

**PLATINCOIN**



**WHITE PAPER**

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# OUR MISSION

The founders of the company Platin Genesis believe their main mission is to build a society united by common desire to learn how to manage sophisticated technologies changing more and more our normal reality.

From one side we see and accept the progressive role of digital technologies in the modern world. From the other side we understand not everyone has access to them. A big number of fully-fledged citizens are cut off from technological progress owing to financial, political, geographical, mental and other reasons. We see the digital divide as a global challenge to humankind and are ready to work on overcoming it. Our contribution to deal with this problem is our unique product, a high-tech platform making advanced technologies publicly accessible and promoting them.

**High tech inevitably becomes part of our everyday life. That's why we see education and training of millions future users as our primary task.**

For this purpose we offer to become a part of the global cryptosystem and an international community, where everyone will have possibility to communicate, to gather useful information about new technologies and to get acquainted with technological advances and recent developments in hi-tech industry.

**We developed powerful platform PLATINCOIN based on advanced technologies. However it's structured the way that every step made by every user is user-friendly and does not require any special knowledge and skills.**



# PLC NETWORK

The social network PLC Network combines all members of PLATINCOIN community. According to experts the social network will account for about 100 000 000 users within next five years. It's not only a global community where everyone can find adherents, we also give our members an effective and useful tool for business communications.

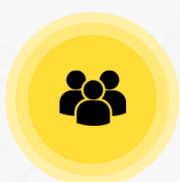
Compared to other social networks where you can have only 2 000 – 5 000 friends, in PLC Network you can have 100 000 friends. It especially benefits those who has an online business or plans to start it and draw the attention of potential customers.

The platform has additional opportunities for private companies promotion and favorable marketing conditions. Business accounts have even more benefits.

We really want our users to improve their wellbeing with our assistance. That's why there are additional activity bonuses in PLC Network (for posts, likes, comments etc)



## PLC Network Features



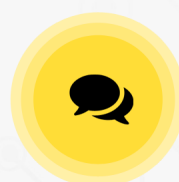
**Up to 100,000 friends**  
(in FB – up to 5,000)



**Business-accounts**  
and effective  
promotion



**Placing advertise-**  
ments using AdPoints



**Reward for activity in**  
a social network  
(posts, likes.)



**No spam**



# PLC BUSINESS

**A great community, combined by the social network PLC Network has a strong capacity to address this challenge. And the PLC Network can provide with all benefits of the PLC Business platform.**

We believe that ideas change the world. Best of them are capable to solve global problems, make people no more suffer from disease, hunger and poverty.



We also know how many bright and useful ideas stay unrealized. How many important projects are placed on hold because there is no money to implement them? The authors of these ideas and projects don't usually get financial support because investors don't know if the product will be in demand or not. But people can decide together and chose ideas they want to live. And together support projects they believe in.

This is exactly the place where the idea men can go public and their projects can have a chance for implementation. Every user decides about ideas he likes, supports, votes for and is actively involved in its development.

**The best and the most promising projects of PLC Business will become a part of investment portfolio of Platin Genesis. Profits of the companies from the portfolio support the PLATINCOIN brand. In this way we help powerful breakthrough ideas come to reality, our users gain success in their undertakings, and companies constantly grow and develop.**

# PLC MARKET

There is another powerful instrument within PLATINCOIN platform for business matters and increase of wellbeing and improvement of living standards.

It's a natural everymen's desire to have a chance to reach out for best option available. But how many people have to stick with products of quality available in their region? In the same time the manufacturers who would be happy to offer best quality goods can't further develop their business due to lacking access to the market and resources to enter it. Because very often it's connected with necessity of business scaling. And this is an impossible task for the most of manufactures.



**PLC Market is a global market. It can host unlimited number of sellers and buyers. That means that every PLATINCOIN user has an opportunity to sell and buy any legal goods regardless of borders and distances.**

For instance, if you manufacture qualitative goods at your own production but you don't have many customers and resources to export your goods, our platform would be a great opportunity to offer your products to a huge number of visitors.

**Goods are becoming more accessible with development of new markets. The Blockchain technology erases trade borders. Manufactures can use it to market their goods without violating the local law.**

# PLC ACADEMY

You need to be properly informed if you want understand advanced technologies and effectively use them.

You need to understand modern business processes if you want start your own business. Knowledge of web analytics and promotion is an additional benefit not only for businessmen.



Without this knowledge you cannot even attract subscribers to your channel or page. We created PLC Academy, an online platform with training packages allowing to gain all necessary knowledge and skills in a clear and easy way.

The Academy content is developed in a way that the user goes through new information step by step at a comfortable pace and in a relaxed atmosphere.

Student can choose to study in one of several languages of the platform. Authors' video courses professional practitioners are focused on such themes as blockchain, network marketing, digital marketing, effective communication, webinars etc.

**Video lessons are aimed to provide students with knowledge needed to maximize potential of Internet, social networks, messengers, to grow your own business, to promote your brand and to understand latest trends of crypto industry and high technologies.**



Presentation of the materials is very simple and accessible, because we want anyone with no special education and training to be able to easily understand and use this new knowledge. You can watch and read the lessons, go over already covered using illustrations and infographic, strength your knowledge with validation tests.

Everyone makes his own decision on how to learn: to steadily obtain a basic knowledge or to become a digital expert just in two months. Success users make in obtaining new knowledge can make feel them more confident in different areas of modern life, but it will not change their status inside the system, we equally respect all users.

The user gets access to the lessons and validation tests by obtaining the package of chosen volume. Furthermore all business packages contain a certain number of marketing points depending on the volume of the pack. These points can be exchanged, forwarded to other users or used for marketing purposes and promotion of own business in PLATINCOIN social network.



**Why do we pay so much attention to the education? Because we are sure that knowledge is the only one heritage that can't be lost or taken away. That means it's the only one worth spending money on it. And without knowledge and education there is no use in advance technologies.**

# MONETIZATION

Monetization of PLATINCOIN platform is performed by selling of business packages priced from 5 € to 1 000 € covering following topics: network marketing; online promotion; effective sales communication; blockchain technology.

By obtaining a business package of chosen price the user gets access to desired set of e-learning services and marketing solutions of PLATINCOIN: Academy Points, AdPoints, Voices, PLC.

## UNIQUE SOLUTION OF PLATINCOIN CRYPTOSYSTEM



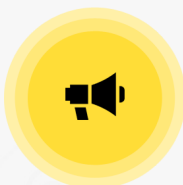
### **Academy Points**

Give access to learning materials in PLC Academy: video lessons, articles, validation tests. The more academy points you have the more learning levels you can achieve.



### **AdPoints**

Allow to advertise in the social network PLC Network without spending on it additional money.



### **Voices**

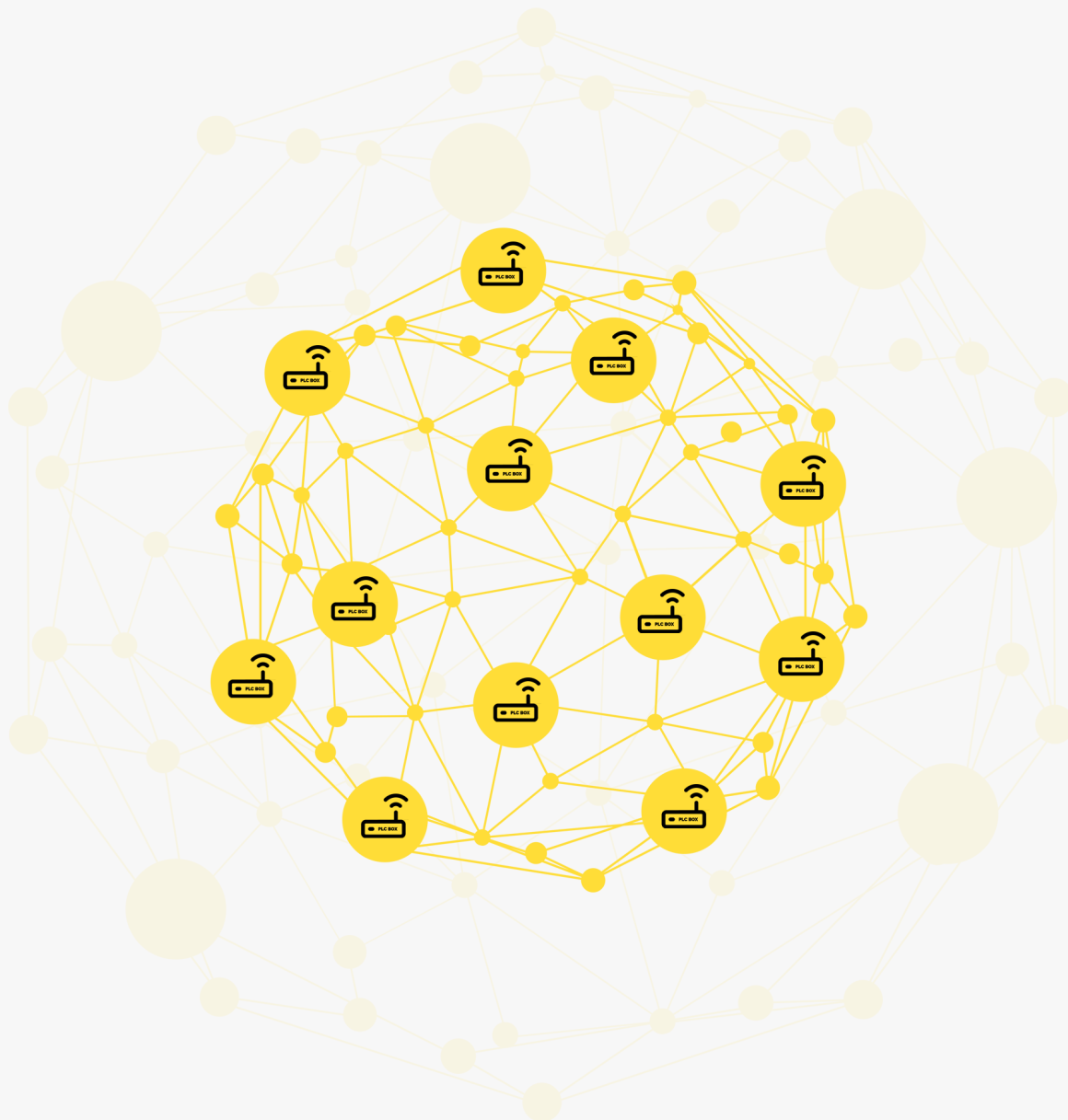
Are used by cryptosystem users for voting on PLC Business platform.



### **PLC**

Is another marketing solution of PLATINCOIN cryptosystem giving the opportunity to use all benefits of our technologies.

# TECHNOLOGIES



**PLATINCOIN (PLC) is a peer-to-peer cryptosystem with distributed decentralized public ledger called blockchain.**

PLATINCOIN shares the principles of decentralized consensus and security ensured by cryptography with the leading companies in crypto industry. But PLC makes the next step protecting from many potential attacks and strengthening the safety of existing consensus model: Proof-of-Work and Proof-of-Stake.





## PROOF OF WORK



## PROOF OF STAKE

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**PLATINCOIN pays a lot of attention to scalability which have always been as well known a bottleneck for decentralized systems and crypto industry. Unlike previously existed solutions PLC adopts superior technologies combining the most effective solutions. These are the main crypto technical solutions: Segregated Witness and Lightning Network.**

We briefly review the existing models of consensus building below and compare them with model implemented in PLATINCOIN. Referring to scalability we consider frequently encountered problems and their solutions and offer a number of technical improvement used in the original code of PLATINCOIN.

Development team of PLATINCOIN original code will take all necessary actions for the correct application of these improvements and scalability in PLC network.

# MODEL OF CONSENSUS-BUILDING



**PLATINCOIN uses Proof-of-Work (“PoW”) initial coin distribution cycle followed by transition to a hybrid model of both PoW and PoS (Proof-of-Stake). Both parts work simultaneously to provide additional security and network resiliency.**

## Proof-of-Work

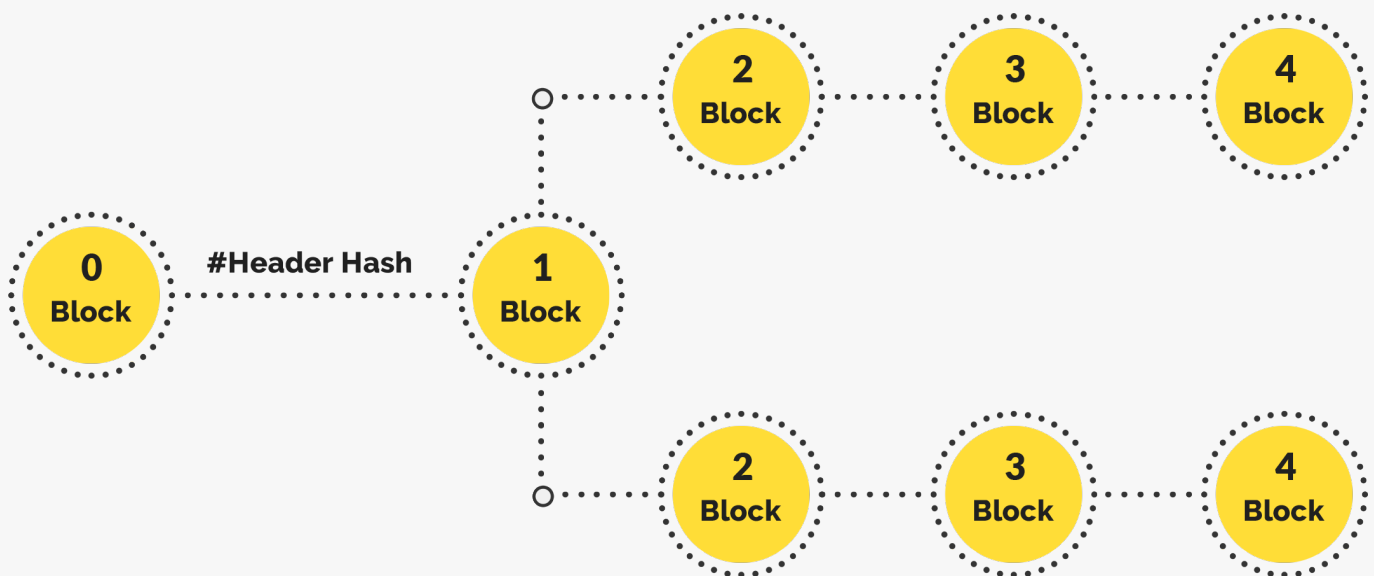
Proof-of-Work consensus model had been around since the inception of first cryptocurrencies. Being the most common model applied in many existing cryptocurrencies, PoW is the most studied consensus model by now as well. However, it has a well-known attack vector called a 51% attack. In essence, it is the ability of someone controlling a majority of network hashrate to revise transaction history and prevent new transactions from confirming.

**51% attack is the main concern for new PoW cryptocurrencies, as anyone holding significant mining powers is capable of suspending the entire network, preventing new transactions from going through.**

## Proof-of-Stake

PoS - is the less known consensus model which avoids the hardware overhead of PoW-based networks. Unlike PoW-based cryptocurrencies, where the algorithm rewards participants who solve complicated cryptographic puzzles in order to validate transactions and create new blocks, in PoS-based cryptocurrencies the creator of the next block is chosen in a pseudo-random way, and the chance that an account is chosen depends on its wealth (i.e. the stake).

PoS model has a list of potential attack scenarios, the majority of which is only theoretical. There also exists the “nothing at stake” problem, stating that in PoS model nodes are incentivized to behave badly by signing each and every block as it does not cost anything. This implies that in the traditional PoS it is a good strategy to work on every chain attempting to double spend a digital asset.



**PLATINCOIN uses a hybrid PoW / PoS consensus model, which has several benefits over both classic PoW and pure PoS models. In a hybrid model, PoW blocks also act as checkpoints, containing no transactions, but anchor both to each other and to the PoS chain.**

This approach addresses the “nothing at stake” problem by preventing nodes from forging blocks on several chains simultaneously. Hybrid model significantly decreases a possibility of 51% attack, as both 51% of overall network hashrate and staking coins are required to carry out a successful attack against the network.



# SCALABILITY



**PLATINCOIN is oriented at the global commercial use and mass adoption, which implies that the PLC network should be capable of processing thousands of transactions per second.**

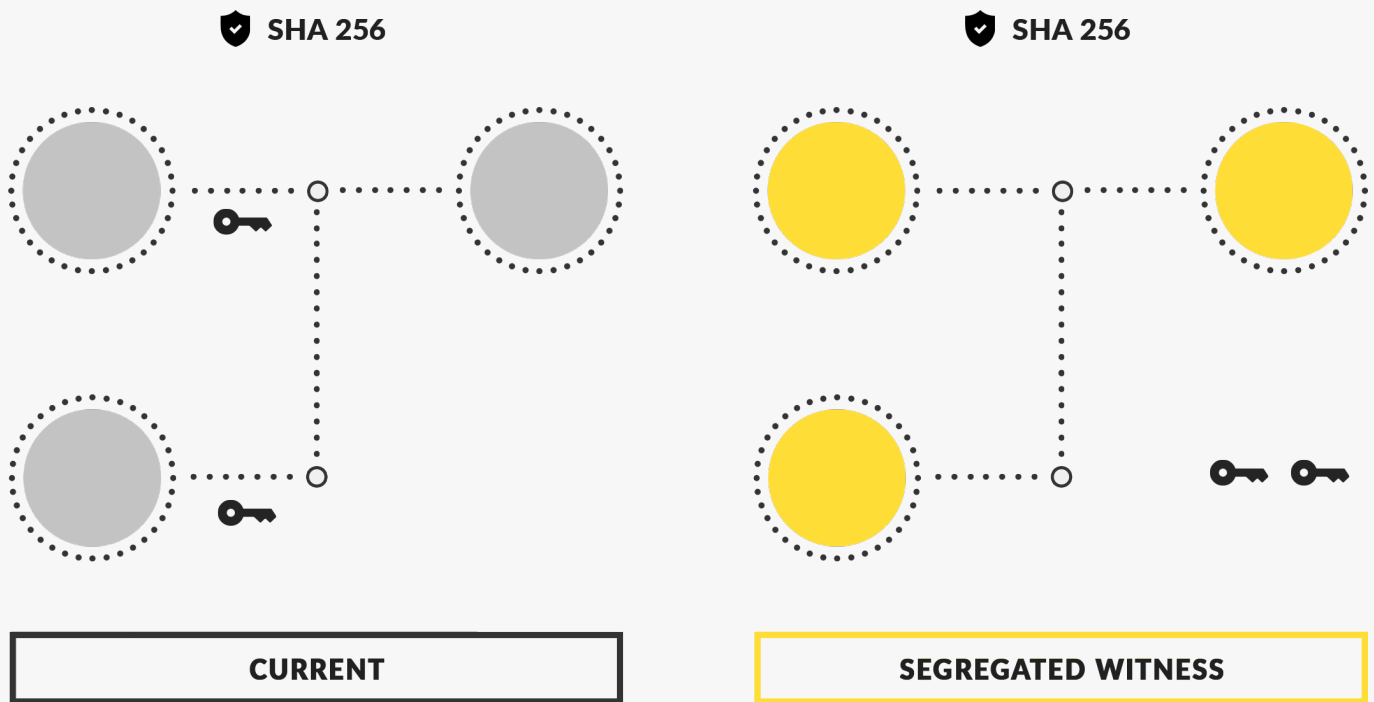
Scalability issues have always been a bottleneck for decentralized payment systems. Current throughput of Bitcoin and other alternative cryptocurrencies is too low for a widespread adoption and varies between 3-10 transactions per second (tps).

To achieve that goal, PLATINCOIN supports the SegWit technology in its codebase and implements the Lightning Network (LN) proposal. As of today, the use of both SegWit and increased block size limit gives PLATINCOIN a throughput of more than 50 tps. The successful implementation of the LN technology will make it possible to achieve a few thousands transactions per second metric.

PLC development team does not support scalability solutions imposing more centralization on the network (e.g. DASH project). DASH supernodes are an example of the unacceptable solution, increasing the network's throughput but effectively leading to centralization, which confronts the main principles of decentralized cryptocurrencies.

## SegWit

Segregated Witness (or SegWit) is the process by which the block transaction limit on a blockchain is increased by removing signature data from transactions. When certain parts of a transaction are removed, this frees up space or capacity to add more transactions to a single block, providing an increased block capacity without modifying the block size limit.

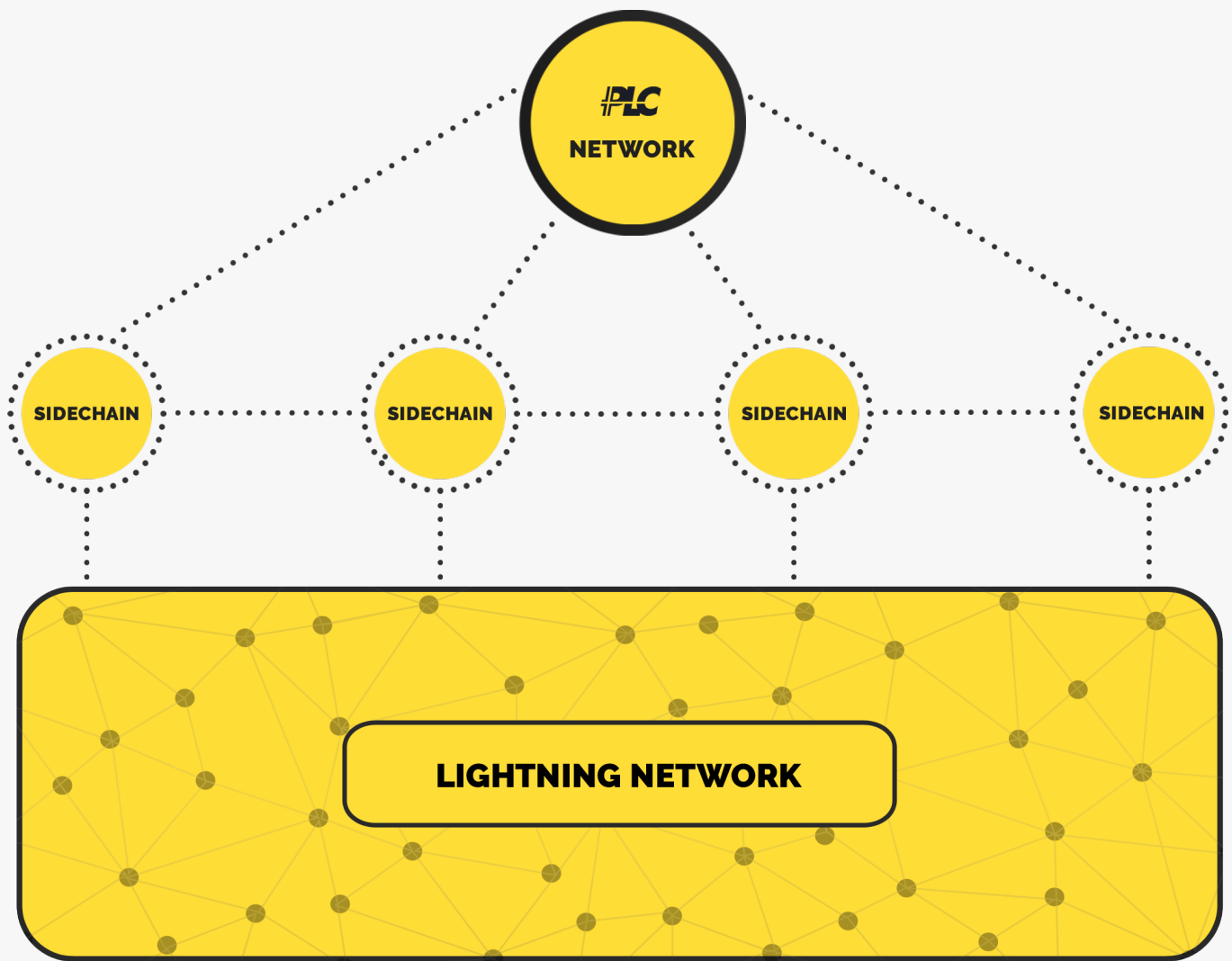


PLC network has SegWit activated together with the moderately increased block size limit. PLC core developers are aware of potential problems with orphaned blocks produced by high-latency nodes which cannot obtain high-size blocks on time.

To address this issue and avoid network centralization, PLC protocol has only a slightly increased block size limit compared to other cryptocurrencies.

## Lightning Network (LN)

Is a proposed implementation of Hashed Timelock Contracts (HTLCs) with bi-directional payment channels which allows payments to be securely routed across multiple peer-to-peer payment channels. This allows the formation of a network where any peer on the network can pay any other peer even if they don't directly have a channel open between each other. LN implementation is essentially a P2P network that builds upon another network with SegWit being activated (e.g. PLC network) to provide a mesh network of bidirectional payment channels.



Our current goal involves deploying the PLC Lightning Network, a second-layer protocol on top of PLATINCOIN, which can handle thousands of transactions per second by using the base, on-chain layer, only as a settlement for payments. After increasing the network's transaction throughput, PLC core developers will focus on further protocol improvements: further capacity compression through Schnorr signatures which aggregates signature data, MAST, which aggregates scripts, and other optimizations mainly focused on complex multi-signature transactions to support layer two protocols (L2TP).

Successful activation of both SegWit and LN technologies makes it possible to support an exponentially growing number of PLC nodes and transactions between them.

Transactions broadcasted in the PLC network get confirmed swiftly compared to many alternative systems. A well-known problem of scaling a decentralized payment network has been resolved by applying the latest advances in a cryptopcin protocol improvements. compression through Schnorr signatures which aggregates signature data, MAST, which aggregates scripts, and other optimizations mainly focused on complex multi-signature transactions to support layer two protocols (L2TP).



# BLOCKCHAIN

Blockchain is an open, distributed ledger that can record transactions between two parties efficiently and in a verifiable and permanent way. The ledger itself can also be programmed to trigger transactions automatically. Technically-wise, Blockchain is a distributed database that is used to maintain a continuously growing list of records, called blocks.

**PLATINCOIN (PLC) is a peer-to-peer cryptosystem with distributed decentralized public ledger called blockchain.**

Every PLC node shares the same transaction history, which means that the transaction ledger is entirely transparent. PLC node software is open-source and open to anyone for purposes of auditing or building services on top of it.

## Specifications

**60<sub>s</sub>**

Average block generation time

**POW  
/POS**

Block generation model

**Stand  
Alone**

Blockchain

**>50<sub>tps</sub>**

Initial transaction throughput

**API**

JSON-RPC, Bitcoin-compliant

# MADE IN PLATINCOIN

PLATINCOIN creators assigned a difficult task to Platin Genesis company engineers. In accordance to their idea new technologies should be clear, easy and accessible to use, by the same time the should make user feel as comfortable and safe as possible. The result is unique hybrid solution improved the blockchain technology as well as several unique inventions with patent application.

## SUPER THIN PLC WALLET AND TOTAL CONTROL

The most popular and accessible solution was always an e-service, where user registered an account and received an access to his virtual wallet for all transactions in Internet. The most valuable in this system is the key to the wallet.

**In currently available systems the key is being stored not by user but on server of some intermediate company.**

That means if the company faces license issues, its server will be hacked or simply crashes, user will not have any access to his wallet. If company will decide to charge much more for its services, user will also have no other choice.

But why do people take such a risk if even they understand that they do not control their personal key? The answer is simple as that: other options are even less acceptable.

For instance, you have to download a blockchain of around 100 GB to your computer if you want to own your personal key. Let's agree it's not that easy. And you can use such wallet only from home because it's is even more complicated to download 100 GB on your smartphone.



**PLC Super Thin Wallet is an unique solution allowing to store your personal key without middle-men and to own it directly.**

The program is only 10 GB and can be easily downloaded on any device. With PLC Wallet only you control your wallet and your personal key.

## **PLC SECURE WALLET AND MAXIMAL SECURITY**

The developers call this invention “paranoic mod”. The solution is made for those who want to use PLC Wallet for savings. If wallet content is very valuable it becomes dangerous to store its personal key on your smartphone.



**Paranoic mod allows to keep it separately on another device. That means that PLC Secure Wallet is composed from two devices.**

First smartphone with Internet connection runs PLC Wallet without personal key. Second device is generally another smartphone totally isolated from Internet and cell services that has complete wallet software and personal key.

The connection between these two devices is optically established with QR-code. The user therefore should not worry about the possible misuse of his personal key while placing transactions in blockchain. It is simply impossible to do, because the device performing transaction does not have the personal key.

**No single market solution offered yet such security of operations.**

## OFFLINE WALLET AND AIRPLANE MODE

Feel free to call PLC Secure Wallet a crypto wallet with unique options. Among others there is an option of making transaction without Internet connection.

**You can work on airplane mode on your smartphone, without Internet connection PLC Wallet can make transactions with QR-code.**

By the recovery of Internet connection it automatically publishes pending transaction in blockchain and saves all its data for the case confirmation will be required.

PLC SECURE WALLET is a wallet pegged to the platform PLATINCOIN. Everyone can use standard functions of the wallet.

But additional solutions for higher safety, download of light software on smartphones and offline payments are available for registered users only.

That's why sooner or later the majority will join our platform.



# PLC SECURE BOX

PLC Secure Box — is another technical solution developed by Platin Genesis engineers with no analog known. Users might need a constant Internet connection through a virtual rented computer while working in blockchain. In that case a private user key might be at risk.

**A mini computer PLC Secure Box helps secure a private key and allows to use rented virtual computer with no concerns.**

It's not big (50x95x120) and there is nothing redundant inside the device. You can connect PLC Secure Box to domestic router simply with a standard Internet cable (experts often call it ethernet - patch cable).



Blockchain attracts the most users by its possibility to capture cryptocurrencies. For this you need to check transactions already made, gather them in block, solve a specific task, generated by blockchain and publish your block.

Of course the whole work is done not by the user but by his computer or several computers what should be constantly connected to Internet. This process is called mining.

This job requires sophisticated equipment, its maintenance and big energy consumption.

**PLC Secure Box is a much more simple, compact, cost-effective and safe solution. It allows the user to easily capture cryptocurrencies through mining, secures quick blocks creation, securely stores a private key and save energy and environment.**



# CONCLUSION

The innovative platform PLATINCOIN is a breakthrough platform based on the most trendy and promising ideas and technologies. The cryptosystem includes social network PLC Network, online shop PLC Market, platform PLC Business, training package PLC Academy, and a complex of unique technological solutions PLC Technologies.



The cryptosystem PLATINCOIN benefits to its users with maximal simplicity and public accessibility. The platform is user-friendly. So we can accomplish the main mission of Platin Genesis to decrease a digital divide in the community and to make advanced but very interesting cryptotechnologies accessible for public.

**WE GO BEYOND THE LIMITS AND BUILD OUR OWN UNIVERSE!**