

GAMING PC

CyberPower Infinity X55 Pro / £999 inc VAT

SUPPLIER www.cyberpowersystem.co.uk



The Infinity X55 Pro might be a sub-£1,000 system, but it makes a first impression we expect from far pricier machines. That's because CyberPower has deployed Corsair's vast Carbide 600C case, and has filled the black interior with bright white lights.

The Carbide 600C isn't just striking because of its size. The motherboard also sits upside down, on the opposite side of the chassis from usual. The CPU is at the bottom of the case, with the GPU above it, and a shroud at the very top hides the PSU, its cables and most of the storage. Corsair says the odd layout is designed to improve airflow thanks to a clearer route to the main components. And, despite the unconventional design, it's a popular chassis – PC Specialist chose the same case for its Vanquish Redline (see Issue 153, p60), which cost £979.

Corsair's design and CyberPower's neat building makes for a tidy rig. The main power cables emerge discreetly from rubber-lined routing holes, and the smaller cables at the bottom of the board are barely visible. It isn't neat around the back, with cables roughly bunched together, but it's serviceable and you won't see this area in everyday use.

The tidy build and the sheer size of the Carbide 600C means it's easy to work inside the CyberPower too. There's ample room around the motherboard slots, and the Corsair H55 cooler doesn't intrude on the two empty memory slots. There are two empty SSD bays around the back as well, plus one free hard disk bay. The case is good-looking but, as

with the Carbide 400C (see p45), build quality could be better in a couple of places. The metal frame beneath the plastic is rock-solid, but the interior shroud and some of the drives bays are all a little flimsy.

Inside, there's a Core i5-6600K, which has four cores but no Hyper-Threading and a smaller cache than Core i7 chips. It's the same CPU used in the aforementioned PC Specialist rig, and both machines share an overclock from 3.5GHz to 4.6GHz. There's little to choose between the systems in terms of storage either. CyberPower's machine has a 240GB Corsair Neutron XT SSD and a 1TB hard disk, whereas the PC Specialist had a 240GB Kingston HyperX Savage boot drive.

The Infinity diverges from its rival elsewhere though. It has 8GB of 2400MHz memory, while the Vanquish Redline had 16GB of 2133MHz RAM. More importantly, the two machines have different GPUs. The Infinity sports an overclocked XFX Radeon R9 390 – a significant step up from the XFX R9 380X in the PC Specialist machine, which should result in playable frame rates at 2,560 x 1,440. The R9 390 has a reputation for hot running, though, so it will be interesting to see how the Carbide

600C's airflow helps in this respect. The other key area where the two machines differ is CPU cooling – the CyberPower has a single-fan 120mm Corsair H55 cooler, compared with the two-fan, 240mm Corsair H100i cooler in the PC Specialist, although the latter is arguably overkill for a Core i5-6600K chip.

Meanwhile, the MSI motherboard is a no-nonsense slab of black PCB with a good basic feature set, including support for multi-GPU setups, an M.2 socket, beefed-up audio circuits and a trio of diagnostic LEDs. Those latter two features lift it above the Asus board installed in the PC Specialist, but there's nothing to choose between the two at the rear: both have pairs of USB 3 and USB 2 ports, a single USB 3.1 Type-C connector, and six audio jacks and standard Gigabit Ethernet.

Finally, CyberPower's standard warranty offers two years of the all important parts and labour coverage, with a further year of labour only cover.

There's only a month of collect and return service though – afterwards, it reverts to a return to base deal. It's still better the PC Specialist machine's warranty, however, which only had a single year of parts coverage.

Performance

The CyberPower's overclocked Core i5 processor delivered solid benchmark results, although the PC Specialist was a little quicker in our RealBench 2015 suite, with its final result of 118,269 being about 3,000 points behind its rival. The CyberPower is slower, then, but there's not much in it – and no games or applications will noticeably struggle as a result. More significantly, the CyberPower's came back strongly in

/SPECIFICATIONS

- CPU** 3.5GHz Intel Core i5-6600K overclocked to 4.6GHz
- Motherboard** MSI Z170A SLI
- Memory** 8GB 2400MHz Corsair Vengeance LPX DDR4
- Graphics** XFX AMD Radeon R9 390
- Storage** 240GB Corsair Neutron XT SSD, 1TB hard disk
- Case** Corsair Carbide 600C
- Cooling** CPU: Corsair Hydro H55 with 1x 120mm fan; GPU: 2 x 90mm fans; front: 2 x 140mm fans
- PSU** Corsair VS650 650W
- Ports** Front: 2 x USB 3, 2 x USB 2, 2 x audio; rear: 2 x USB 3, 2 x USB 2, 2 x PS/2, 1 x USB 3.1 Type-C, 1 x Gigabit Ethernet, 6 x audio
- Operating system** Microsoft Windows 10 Home 64-bit
- Warranty** Two years parts and labour, plus one year labour only. One month collect and return, then return to base

the games benchmarks, where its overclocked R9 390 overpowered the tweaked R9 380X in the PC Specialist rig.

Not surprisingly, the Infinity had no problems with 1080p gaming but, unlike the PC Specialist, it also managed playable frame rates in all our test games at 2,560 x 1,440, never dropping below 30fps, even in tough tests such as Crysis 3 and Fallout 4.

The two machines converged again in storage benchmarks though. The Corsair Neutron SSD's sequential read speed of 526MB/sec is barely ahead of the PC Specialist's Kingston drive, and the Neutron's 429MB/sec write pace is a little behind. They're all solid scores for SATA drives, but that M.2 slot could deliver a much quicker pace if it's used in the future.

There wasn't much to choose between the systems in thermal and noise tests either. The CyberPower's CPU and GPU delta Ts of 47°C and 52°C are both a little higher than the PC Specialist, but the latter is no surprise given the GPU used, and neither is cause for concern. The Infinity kept quiet throughout our tests too, with barely any additional noise during stress tests. As such, the Carbide 600C's lowest fan speed can be used without any negative repercussions.

Conclusion

The CyberPower's mid-range specification is better balanced than its rival from PC Specialist. It might not have as much memory, or the large CPU cooler, but those differences have much less of an impact than the tweaked Radeon R9 390 in the Infinity, which is noticeably quicker than the R9 380X in the Vanquish Redline, enabling



- 1 The Carbide 600C positions the motherboard upside down, with the PSU at the top
- 2 The XFX Radeon R9 390 graphics card makes gaming at 2,560 x 1,440 possible
- 3 The overclocked CPU is kept in check by a Corsair H55 all-in-one liquid cooler

gaming at 2,560 x 1,440, and both systems have capable Core i5 processors.

The large Carbide 600C case is perhaps overkill for the CyberPower's mid-range hardware, but it also means it's kept cool without making too much noise. If you're looking for a well-built PC for gaming at 1080p or 2,560 x 1,440, the Infinity X55 Pro gives you a good system for a fair price.

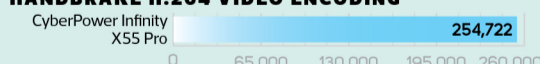
MIKE JENNINGS

CPC REALBENCH 2015

GIMP IMAGE EDITING



HANDBRAKE H.264 VIDEO ENCODING



LUXMARK OPENCL



HEAVY MULTITASKING



SYSTEM SCORE



INTEL REFERENCE: 103.33%

SPEED
20/25

DESIGN
21/25

HARDWARE
21/25

VALUE
21/25

OVERALL SCORE
83%

FALLOUT 4

1,920 x 1,080, Ultra Detail, TAA

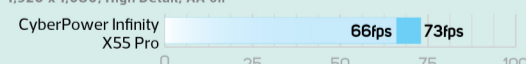


2,560 x 1,440, Ultra Detail, TAA



WITCHER 3

1,920 x 1,080, High Detail, AA on

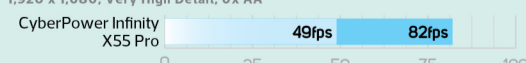


2,560 x 1,440, High Detail, AA on

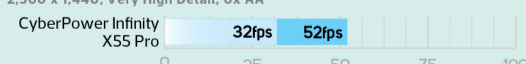


CRYSIS 3

1,920 x 1,080, Very High Detail, 0x AA



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



Minimum Average

VERDICT

A well-built and well-balanced system that offers 2,560 x 1,440 gaming for under a grand.