Top Solana RPCs — Helius vs. Other Node Providers

What are RPCs?

RPC nodes are the fundamental building blocks of blockchain development. Similar to how electricity, water, and steel enable the building of cities, RPCs enable the building of crypto applications. Fundamentally, blockchains are simply a set of nodes talking to each other and reaching consensus on what data to process. This data is read (or written to) via RPC nodes. The higher quality your RPC is, the higher your crypto application's potential and quality.

What Makes a Good RPC?

Given that RPCs are the lifeline for any crypto developer — it is crucial for an RPC provider to be reliable.

But reliability alone isn't enough, to ensure your app performs at its best, your RPC must also be fast, with minimal latency.

In the rare case where your RPC is both reliable and fast, it must also be affordable so you can focus on your business without worrying about your monthly bill!

To represent this relationship, we've crafted the RPC trilemma below.

The sweet spot when deciding on an RPC provider is one that — at minimum — hits all 3 criteria. Of course, you'll also want things like great documentation, the latest features from the underlying L1 network, 24/7 developer support, and seamless integration with other tools that you may benefit from such as APIs, webhooks, and more.

Helius RPCs vs. Other Providers: How to Decide?

To answer this question, let's assess the current RPC landscape. Most RPCs on the market today aren't inherently bad. Some are fast, some are relatively affordable, and some are reliable. The problem arises when you want more than one of these qualities all at once.

How do we know? Well, we were in your shoes[not long ago](#)! When Helius first started, we only offered enhanced APIs. These APIs relied heavily on underlying RPC providers. We tried them all. Really, every single one. They turned out to be either too slow, too unreliable, too expensive and also full of random overage charges with hidden cost multipliers. After experiencing this for months, we decided we had to build our own RPC clusters from the ground up.

After months of iteration, we released Helius RPCs. Since then, we've been fortunate enough to power more than half of the Solana ecosystem with best-in-class RPCs — from heavily botted NFT mints and low-latency DeFi aggregators, to mission-critical DePIN infrastructure.

Why Should I Pick Helius RPCs Over Others?

Helius RPCs were created to address the RPC trilemma — an RPC that could be performant, reliable, and cost-efficient all at once. Let's inspect each one.

Performance

Some other providers will claim that they are the fastest on the market, but these are generally misleading, nuanced claims. RPC performance depends on a myriad of factors including geography, the method(s) being called, the subscription plan you are on, and whether the node is private or not.

While we are not going to claim we are the absolute fastest (and others shouldn't either) — we can safely claim that we are within the top 1% of all RPC providers with respect to performance. Below are a few attached screenshot of a Solana community developers benchmarking and documenting their results, where Helius is the fastest provider.

But of course, do not take anyone's word for it — we've created a tool so that you can benchmark RPC calls on your own, with detailed documentation! [Please find it here](#).

Cost

A common problem we've found from other RPC providers in the space is the opaqueness of price structures. We often have customers come up to us and claim that Provider X is actually more cost-efficient than Helius because they give more "Credits" or "Compute Units".

This is misleading as those providers generally add hidden multipliers per RPC method and whether the methods require archival/full RPC nodes or not.

Whereas with Helius 1 RPC call always equals 1 credit, some providers might charge you as much as 500 credits for a single RPC call! What's worse, you often won't be aware of this until you get your bill and see that you have a 10x premium to pay on your overages! We've been there.

Some other providers have simpler cost structures, but start at very high prices (over $500 per month).

Some providers will claim to give you unlimited credits or requests but will give you a very low rate limit such that you can't exceed a certain number of credits per month anyway.

At Helius, we pride ourselves in having the most transparent and simple to understand pricing model in the market. Our unit cost for RPC call is in the top 1%, we give the most amount of credits, have the most generous rate limits, have top-tier support for all plans, and offer you a lot more than just RPCs: including APIs, webhooks, Compression support, and even general marketing help.

What's more: if you are unsatisfied with our services, we will give you a full refund within 7 days.

You can find our pricing here. You can also pay fully in crypto.

Reliability

Reliability in RPCs is a multi-faceted equation — it doesn't just mean uptime, it also means data consistency.

Fortunately, we work closely with Solana Labs to ensure there are never any holes in your historical data. We've also backfilled the entire history multiple times and have come across and patched some very nasty data inconsistency issues.

We are also within the top 1% of reliability of all providers and most importantly, we have a status page with built in alerting and notifications for full transparency and to ensure you're always kept in the loop. Our status page can be found here.

We also set up priority chats with all of our business customers on Slack, Telegram, and Discord to ensure swift incident response in the rare case of any downtime.

Observability

One of the best parts of Helius RPCs is that we don't just give you any old metrics dashboard — we give you an entire dedicated Datadog dashboard with fully customizable metrics over vast time ranges, including global requests, method latencies, success rates, error logs, trends over time and much more. This comes included in all plans.

Enhanced APIs, Webhooks, and Compression

Helius is the leading provider of webhooks, enhanced APIs, and compression on Solana. Since we have a Solana exclusive focus, we are able to add new Solana-native features sooner than anyone else on the market. We currently power over 90% of the teams using webhooks, enhanced APIs, and compression on Solana.

Conclusion

While other RPC providers may provide reasonable speeds, costs, or reliability — none of them offer all three at once. Helius RPCs were crafted exclusively for Solana developers to address their pain points holistically. We are within the top 1% of costs, performance, and reliability — as well as providing the absolute best (and quickest) developer support with the most comprehensive platform full of enhanced APIs and newer Solana releases. If you don't believe us, give our platform a try, for free! We will give you a full refund if unsatisfied with our services!

To get started, visit our website. Thank you for reading and happy building!