PC system reviews

GAMING PC

CyberPower Hyper Liquid RTX / £3,199 inc VAT

SUPPLIER www.cyberpowersystem.co.uk

The CyberPower Hyper Liquid RTX looks superb, with an extensive water-cooling loop coursing with orange coolant. It's packed with powerful gear too, including Intel's new Core i9-9900K CPU, an Intel 9th-generation chip, which means you get the same architecture as last year's processors, but with improved core counts, clock speeds and turbo abilities. The result of Intel's tweaks is that the Core i9-9900K has eight Hyper-Threaded cores, a 3.6GHz base clock and a mighty turbo peak of 5GHz across two cores.

Scan's recent Core i9-9900K machine, the £3,500 3XS Vengeance RTX Ti, overclocked the chip to 5GHz across all cores, which is great for heavily multi-threaded content creation software, but the stock speed turbo peak of 5GHz on two cores will still get you great performance in most games. CyberPower pairs the CPU with 16GB of memory, a 500GB Samsung 970 Evo SSD and a 2TB hard disk. That's decent hardware, and you get a solid PSU as well – a modular, 80 Plus Gold-certified Corsair RM850x unit with 850W of power available.

Meanwhile, graphical ability comes from the RTX 2080 Ti – Nvidia's latest flagship Turing GPU, offering support for Nvidia's real-time ray tracing and deep learning features. This MSI card is a Duke 11G OC model, with a boost speed of 1665MHz. The motherboard comes from MSI too. The MPG Z390 Gaming Pro Carbon has all the features we expect from a high-end gaming board.

It has big heatsinks, RGB LEDs, a second M.2 slot and steel supports on the main slots. There's solid scope for expansion throughout, and you get great quality Realtek ALC1220 audio hardware and a USB Type-C connector at the rear. There are also three full-sized USB 3.1 ports, five audio jacks and a PS/2 connector on the rear, plus a USB 3.1 Type-C port on the front of the case.

It's all decent gear. The aforementioned Scan machine has an overclocked CPU, double the memory, a second SSD and a more fully featured motherboard, but it also costs £300 more and doesn't have the CyberPower's stunning design, with a full custom water-cooling loop with rigid tubing.

The front of the case is occupied by an EK-CoolStream SE 360 radiator and an EK-XRES 140 DEVO D5 reservoir. Meanwhile, the processor is topped by a transparent EK Supremacy Evo waterblock and the GPU uses similar EK-made hardware. CyberPower has filled the rigid tubes with orange coolant and, impressively, the case has two strips of RGB LED lights that can be altered using an infrared remote control.

The Corsair Obsidian 500D's curved, brushed aluminium front and tinted, tempered glass side panels look amazing too. It's also easy to access the insides, thanks to hinged and magnetic side panels, and there are decent practical features too. At the rear there are three 2.5in bays and a hard disk bay, and cabling is neat. Wires are tidied by a smart cover at the rear, and at the front, they're contained by a small, smart shroud.

Finally, CyberPower's PC includes a three year labour warranty with two years of parts coverage, and six months of collect and return service – it's a decent deal.

Performance

The CyberPower's gaming performance is superb, playing Shadow of the Tomb Raider and Deus Ex at 4K without dropping below 50fps. Sadly, an ongoing Nvidia driver issue means Total War: Warhammer II still occasionally stutters, knocking down the minimum frame rate, but the 45fps 4K average shows the GPU clearly has the power to play this game. We've still yet to properly test new features of Nvidia's RTX GPUs, but this PC is still very fast without them.

/SPECIFICATIONS

CPU 3.6GHz Intel Core i9-9900K

Motherboard MSI MPG Z390 Gaming Pro Carbon

Memory 16GB Corsair Vengeance LPX 3200MHz DDR4

Graphics MSI GeForce RTX 2080 Ti 11GB

Storage 500GB Samsung 970 Evo SSD, 2TB Seagate Barracuda hard disk

Case Corsair Obsidian 500D

Cooling CPU: EK-CoolStream SE 360 radiator with 3 x 120mm fans, EX-XRES 140 Revo D5 PWM reservoir/pump, EK Supremacy EVO waterblock; GPU: EK-Vector RTX 2080 Ti waterblock; rear: 1 x 120mm fan

PSU Corsair RM850x 850W

Ports Front: 2 x USB 3, 1 x USB 3.1 Type-C, 2 x audio; rear: 3 x USB 3.1, 1 x USB 3.1 Type-C, 2 x USB 2, 1 x Gigabit Ethernet, 1 x PS/2, 1 x optical S/PDIF, 5 x audio

Operating system Microsoft Windows 10 Home 64-bit

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

ELITE
NEW ENTRY
P62

1 **Orange coolant courses through the water-cooling loop's rigid tubing**

2 **The RTX 2080 Ti's delta T only peaked at 39°C, thanks to its waterblock**

3 **An 8-core Intel Core i9-9900K CPU sits under the EK waterblock**

Thanks to Intel's turbo tweaks, the CyberPower doesn't appear to lose much from not having an all-core overclock either. Its image editing score of 59,204 was a little behind the Scan, but it's hardly slow. The CyberPower's video encoding result was virtually identical to the Scan too, and the CyberPower was 12,000 points faster in our heavily multi-tasking test.

Our LuxMark benchmark wouldn't finish on the CyberPower, likely due to a driver issue with the new GPU, which also means we didn't get an overall system score. However, this test is generally unimportant for most people, and the other benchmarks show how much power is on offer. It's otherwise an impressive set of benchmarks for a cheaper PC without an overclock, with the bonus of an amazing water-cooling loop. The CyberPower also bolstered those tests with solid SSD read and write speeds of 3,546MB/sec and 2,321MB/sec.

Finally, thanks to its cooling system, the CyberPower's thermal results were superb. The CPU delta T of 68°C is cooler than the Scan, and the GPU delta T of 39°C is great. The CyberPower was practically inaudible when idle, and it didn't get any louder when gaming. There was a little more noise during a full-system stress test, but it was still quieter than the Scan.

Conclusion

CyberPower's machine offers an amazing spec, an excellent case and top-notch water-cooling. It's cooler, quieter and cheaper than the Scan machine we reviewed last issue, and while it doesn't have the Scan's superior storage, memory, warranty and overclock, the CyberPower undoubtedly offers better value for money. The CyberPower's excellent performance, great design and lower price makes it as superb machine, getting you a cracking CPU and GPU, as well as a fantastic design.

MIKE JENNINGS

CPC REALBENCH

59,204	619,887	DNF
GIMP IMAGE EDITING	HANDBRAKE H.264 VIDEO ENCODING	LUXMARK OPEN CL

256,571	N/A
HEAVY MULTI-TASKING	SYSTEM SCORE

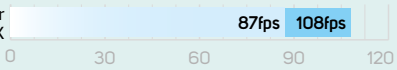
PERFORMANCE	DESIGN	OVERALL SCORE
24/25	24/25	93%
HARDWARE	**VALUE**	
22/25	23/25	

VERDICT

Excellent speed and design, and an amazing water-cooling loop, for a very tempting price. A superb machine if you can afford it.

SHADOW OF THE TOMB RAIDER

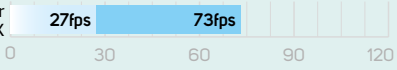
2,560 x 1,440, Highest Detail, TAA



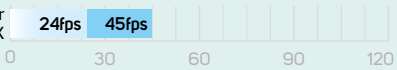
3,840 x 2,160, Highest Detail, TAA

TOTAL WAR: WARHAMMER II

2,560 x 1,440, Ultra Detail, DX12

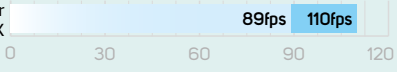


3,840 x 2,160, Ultra Detail, DX12

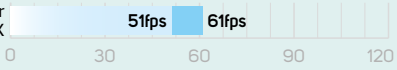


DEUS EX: MANKIND DIVIDED

2,560 x 1,440, Very High Detail, DX12



3,840 x 2,560, Very High Detail, DX12



Minimum Average