

GAMING PC

CYBERPOWER ULTRA 5 SUPER / £1,179 incvat

SUPPLIER cyberpowersystem.co.uk

yberPower's Ultra 5 Super is the first PC we've seen with a new Nvidia RTX 2060 Super GPU (see p16), which is designed to provide a significant boost over

the previous RTX 2060. It has 2,176 stream processors, compared to the original GPU's 1,920, and the 2,304 in the original RTX 2070. The Founders Edition card in the

CyberPower. It also comes with 8GB of memory, rather than 6GB.

The card in the CyberPower is an Nvidia Founders Edition, with a 1470MHz base clock and 1650MHz boost frequency. The RTX 2060 Super also compares well with the AMD Radeon RX 5700, which has comparable performance for the money but no hardware ray-tracing abilities.

The RTX 2060 Super isn't the CyberPower's only new silicon either – this machine also has a Ryzen 5 3600, which has six SMT-enabled cores (giving it a total of 12 threads – alongside base and boost clocks of 3.6GHz and 4.2GHz. It's a core spec that compares well with Novatech's £1,349 Reign Sentry MKI (see Issue 192, p40), which had a Core i5-9600K with no Hyper-Threading, as well as a standard RTX 2060 graphics card.

The CPU slots inside an MSI B450-A Pro. It's not an X570 motherboard, but that's no surprise at this price. The older chipset means you lose out on PCI-E 4, but you can still run the new CPUs fine. Elsewhere, the MSI is a modest board though. It has two spare memory slots

and some free 1x PCI-E slots, but its sole M.2 connector is occupied and its second 16x PCI-E slot only runs at 4x speed.

It has entry-level Realtek ALC892 audio and no Wi-Fi either, although CyberPower has thoughtfully added a separate card for the latter. At the rear you get pairs of USB 3.1Gen 1 and Gen 2 ports, but no Type-C ports and no optical S/PDIF either.

Elsewhere, CyberPower has installed 16GB of 3000MHz DDR4 memory, and you also get a 2TB hard drive and a 512GB Intel 600p SSD. The latter is a PCI-E 3 NVMe drive that's much quicker than a SATA drive, but no match for Samsung's 970 Evo Plus drives, or the latest PCI-E 4 drives for that matter.

Meanwhile, power comes from a 600W Cooler Master unit. It's not modular, and it only has entry-level 80 Plus certification, but it has more than enough power for the spec. CyberPower's case comes from Cooler Master too. It's a MasterBox MB511, and it looks conventional: it has a meshed front panel with three 120mm fans, a magnetic dust filter on the roof and a see-through side panel.



CPU

3.6GHz AMD Ryzen 5 3 600

Motherboard

MSIB450-A Pro

Memory

16GB Corsair Vengeance LPX 3000MHz DDR4

Graphics

 $N vidia\,GeForce\,RTX\,2060\,Super\,8GB$

Storage

512GB Intel 600p M.2 SSD, 2TB Seagate Barracuda hard disk

Case

Cooler Master Master Box MB511

Cooling

CPU: Cooler Master MasterLiquid Lite 120 with 1 x 120mm fan; GPU: 2 x 90mm fans; front: 3 x 120mm fans

PSU

Cooler Master Master Watt Lite 600W

Networking

Gigabit Ethernet, dual-band 802.11ac Wi-Fi

Ports

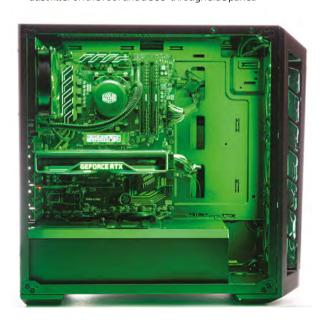
Front: 2 x USB 3,2 x audio; rear: 2 x USB 3.1 Gen 2, 2 x USB 3.1 Gen 1,2 x USB 2,1 x Gigabit Ethernet, 1 x PS/2, 6 x audio

Operating system

Microsoft Windows 10 Home 64-bit

Warranty

Two years parts and labour, plus one year labour only. Six months collect end return, then return to base



BENCHMARK RESULTS 452,206 116,437 GIMP IMAGE HANDBRAKE H.264 VIDEO ENCODING LUXMARK OPENCI SHADOW OF THE TOMB RAIDER 1,920 x 1,080, Highest Detail, TAA CyberPower Ultra 5 Super 2,560 x 1,440, Highest Detail, TAA CyberPower Ultra 5 Super **TOTAL WAR: WARHAMMER II** 1,920 x 1,080. Ultra Detail. DX11 CyberPower Ultra 5 Super 2,560 x 1,440, Ultra Detail, DX11 CyberPower Ultra 5 Super BATTLEFIELD V CyberPower Ultra 5 Super 2,560 x 1,440, Ultra settings, DX11 CyberPower Ultra 5 Super 1,920 x 1,080, Ultra settings, DX12, High DXR, DLSS 52fps 74fps CyberPower Ultra 5 Super 2,560 x 1,440, Ultra settings, DX12, High DXR, DLSS CyberPower Ultra 5 Super 47fps Minimum Average

It's a low-cost case, though, so the side panel isn't made of tempered glass – it's plastic. It's bare on the inside too, with a plain PSU shroud, no rubber grommets and mediocre cable tidying. There's also room for a single hard disk and three 2.5in drives. The aforementioned Novatech is better here – its NZXT H500 is smarter and smaller, with a neater interior and a tempered–glass side panel.

Finally, the CyberPower has a three year labour warranty with two years of parts coverage, and six months of collect and return service. That's a good deal for a system at this price.

Performance

The CyberPower's RTX 2060 Super easily outpaced the RTX 2060. In Shadow of the Tomb Raider, its 82fps minimum at 1080p was 10fps better than the Novatech with its RTX 2060. It even maintained a 30fps minimum in this game at 4K. Likewise, in Total War: Warhammer II, the CyberPower's 68fps minimum at 1080p was 22fps ahead of the Novatech. It zipped through Battlefield V with a 9fps lead, and it managed playable frame rates in Battlefield V with High ray tracing enabled at 2,560 x 1,440 as well – a feat the normal RTX 2060 couldn't manage.

Similarly, the new AMD CPU impressed, cutting out a modest lead over the Novatech's i5-9600K in our single-threaded image editing test, and getting a huge advantages in our heavily multi-threaded Handbrake video encoding test. Its overall score of 192,550 is miles ahead of the Novatech's Core i5. The accompanying SSD also delivered fine read and write speeds of 1,825MB/sec and 981MB/sec respectively.

The CPU is topped with a Cooler Master MasterLiquid Lite, and it cools effectively – the CPU's peak delta T of 56° C is fine. Similarly, the GPU's delta T of 49° C isn't a problem. This machine produces noticeable fan noise when idle and gaming, though, so it's no good if you want a near–silent experience – you'll want to keep it under your desk. At least the noise level is consistent, without any sudden modulations.

Conclusion

The CyberPower Ultra 5 Super concentrates on performance rather than finesse, and it delivers. The RTX 2060 Super and Ryzen 5 3600 outpace the pricier Novatech, which means more gaming pace and processing versatility throughout. Elsewhere, though, the budget bites. CyberPower's motherboard and case are basic, and this PC produces persistent noise.

If you're happy to make those sacrifices, though, and you want the best performance possible for the money, it's a tempting trade-off. If you're not fussed about looks and noise, and want the maximum speed for the minimum outlay, the CyberPower is a great budget option.

MIKE JENNINGS

VERDICT

It might lack sophistication, but this low-cost rig delivers a huge amount of CPU and GPU power.

RYZEN

- Superb gaming power
- Plenty of CPU ability
- + Low price

FALLING

- Underwhelming motherboard
- Basic enclosure
- Persistent noise

