A Principled Technologies report: Hands-on testing. Real-world results.



Dell OptiPlex 7070 Micro Desktop: Save time and get better performance on office tasks

We compared system performance on a Dell OptiPlex 7070 Micro Desktop to that on an HP EliteDesk 705 G4 Mini PC and a Lenovo ThinkCentre M75s SFF

The Dell OptiPlex[™] 7070 Micro Desktop is an ultracompact business desktop with versatile mounting options that claims "Mighty Performance. Miniature Design."¹ It's easy to see from the specs that the Intel[®] Core[™] i5-9600T vPro[®] processor-based PC is tiny, but how does its performance stand up to other compact business desktops on the market?

To find out, we measured Dell OptiPlex 7070 Micro Desktop responsiveness across a wide range of collaboration and media creation tasks. Next, we compared these hands-on test results to those from an HP EliteDesk 705 G4 Mini PC and a Lenovo® ThinkCentre® M75s SFF—both powered by AMD Ryzen[™] 5 PRO 3400G processors. To gauge productivity, we also compared the business-class desktops' scores in two benchmarks that reflect real business worker usage and found that the Dell OptiPlex 7070 Micro Desktop delivered higher overall scores than its competitors.

Continue reading to learn about the desktop configurations we tested and the real-world results that matter to you.

Productivity

 Realize up to 15% better performance on office tasks based on SYSmark[®] 2018 and WebXPRT 3 overall scores

Collaboration

- Start collaborating on a presentation in up to 9% less time
- Start updating a Microsoft Excel spreadsheet in up to 21% less time
- Crunch numbers in Microsoft Excel in up to 35% less time
- Start adding info to Microsoft OneNote in up to 18% less time

Media creation

- Import and save RAW images in up to 14% less time
- Render 4K video in up to 15% less time
- Start working in Adobe[®] Photoshop[®] Lightroom[®] Classic in up to 18% less time

Testing overview

The desktops we tested included 8 GB of RAM, 256GB SSDs, and business-class processors:

- Dell OptiPlex 7070 Micro Desktop, powered by an Intel Core i5-9600T vPro processor
- HP EliteDesk 705 G4 Mini PC, powered by an AMD Ryzen 5 PRO 3400G processor
- Lenovo ThinkCentre M75s SFF, powered by an AMD Ryzen 5 PRO 3400G processor

We hand-timed how long it took each desktop to perform common office, collaboration, and content creation tasks—executing each task three times and using the median of the three runs in our comparisons. We also ran the WebXPRT 3 and SYSmark 2018 benchmarks—both use actual applications in real-world workloads that reflect business worker usage patterns—for overall score comparison.^{2,3}

Below are our productivity, collaboration, and media creation testing results. For a deeper dive into the individual results as well as our testing parameters and procedures, see the science behind this report.





The Dell OptiPlex 7070 Micro Desktop, equipped with an Intel Core i5 vPro processor, came out on top in both benchmark overall score comparisons, scoring better in SYSmark 2018's productivity and creativity categories and WebXPRT 3's photo enhancement, stock option pricing, and online homework scenarios. You can find individual category and scenario scores in the science behind the report.

Realize up to 15% better performance based on SYSmark 2018 overall scores



Figure 1: SYSmark 2018 benchmark overall scores. Higher is better. Source: Principled Technologies

Realize up to 15% better performance based on WebXPRT 3 overall scores

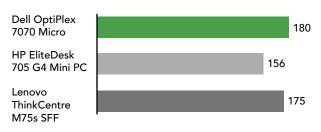
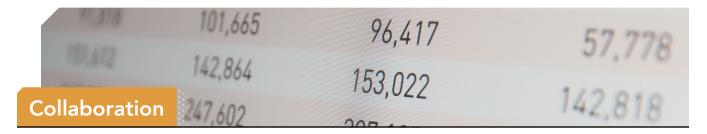


Figure 2: WebXPRT 3 benchmark overall scores. Higher is better. Source: Principled Technologies



The Dell OptiPlex 7070 Micro led the pack in four collaborative tasks. Faster response times here enable employees to make the most of their time.

Start collaborating on a presentation

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in up to 9% less time
Save up to 16.9 seconds
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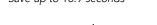




Figure 3: Opening a shared PowerPoint presentation in Microsoft Teams. Time (sec). Lower is better. Source: Principled Technologies

Start updating a Microsoft Excel spreadsheet in up to 21% less time

Save up to 5 seconds

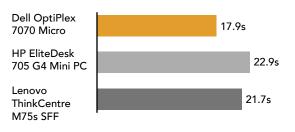


Figure 4: Opening a 93MB Excel spreadsheet. Time (sec). Lower is better. Source: Principled Technologies

Crunch numbers in Microsoft Excel in up to 35% less time

Save up to 1.3 seconds

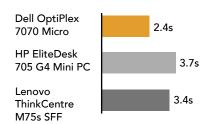


Figure 5: Performing a large Excel calculation. Time (sec). Lower is better. Source: Principled Technologies

Start adding info to Microsoft

OneNote in up to 18% less time

Save up to 4.4 seconds

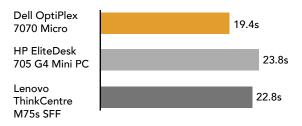


Figure 6: Inserting a 46MB Excel spreadsheet into Microsoft OneNote. Time (sec). Lower is better. Source: Principled Technologies



The Dell OptiPlex 7070 Micro completed three media creation tasks faster than either competitor. Faster response times here mean employees can crank out content with less distracting downtime.

Import and save RAW images in up to 14% less time

Save up to 31.5 seconds

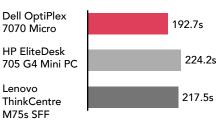


Figure 7: Importing and saving 50 RAW images to JPEG. Time (sec). Lower is better. Source: Principled Technologies

Start working in Adobe Photoshop Lightroom Classic in up to 18% less time

Save up to 3.4 seconds

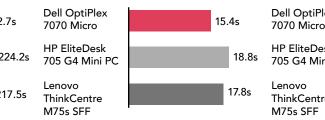


Figure 8: Opening Adobe Photoshop Lightroom Classic. Time (sec). Lower is better. Source: Principled Technologies Render 4K video in up to 15% less time Save up to 31.6 seconds

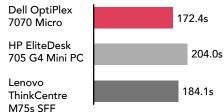


Figure 9: Rendering a 4K RED video file to H.264. Time (sec). Lower is better. Source: Principled Technologies





Conclusion

After hands-on testing, we found that the Dell OptiPlex 7070 Micro Desktop, equipped with an Intel Core i5-9600T vPro processor, delivered faster response times in the collaboration and media creation tasks we tested than either an HP EliteDesk 705 G4 Mini PC or a Lenovo ThinkCentre M75s SFF—both powered by AMD Ryzen 5 PRO 3400G processors. The Dell OptiPlex 7070 Micro also scored better overall in both the SYSmark 2018 and WebXPRT 3 benchmark comparisons. These Dell OptiPlex 7070 Micro wins could help companies deliver business productivity, empower team efforts, and get projects out the door fast.

3 BAPCo, "SYSmark 2018 overview page," accessed April 30, 2020, https://bapco.com/products/sysmark-2018/.

Read the science behind this report at http://facts.pt/tjonuxz





Principled Technologies is a registered trademark of Principled Technologies, Inc. All other product names are the trademarks of their respective owners. For additional information, review the science behind this report.

This project was commissioned by Dell Technologies.

¹ Dell Technologies, "OptiPlex 7070 Micro Desktop product page," accessed April 30, 2020, https://www.dell.com/en-us/work/shop/desktops-all-in-one-pcs/optiplex-7070-micro-desktop/spd/optiplex-7070-micro.

² Principled Technologies, "WebXPRT 3 overview page," accessed April 30, 2020, http://principledtechnologies.com/benchmarkxprt/webxprt/.