



# Feature List

5irechain Alpha Testnet Release

V1.0

Feature	Description
Unique Consensus	<p>The Sirechain's architecture is cleverly designed, and its consensus algorithm is at the core of this architecture.</p> <p>POF(Proof of fire) is a multifactor consensus protocol. There are 5 factors involved for Nodes -</p> <ul style="list-style-type: none"> <li>Stake - It has a weightage of (50%)</li> <li>Randomised Voting - (10%)</li> <li>Sustainability Score - (10%)</li> <li>Reliability Score - (10%)</li> <li>Previous Nominations - (10%)</li> <li>Waiting Time - (10%)</li> </ul>
Randomised Voting	<p>There will be Nodes (nominator) who will provide votes to potential assemblers which are competing for the right to assemble Blocks.</p>
Sustainability Score	<p>It is a score based on the environmental, social, and governance (ESG) index given to the potential block assemblers.</p> <ul style="list-style-type: none"> <li>● Environmental - Energy Sources, ISO 4001 certifications, Waste Management.</li> <li>● Social - Formal contract, Anti-discriminatory policy, Data Privacy.</li> <li>● Governance - Diversity, Breaches, Illegal Practices.</li> </ul>
Reliability Score	<p>Nodes are assigned the reliability score based on:</p> <ul style="list-style-type: none"> <li>● Age: Age of node or the time node has been online during the last 14 epochs(7 days).</li> <li>● Stake: The amount of Sirechain's native token held by the node.</li> <li>● Block Assembly: Successful block assembling done by the node previously.</li> </ul>
Previous Nominations	<p>Probability of being selected as an assembler reduces after each epoch(12hrs). So that every</p>

	node gets a fair chance to participate in block assembling.
Waiting Time	A node has to wait for a certain time after it has been selected for assembling the blocks for an epoch.
Nested Blocks	5irechain will use the scheduling algorithms to make sure the maximum utilisation of the nodes. The nodes that are in all the parallel chains will be selected based on their weights (Reliability Score, Stake, ESG score, and Randomised voting).
Transactions Pools	In order to support the parallel chains, the 5ireChain ecosystem will use multiple transaction pools. There shall be one transaction pool per chain having a unique serial number.
Immutability	Every node on the 5irechain will have a copy of the digital ledger. So if someone wants to change something in the system then he has to change it on every user's ledger which is nearly impossible.
Decentralised	The 5irechain's network is decentralised meaning it doesn't have any single person or a governing authority looking after the framework. Instead, a group of nodes maintains the network making it decentralised.
Smart Contract	5irechain will support smart contract deployment which will be a program stored on the blockchain that will run when predetermined conditions written in it are met. A smart contract is typically used to automate the execution of an agreement so that all parties are certain of the outcome, without any mediator's involvement or time loss.
Governance	5irechain will have an on-chain governance system for managing and implementing changes to blockchain. The rules for instituting changes

	<p>will be encoded into the 5irechain's protocol. Developers propose changes through code updates and each node votes on whether to accept or reject the proposed change.</p>
Enhanced Security	<p>5irechain being a decentralised platform gets rid of the need for a central authority, no one can just simply modify any characteristics of the network for their benefit. Also, we are using encryption which ensures another layer of security for the system.</p>
Distributed Ledgers	<p>The ledger on the 5irechain's network is maintained by all the users on the system. The distributed computational power across the computers ensures a better outcome.</p>
Faster Settlement	<p>5irechain offers a faster settlement of the funds compared to traditional banking systems. This way a user can transfer crypto relatively faster, which saves a lot of time in the long run.</p>