Nvidia RTX 4070 Super review: a super performance bump for $599

When I reviewed the RTX 4070 last year, there were a few things that held it back. The original card shipped with 12GB of VRAM, its 4K performance didn’t quite match the RTX 3080, and overall, it didn’t feel like a big generational leap. The RTX 4070 Super corrects most of those issues at the same $599 price point.

While Nvidia has stuck to the same 192-bit memory bus and 12GB of G6X memory with the RTX 4070 Super, the big bump to CUDA cores puts its performance a lot closer to the RTX 4070 Ti. The RTX 4070 Super feels like a generational leap, delivering even better 1440p and 4K performance than before.

I wasn’t expecting quite the bump in performance from the RTX 4070 Super — around 17 percent on average at 1440p and 15 percent at 4K — which could make it an ideal pairing for the new 1440p OLED monitors starting to hit the market this year.

8Verge Score

Nvidia RTX 4070 Super

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The Bad

- 12GB of VRAM
- The power adapter

How we rate and review products

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There are three DisplayPort 1.4 ports (up to 240Hz at 4K with DSC) and a single HDMI 2.1 port (up to 60Hz at 8K with DSC) at the rear. Nvidia still hasn’t moved to DisplayPort 2.1, but I think it’s less of an issue on a card like this that’s targeting 1440p rather than the high frame rates required for 4K gaming.

Nvidia continues to use the single 12-pin PCIe 5 connector on the RTX 4070 Super,

and there’s an included 12VHPWR adapter cable in the box so you can connect two regular eight-pin PCIe power cables. I always skip this adapter on my personal builds because I’m really not a fan of it. I much prefer single cable solutions that are available from third parties or that ship with the latest power supplies.

In terms of power, Nvidia has actually bumped the power draw of the RTX 4070 Super by 20 watts. It takes up to as much as 220 watts at peak, compared to 200 watts on the RTX 4070. You’ll still only need a 650-watt power supply, though, the same requirement for the previous-gen RTX 3070. The slight bump to power usage helps Nvidia squeeze out that extra performance at both 1440p and 4K.

Unfortunately, the RTX 4070 Super still ships with 12GB of memory, just 2GB more than the original RTX 3080. I was disappointed with this choice on the original RTX 4070, and I’m once again

surprised Nvidia hasn’t pushed this up to 16GB, even if the price point has held at $599. This might not be an immediate issue, but modern games are constantly demanding more VRAM, and 16GB just gives you more headroom for years to come. It’s especially disappointing when you consider that AMD ships its $499 Radeon RX 7800 XT with 16GB of VRAM.

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4070 Super offers better performance at both 1440p and 4K.

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hadow-underline-gray-63 [&>a]:shadow-underline-gray-13 dark:[&>a]:shadow-underline-gray-63”>*The RTX 4070 Super has a 12VHPWR connector.*

I still think the

RTX 4070 Super is an ideal 1440p card, though. The RTX 3070 was always the sweet spot for 1440p gaming, and the RTX 4070 Super gives you even more room for the

latest games if you’re looking to upgrade from 1080p.

The RTX 4070 was a $600 RTX 3080, kind of. Now, the RTX 4070 Super exceeds that to comfortably

deliver more performance than an RTX 3080 at the same $599 price point as the RTX 4070 before it. If I were still running a GTX 10-series or RTX 20-series card, then

I’d be seriously tempted to upgrade to the RTX 4070 Super. The only thing that would make it even more appealing would be 16GB of VRAM.

As it stands, Nvidia’s first RTX

40-series Super card is an impressive performance jump over the original RTX 4070 and one that I would seriously consider for a 1440p PC build. I’m now

waiting to see if Nvidia can replicate the same performance boosts with its RTX 4070 Ti Super.

Photography by Tom Warren / The Verge

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ge.com/24039832/nvidia-rtx-4070-super-review-gpu-graphics-card-benchmark-test