

PC system reviews

GAMING PC

CyberPower Infinity X77 Deluxe / £1,999 inc VAT

SUPPLIER www.cyberpowersystem.co.uk

CyperPower's Infinity X77 Deluxe arrives inside a case that shines with tempered glass. The daring design comes courtesy of In Win's 805. Its side panels and front cover are made entirely from thick glass, the front of the side panels have smart In Win logos, the whole case sits on subtle plastic feet and the skeleton beneath the glass is hewn from aluminium.

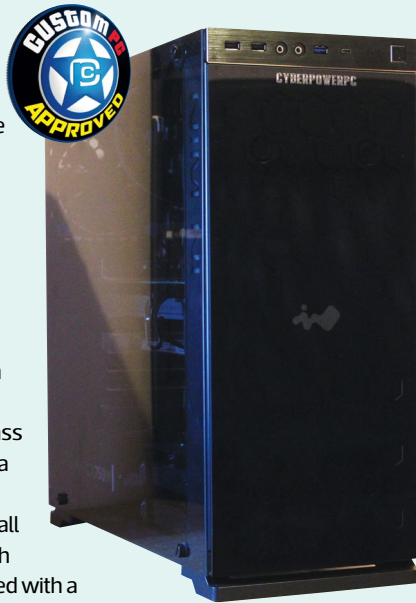
It looks fantastic. The gleaming glass panels are also complemented with a blue strip light in the roof; every component is bathed in light, and it's all visible. That blue light works well with the glass front panel too; it's decorated with a honeycomb pattern that glows with light from behind.

On the inside, the PC is more conventional. The radiator for the Corsair Hydro H110i GTX CPU cooler is attached vertically at the front, there's a storage bay beneath and the middle of the chassis is dominated by the graphics card. Meanwhile, the Corsair CX750M PSU isn't modular, but CyberPower has carefully routed its cables, making good use of the space behind the case's motherboard tray and the generous routing holes. Of course, you need to have a neat build in a case with glass side panels, since every component is visible, and CyberPower has done a great job here.

CyberPower has delivered decent specs too. The Core i7-6700K has had its four Hyper-Threaded cores overclocked from 4GHz to a massive 4.7GHz, and it's bolstered by 16GB of 3000MHz RAM too. Meanwhile, the MSI GeForce GTX 980 Ti card isn't an overclocked model, but it still has 2,816 stream processors.

The storage is great too. The 400GB Intel 750 Series SSD uses the fast PCI-E interface and NVMe protocol rather than slower SATA/AHCI, and it's paired with a 2TB hard disk.

Many of the components are enthusiast-level, and the Asus Maximus VIII Ranger motherboard follows suit, even if you wouldn't know it to look at its plain metal heatsinks. The mundane aesthetics conceal impressive features though. There are power and reset



buttons at the bottom of the board and a two-figure POST display at the top, and SupremeFX circuitry to improve the audio. The back panel is packed too, with USB 3.1 Type-A and Type-C connectors for future proofing, and two further USB 3 ports alongside four USB 2 connectors. There's also a clear-CMOS button and five audio jacks.

There's the usual array of slots too, but the large graphics card, Wi-Fi adaptor and PCI-E SSD mean most of these slots are occupied or blocked. There's only one 16x PCI-E slot and two 1x PCI-E slots free – and even then it's tricky to add components between existing cards.

Elsewhere, expansion potential is more obvious. There's an M.2 socket and several free SATA connectors, and there's a single free side-facing 3.5in bay and four empty 2.5in bays behind the motherboard tray.

Finally, CyberPower's warranty covers labour for three years, while the all-important parts coverage lasts two years. There's only six months of collect and return cover though – it reverts to a return to base deal afterwards.

Performance

The presence of a GTX 980 Ti moves the CyberPower above most of the single-card systems we've seen recently. While machines such as the Eclipse i7 Liquid Vengeance (see Issue 149, p58) just about get their fingertips into the 4K world thanks to GTX 980 cards, the Infinity X77 Deluxe uses the 980 Ti's extra stream processors to easily ascend to 3,840 x 2,160 gaming. In Battlefield 4 at 4K, the CyberPower's minimum of 37fps is comfortably smooth, and the CyberPower led the way in Crysis 3 too: its 4K minimum of 29fps hits our minimum playable frame rate target, a feat that neither the Eclipse i7 Liquid Vengeance, nor the £1,999 Box Cube Predator (see Issue 147, p58) could achieve.

Needless to say, the Infinity X77 Deluxe also handled 2,560 x 1,440 gaming fine: its Battlefield 4 pace of 62fps was its best, but it still romped through Shadow of Mordor and Crysis 3 to scores of 56fps and 43fps. The CyberPower also has a helping hand from the massive overclock applied to its Core i7-6700K – 4.7GHz is an amazing speed to be guaranteed by a system builder and it pays off in application

/SPECIFICATIONS

CPU 4GHz Intel Core i7-6700K overclocked to 4.7GHz

Motherboard Asus Maximus VIII Ranger

Memory 16GB Corsair Vengeance LPX 3000MHz DDR4

Graphics MSI GeForce GTX 980 Ti 6GB

Storage Intel 750 Series 400GB SSD; 2TB Seagate hard disk

Case In Win 805

Cooling CPU: Corsair Hydro H110i GTX with 2 x 140mm fans GPU: 1 x 60mm fan; rear: 1 x 120mm fan

PSU Corsair CX750M 750W

Ports Front: 1x USB 3.1 Type-C, 1x USB 3, 2x USB 2, 2x audio; rear: 1x USB 3.1 Type-A, 1x USB 3.1 Type-C, 2x USB 3, 4x USB 2, 1x PS/2, 1x Gigabit Ethernet, 1x optical S/PDIF, 5x audio

Operating system Windows 10 Home 64-bit

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

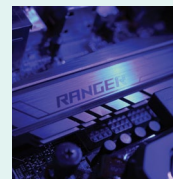
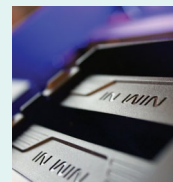
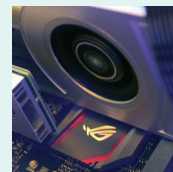
- 1** The super-fast Intel 750 SSD comes on a PCI-E card
- 2** The CPU has been given a massive boost to 4.7GHz
- 3** The dual-fan Corsair H110i GTX cooler is mounted at the front

benchmarks. The CyberPower's image editing result of 68,900 outpaces the Box Cube Predator's 65,279 with its 4.5GHz CPU, and its 329,911 result in the video encoding test is quick too. The CyberPower's system score of 149,808 is excellent, being around 17,000 points ahead of the Eclipse, and more than 4,000 points in front of the Box. This is a very fast Skylake system. The PCI-E Intel SSD is a barnstormer too. In sequential tests, its read and write speeds of 2,053MB/sec and 1,007MB/sec are excellent.

Amazingly, the machine doesn't get too hot either. The CPU and GPU delta Ts of 53°C and 60°C respectively are higher than those of the aforementioned Box PC, but that isn't surprising given the CPU overclock, and neither are cause for concern. Noise, though, is worse from the CyberPower: its low idle fan noise ramps up to a more noticeable level during games, with an obvious rumble that modulates up and down. It's no worse than most gaming PCs, but it's definitely louder than the Box system.

Conclusion

CyberPower's machine costs the same amount of money as the Box Cube Predator and it shares its main components: an overclocked Core i7-6700K processor and GTX 980 Ti GPU. However, the CyberPower is faster in applications thanks to its huge overclock, and it also has a



faster primary storage system and the ability to play Crysis 3 at top settings at 4K. The CyberPower also looks fantastic. Its only downsides are the variable noise levels when running at full pelt, and the lack of upgrade room, but those are the compromises you make when buying a fast, fully featured machine – if quiet operation is your priority, the Box system will suit your needs better. However, with its amazing speed, great looks and cracking feature set, the CyberPower is a fantastic high-end gaming system.

MIKE JENNINGS

CPC REALBENCH 2015 GIMP IMAGE EDITING



HANDBRAKE H.264 VIDEO ENCODING



LUXMARK OPENCL



HEAVY MULTITASKING



SYSTEM SCORE



INTEL REFERENCE: 130.89%

SPEED
23/25

DESIGN
23/25

HARDWARE
22/25

VALUE
20/25

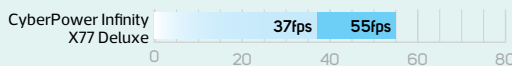
OVERALL SCORE
88%

BATTLEFIELD 4

2,560 x 1,440, Ultra Detail, 4x AA



3,840 x 2,160, Ultra Detail, 4x AA



SHADOW OF MORDOR

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



3,840 x 2,160, Very High Detail, FXAA

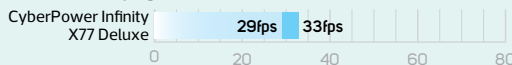


CRYSIS 3

2,560 x 1,440, Very High Detail, 0x AA



3,840 x 2,160, Very High Detail, 0x AA



Minimum Average

VERDICT

An amazing overclock and impressive 4K gaming performance, all packed into a striking case.