

Stellar

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The Stellar Consensus Protocol

mechanism	decentralized control	low latency	flexible trust	asymptotic security
proof of work	✓			
proof of stake	✓	maybe		maybe
Byzantine agreement		✓	✓	✓
Tendermint	✓	✓		✓
SCP (this work)	✓	✓	✓	✓

Fig. 1. Properties of different consensus mechanisms

Protocol Comparison

	Bitcoin's blockchain	Ethereum	Stellar
Average Transaction Confirmation Time	1 hour	15 minutes	3 to 5 seconds
Average Transaction Fees	\$18.75 per transaction	\$1.13 per transaction	\$0.01 will pay for 300,000 transactions
Transactions Per Second	3 transactions per second	7 transactions per second	3000+ transactions per second
Consensus Mechanism	Proof of Work	Proof of Work	Stellar Consensus Protocol (SCP)

Stellar vs Ethereum

- + Supports custom tokens with decentralised exchange
- - But no Turing-complete smart contracts
- + Lightning Network equivalent coming soon
- - 1% annual inflation? Minimum balance requirement.