each once of arbitrage strategies. As stated above, great algo trading is only a piece of what makes MARC platform such a robust automated approach. Each logic method belongs to a larger set, and this set is monitored by another layer of automation that monitors the market, and based upon that, is able to swap the logic autonomously to the one that will best perform according to our set risk to reward ratio. This logic spans a number of tried and true indicators. Rest assured that all actions taken by our platform notify our team in real time of every move. This includes every position taken, logic swapped, returns netted, market being monitored and more. This is done in order to ensure that everything runs smoothly.

The versatility of smart learning, logic, and market-neutral strategy allow one to make returns in nearly any market condition, making it an ideal investment tool. Arbitration abilities are truly amazing, but there are still further investment protecting strategies used by MARC to mitigate risk and allow upside possibilities. Each risk mode of Platform works with certain predefined currencies and exchanges. The makeup of each group was cultivated to include as much diversification as possible, matching currencies that historically track separate each other, this hedging allows to lock in profitable trades on some assets while others may not be performing. There is further diversification for each mode across a number of trading exchanges to ensure protection from volatility, technical, legal, or political issues that any one exchange may experience.

Our platform uses a pooling approach for each mode, this means that all users of a like mode, or risk type, contribute to, and receive returns, from that mode's pool. This allows a massive advantage to all traders, especially in regards to safety of returns. With the pooling model there is sufficient capital to allow maximum diversification, no need to wait for a particular position to open or close to net profit, and no need for the use of margin, eliminating liquidation danger and lending costs. This strategy also allows for the hedging of not only currencies, but also positions, as described above; of course, only when all preset safety criteria is met.

USER PORTAL – MARC WEB WALLET & INVESTMENT

Once the user portal is setup and the user has logged in, there will be a unique “User Wallet” displayed. This wallet is personal and designed solely for the function of sending and storing Coins within the MARC user portal. It can accept deposits of MARC from any wallet or exchange and can likewise send coins out to other user’s wallet. Additionally, it can send a deposit of MARCs to the user’s “Investment Wallet.” In order to access the functions of the investment bot. The amount of MARCs that the user wishes to invest into Arbitrage Platform (AP) must be sent to the “Investment Wallet.” This wallet invests 100% of the available wallet funds placed into it in the investment bot operating at the mode selected by the user during setup.

When a user wants to transfer MARCs into the Investment System (IS) they must do so by funding the IS via a deposit to their “Investment Wallet” which should only be made from that user’s “User Wallet.” Any funds in a user’s “User Wallet” will remain there dormant unless acted on by the user, however, all funds placed in the user’s “Investment Wallet” will be automatically invested as soon as they are received in this wallet. The auto investment operation is triggered on the backend when the deposit is initially sent to the “Investment Wallet” from the “User Wallet.” If the funds sent to the “Investment Wallet” are sent from any other wallet, such as an exchange or offline wallet, the automatic invest will not occur. In the event of this mistakenly happening, a support ticket can be opened to remedy the situation.

MARC Wallet User Portal



Send to Invest

Sending funds from WEB Wallet is the preferred way to fund your MARC’s investment wallet



Fund Wallet

Exchange – P2P and other feature options will deposit to this User Portal Wallet



HODL

Place to store your MARC



MARC Investment Wallet



Auto Re-invest Option

Maximize your returns with auto reinvest and start earning compounding returns attention free



Auto Net Return

Auto net option allows you to set a date to automatically lock in returns and have them deposited to your User Portal



View Profit

View all information about your investment from this portal including current and projected return balance

RETURNS

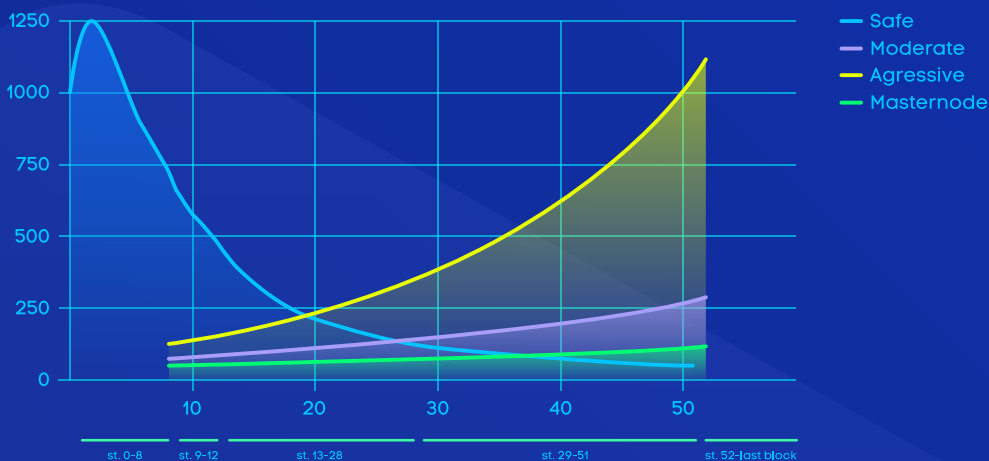
The user portal will walk the user through initial account setup, during this step the user will be able to set a risk level that MARC Platform will use to manage their investments going forward. If at a later date user wants to change their risk setting they are able to do so from within their user portal. The change in strategy will go into effect during the next payout cycle. Users can only set one risk strategy per user account; however, nothing prohibits a separate user account from being created with a different risk strategy making it easy to diversify holdings to a user's liking across multiple accounts with multiple wallet balances.

This risk factor heavily influences the strategy that will be utilized to support the investment. The user interface will be designed to be simple, clean, and easy to interact with; however, the underlying investment strategy is a robust combination of automated smart algo trading and managed diversification aimed to perform and net returns within the constraints of a given risk tolerance.

The following returns are the estimated standard for each respective mode: Safe mode will average an annual time weighted return of 50 - 55% of the principal, Moderate moves the returns estimate to 65 - 75%. Finally, Aggressive Mode will return 120 150% the principal funding. These numbers are solely estimates and not guarantees; however they are arrived at via substantial testing and averaging of actual returns from live trading bots. These figures should not be assumed as best possible outcome, these are the baseline standards that can be reasonably expected.

The above stated returns are time weighted over a one year for ease of estimation for the average user, however has proven to be very stable in returns and a monthly percentage or return is easily estimated as follows for those who prefer that metric - monthly returns:

- Safe Mode 4-5%
- Moderate Mode 6-7%
- Aggressive Mode 9-11%



The current returns on the platform will display for a live time in Investment Wallet located in the Investment Tab of their user portal. Principal amount, which is also able to be user manipulated at any point, returns netted, and total wallet value will displayed live time here. Initial investment amount is converted at the time of deposit to USD and BTC value. USD is used to display current investment value. The value will be taken from exchanges current price of MARC. BTC is used for monitoring only. Your investment is sent to its respective pool and size of contribution is noted. Whenever a position closes, and profit or loss is realized, that amount is added to or subtracted from pool's total, a customer's percentage owed of 'pool total changes' are then reflected real time in relation to their current available net return.

There is never a hold on any principal deposits within MARC. Any principal MARCs may be withdrawn or deposited at any point without penalty. Any amount of MARCs placed into the Investment Wallet, and thus by default invested by Arbitrage Platform will generate returns. In order to withdraw or reinvest these returns, the principal that was used to create them must stay invested for a minimum of 14 days. This applies only to generated returns, the principal never has a hold on it and may be withdrawn at any time. All new investment amounts are automatically subjected to their own 14 day clock solely for that amount. New investments will not restart the clock for any amount already matured. Auto reinvested funds are exempted from the clock entirely.

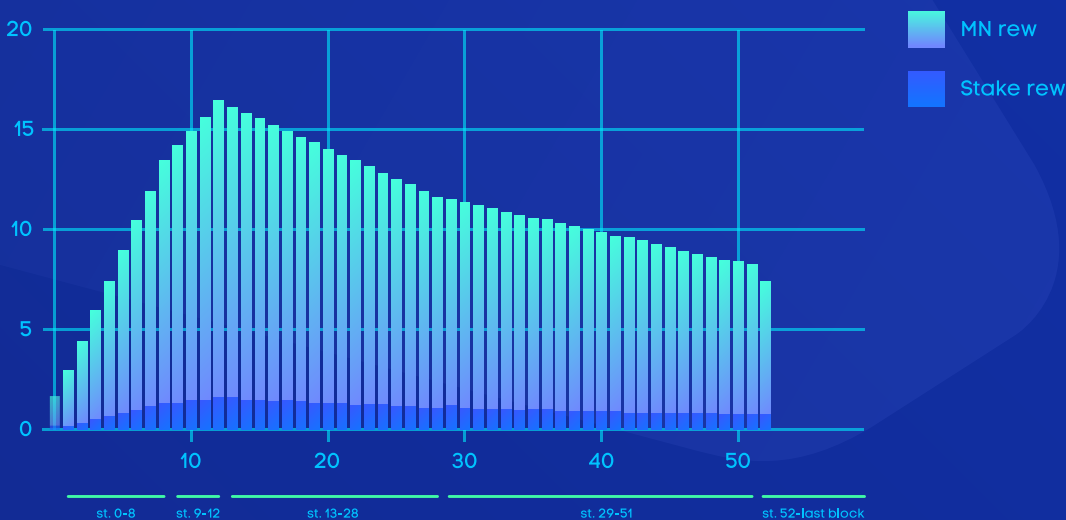
All returns are paid to the user in Market Arbitrage Coins, which serves a number of purposes and incur clear advantages for the user. MARCs may be withdrawn from the Investment Wallet (DIW) or User Portal Wallet to any supporting wallet outside the MARC environment including user owned wallets or directly to exchanges that accept MARCs. From exchanges or via Peer to Peer (p2p), users may sell/trade MARCs for any currency they wish. Requiring MARCs for all in and out operations and related services ensures future demand for the Coin so that users and hodlers can be sure of its appreciation in value over time. This appreciation in value also offers further gains to those investors beyond the above stated expected returns.

REWARD DIAGRAM

We are confident that the coins emission according to the project development plan will help keep interest in the coin at the proper level throughout the entire period.

- **Stage 0-8** – a fast growing stage for increasing ROI and attracting investors' attention.
- **Stage 9-12** – smooth decrease in emission growth for the transition to the arbitrage platform launch.
- **Stage 13-28** – emission decrease in the period of product formation and transition to the stable earnings on arbitrage.
- **Stage 29-51** – Emission slowdown at the moment of implementing our projects' key features (arbitration DEX-CEX, selection of the key (basic) arbitrage currency).
- **Stage 52-last block** – 7.5 coin / block – the final stage where the benefit of keeping a node competes with the benefit of an investment in arbitration.

*Each stage – 20k blocks in blockchain.



Listed below is the block reward distribution table for MARC masternode owners and non- masternode owners, who have their wallets open for staking. With each block a different node is randomly selected and rewarded. The 'minted' block rewards are distributed on a fixed percentage between masternode owners (90%) and staked owners (10%) to create a fair distribution of coins.

#Stage	from block	to block	Coins per block	MN Rate	Stake Rate
0	0	19999	1,7	1,53	0,17
1	20000	39999	3	2,7	0,3
2	40000	59999	4,5	4,05	0,45
3	60000	79999	6	5,4	0,6
4	80000	99999	7,5	6,75	0,75
5	100000	119999	9	8,1	0,9
6	120000	139999	10,5	9,45	1,05
7	140000	159999	12	10,8	1,2
8	160000	179999	13,5	12,15	1,35
9	180000	199999	14,25	12,825	1,425
10	200000	219999	15	13,5	1,5
11	220000	239999	15,75	14,175	1,575
12	240000	259999	16,5	14,85	1,65
13	260000	279999	16,2	14,58	1,62
14	280000	299999	15,9	14,31	1,59
15	300000	319999	15,6	14,04	1,56
16	320000	339999	15,3	13,77	1,53
17	340000	359999	15	13,5	1,5
18	360000	379999	14,7	13,23	1,47
19	380000	399999	14,4	12,96	1,44
20	400000	419999	14,1	12,69	1,41
21	420000	439999	13,8	12,42	1,38
22	440000	459999	13,5	12,15	1,35
23	460000	479999	13,2	11,88	1,32
24	480000	499999	12,9	11,61	1,29
25	500000	519999	12,6	11,34	1,26
26	520000	539999	12,3	11,07	1,23

#Stage	from block	to block	Coins per block	MN Rate	Stake Rate
27	540000	559999	12	10,8	1,2
28	560000	579999	11,7	10,53	1,17
29	580000	599999	11,55	10,395	1,155
30	600000	619999	11,4	10,26	1,14
31	620000	639999	11,25	10,125	1,125
32	640000	659999	11,1	9,99	1,11
33	660000	679999	10,95	9,855	1,095
34	680000	699999	10,8	9,72	1,08
35	700000	719999	10,65	9,585	1,065
36	720000	739999	10,5	9,45	1,05
37	740000	759999	10,35	9,315	1,035
38	760000	779999	10,2	9,18	1,02
39	780000	799999	10,05	9,045	1,005
40	800000	819999	9,9	8,91	0,99
41	820000	839999	9,75	8,775	0,975
42	840000	859999	9,6	8,64	0,96
43	860000	879999	9,45	8,505	0,945
44	880000	899999	9,3	8,37	0,93
45	900000	919999	9,15	8,235	0,915
46	920000	939999	9	8,1	0,9
47	940000	959999	8,85	7,965	0,885
48	960000	979999	8,7	7,83	0,87
49	980000	999999	8,55	7,695	0,855
50	1000000	1019999	8,4	7,56	0,84
51	1020000	1039999	8,25	7,425	0,825
52	1040000	2559999	7,5	6,75	0,75

last block

SEE YOU SOON

MARC Team believes in the bright future of Cryptocurrency as both a form of currency and a wide reaching technical industry and related services. We envision democratizing investments and allowing all levels of capital and experience access to reliable and impressive gains with easy to manage risk, easy setup, no or minimal maintenance cost, and clear reporting backed by top level security where all elements we know to be barrier to investment entry are resolved, thus we preempt the highest level of adoption for the MARC platform. Please join us for our pre-sale and product launch.