About My New Laptop

Introducing: HP OMEN 15-dc0051nr 15.6" Gaming Laptop Computer
The Reason for Purchasing

Performance

Price/Value

HP OMEN 15-dc0051nr 15.6" Gaming Laptop Computer - Black; Intel Core i7-8750H Processor 2.2GHz; NVIDIA GeForce GTX 1060 Graphics 6GB GDDR5; 16GB RAM; 1TB HDD+256GB SSD

SKU: 782409

10+ IN STOCK

$1,269.99 SAVE $270.00

$999.99

From Microcenter Website
Overview of Specs

Overview

SKU: 782409
Mfr Part #: 3UK57UA#ABA
UPC: 192545148344

4.9 / 5
6 out of 6 (100%) reviewers recommend this product.
Read all 7 reviews  Write a review

• Intel Core i7-8750H Processor 2.2GHz
• NVIDIA GeForce GTX 1060 Graphics 6GB GDDR5
• 16GB RAM
• 1TB HDD+256GB SSD
• Microsoft Windows 10 Home
• Multi-Format Digital Media Card Reader
• 10/100/1000 Network
• 2x2 Intel Wireless-AC 9560
• Bluetooth 5.0 Combo
• 15.6" Full HD IPS Anti-Glare Micro-Edge WLED-backlit Display

Power that goes the distance. Play at your best anywhere without sacrificing performance. The OMEN 15-dc-0051nr laptop computer keep you moving and improving with desktop-class graphics, performance, immersion, and upgradability.

From Microcenter Website
More Spec Details:

HP Omen 15

Specs per Microcenter website
Physical Comparison

Old: HP HDX 16t, 2009 Vintage
Size: 14.9” x 10.0” x 1.7”
Weight: 6.8 lbs
Key size: 0.72” x 0.72”
Shiny display

New: HP Omen 15, 2018
Size: 14.17” x 10.35” x 1.02”
Weight: 5.56 lbs
Key size: 0.61” x 0.61”
Matte display
Connections:

Back

Left Side

Right Side
Keyboard
Back Cover Removed

- Memory 16GB
- M.2 SSD 256 GB
- HDD 1 TB
- Battery
- Cooling Fan
Performance Tests

- 3DMark11 Test
  - Demo
- PassMark Test 9.0
  - Demo
Comparison of My PC’s
HP Omen 15: 2018 Vintage
HP HDX 16t: 2009 Vintage

PASSMARK RATING
Your System vs the world

Your PassMark Rating score: 1086
Percentile: 20%

World Average: 2518
World Minimum: 0
World Maximum: 10435

PassMark Rating
CPU Mark: 2117 (17th Percentile)
3D Graphics Mark: 381 (23rd Percentile)
Disk Mark: 10942 (20th Percentile)
Memory Mark: 886 (20th Percentile)

File Edit View Tests Advanced Baseline Help
HP Micro Tower: Pentium, 2011 Vintage

PASSMARK RATING
Your System vs the world

PassMark Rating
CPU Mark
3D Graphics Mark
Disk Mark
2D Graphics Mark
Memory Mark

PASSMARK
922
16th Percentile

CPU MARK
2514
18th Percentile

2D MARK
473
35th Percentile

3D MARK
168
17th Percentile

MEMORY MARK
1443
49th Percentile

Your PassMark Rating score
922
Percentile
16%

World Average
2518
World Minimum
0
World Maximum
10435
Desktop 4770K: 4\textsuperscript{th} Gen, 2013 Vintage
## PassMark Test 9.0 Comparison

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<tr>
<th>Computer</th>
<th>HP HDX 16t</th>
<th>HP Microtower</th>
<th>4770 K Desktop</th>
<th>HP Omen 15</th>
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3DMark11 Test for HP Omen & 4770K

HP Omen 15 with Nvidia 1060 GPU

4770 K with Nvidia GTX 760 GPU
Computing Pi Test: 3.14159........................

Using PiFast: Calculate Pi to 1 million and 10 million digits

PiFast Website
Demo calculating Pi

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How these results compare to early computers?
Now going to talk/demo about more features of the HP Omen laptop combined with Windows 10:

- Driving 2K and 4K Displays simultaneously
- Omen Command Center
- Windows Mixed Reality Portal
- Windows Mixed Reality Viewer
- Touch-pad multiple finger functions
- Keep plugged in or NOT
HP Omen 15 2K & 4K Monitor

Asus MG28UQ
27” 4K Monitor
Connected via Displayport
3840 x 2160

Omen 15.6”
2K Display
1920 x 1080
Omen 15 Display Res: 1920 x 1080
4K Monitor Res: 3840 x 2160
My Experience with Virtual Reality (VR)
My experience with Virtual Reality (VR)
Open Oculus Rift Kit Package
Oculus Rift Detail

Courtesy: Oculus Website
My Oculus Rigt-Omen Setup
Oculus Rift Kit & PC Requirements

- As shown Cost $399 (Microcenter, Bestbuy, Amazon)
- Requires 3 ports: 1 HDMI, 3 USB 3’s
- GPU: NVIDIA GTX 1060 / AMD Radeon RX 480 or greater
- CPU: Intel i5-4590 / AMD Ryzen 5 1500X or greater
- RAM Memory: 8GB +
- OS: Windows 10
- The Oculus Rift does not work with Windows Mixed Reality
My Experience So Far….

- Setup took about an hour, following tutorial steps
- One defines a 5 x 7 ft safety zone as part of set up.
- Resolution is 2160x1200 (1080x1200 per eyeball but Image is pixelated/grainy. (current state-of the art)
- Power supply has to be plugged in to work headset
- The Omen runs “hot”, fans at full speed, when doing VR
- 360 degree viewing with the 2 sensors
- Headset includes earphones; audio is very good
- In VR, hand controllers appear as white hands; they move as a natural extension of your arms
There are 27 free programs on Oculus website and 100s of games.

Programs I played with:
- Google Earth VR (5GB download)
  - Earth is a 3D globe
  - Use controllers to zoom in/out, pick a place on the globe
  - Real easy to fly over terrain e.g. Alps, Cities, etc
  - Visited Rome Colosseum with 360 3D street views
  - Street views are static
- Smithsonian Journeys: Venice (19.1GB download)
  - You are on piazza’s and canals in 360 with a University of Toronto historian providing commentary.
  - There is motion in 360. People, are live; gondolas move!!!
My Experience continued:

- I sit in a my rotating office chair while viewing.
- I have to wear my glasses to get clearest images. Requires me to make headset adjustments.
- The controllers are comfortable and easy to use.
- No feelings of “Vertigo” when suspended in air next to top of Eiffel Tower. Or on top of Matterhorn.
- No nausea when moving head or flying over Alps.
- Do feel slight nausea after maybe 30 minute session.
- Will work on demoing it at my next presentation in the fall!