



# OMEN by HP Laptop 16-c0001nu (4J3B4EA)

## Overview

### Play yourself up

Go beyond with the OMEN by HP 16.1 inch Gaming Laptop. Powered by an AMD processor[1] and mighty graphics, play at your best from anywhere. Expand your gaming world with sharper and smoother visual experiences courtesy of a high resolution and a fast refresh rate display. Stay cool under pressure with OMEN Tempest Cooling Technology[2] that prevents overheating even when your game heats up.



### Stay cool under pressure

With 3-sided venting and 5-way airflow, OMEN Tempest Cooling Technology[2] prevents overheating even when your game heats up.



### OMEN Gaming Hub

From software enhancements to hardware control, and live services, OMEN Gaming Hub elevates play in an easy and simple way.



### Visually stunning

Play at your best with tear-free gameplay at a fast refresh rate and eliminate screen flickering with HP Flicker-free.[3]

## Features



### AMD Ryzen™ 5000 H-Series Mobile Processors

Now you can enjoy elite gaming performance on a thin and light notebook with amazing battery life, thanks to the new AMD Ryzen™ 5000 H-Series Mobile Processors. Never compromise on your gaming laptop again.<sup>[1]</sup>



### Effortlessly connected

Enjoy a smoother wireless experience with Wi-Fi 6 (2x2) and Bluetooth® 5.0 combo, all your connections are solid and up to 3x faster file transfer speeds than Wi-Fi 5.<sup>[5]</sup>



### HP Wide Vision HD Camera

The 88-degree, wide-angle field of view lets you video chat with the entire family or group of friends in crystal clear detail.<sup>[6]</sup>



### 144 Hz FHD anti-glare display

Reduce frustrating lag and image ghosting with a display that combines a 144 Hz refresh rate and a 1080p resolution for smooth, crisp gameplay.<sup>[4]</sup>



### MU-MIMO supported

If you have several MU-MIMO devices in your home, MU-MIMO support works in combination with a MU-MIMO router to maximize network traffic for a smoother online experience.



### SuperSpeed USB Type-A 5Gbps signaling data rate

Plug in your external storage with this SuperSpeed USB Type-A port, featuring 5Gbps signaling data rate.<sup>[7]</sup>

---

[1] Multi-core is designed to improve performance of certain software products. Not all customers or software applications will necessarily benefit from use of this technology. Performance and clock frequency will vary depending on application workload and your hardware and software configurations. AMD's numbering is not a measurement of clock speed.

[2] Thermal solution varies by configuration.

[3] The Flicker-free capability eliminates screen flickering through integrating DC-dimming LED backlights.

[4] All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.

[5] Wireless access point and internet service required and sold separately. Availability of public wireless access points limited. Wi-Fi 6 (802.11ax) is backwards compatible with prior 802.11 specs. The specifications for Wi-Fi 6 are draft and are not final. If the final specifications differ from the draft specifications, it may affect the ability of the notebook to communicate with other Wi-Fi 6 devices. Only available in countries where 802.11ax is supported. Wi-Fi 6 (802.11ax) is not supported in Ukraine, Russia, and Indonesia where the Wi-Fi 6 (802.11ax) will be disabled and downgraded to 802.11ac by the Intel's DRS solution.

[6] Features may require software or other 3rd party applications to provide the described functionality.

[7] Actual throughput may vary.

## Specifications

<b>Operating system</b>	FreeDOS
<b>Product color</b>	Mica silver cover and base, mica silver aluminum keyboard frame
<b>Processor family</b>	AMD Ryzen™ 7 processor
<b>Processor</b>	AMD Ryzen™ 7 5800H (up to 4.4 GHz max boost clock, 16 MB L3 cache, 8 cores, 16 threads) <sup>[6,7]</sup>
<b>Chipset</b>	AMD Integrated SoC
<b>Memory</b>	16 GB DDR4-3200 MHz RAM (2 x 8 GB)
<b>Internal Storage</b>	512 GB PCIe® NVMe™ TLC M.2 SSD
<b>Product design</b>	Paint finish cover and base, sandblasted keyboard frame
<b>Optical drive</b>	Optical drive not included
<b>Graphics</b>	Integrated
<b>Graphics (integrated)</b>	AMD Radeon™ Graphics
<b>Display</b>	40.9 cm (16.1") diagonal, FHD (1920 x 1080), 144 Hz, IPS, micro-edge, anti-glare, 250 nits, 45% NTSC
<b>Display</b>	16.1" diagonal, FHD (1920 x 1080), 144 Hz, IPS, micro-edge, anti-glare, 250 nits, 45% NTSC
<b>Display size (diagonal)</b>	40.9 cm (16.1")
<b>Display size (diagonal)</b>	16.1"
<b>Audio</b>	Audio by Bang & Olufsen; DTS:X® Ultra; Dual speakers; HP Audio Boost
<b>Minimum dimensions (W x D x H)</b>	36.92 x 24.8 x 2.3 cm <i>(Dimensions vary by configuration)</i>
<b>Minimum dimensions (W x D x H)</b>	14.53 x 9.65 x 0.91 in
<b>Weight</b>	Starting at 2.3 kg <i>(Weight varies by configuration)</i>
<b>Weight</b>	Starting at 5.09 lb
<b>Keyboard</b>	Full-size, 4-zone RGB backlit, mica silver keyboard and 26-Key Rollover Anti-Ghosting Key technology
<b>Pointing device</b>	HP Imagepad with multi-touch gesture support; Precision Touchpad Support
<b>Input devices</b>	IR Thermal sensor
<b>Webcam</b>	HP Wide Vision 720p HD camera with integrated dual array digital microphones
<b>Ports</b>	1 SuperSpeed USB Type-C® 10Gbps signaling rate (DisplayPort™ 1.4, HP Sleep and Charge); 1 SuperSpeed USB Type-A 5Gbps signaling rate (HP Sleep and Charge); 2 SuperSpeed USB Type-A 5Gbps signaling rate; 1 HDMI 2.1; 1 RJ-45; 1 AC smart pin; 1 headphone/microphone combo <sup>[19]</sup>
<b>Expansion slots</b>	1 multi-format SD media card reader

<b>Package dimensions (W x D x H)</b>	6.9 x 55.2 x 34.5 cm
<b>Package weight</b>	3.93 kg
<b>Network interface</b>	Integrated 10/100/1000 GbE LAN
<b>Wireless</b>	Intel® Wi-Fi 6E AX210 (2x2) and Bluetooth® 5.2 combo (Supporting Gigabit data rate)
<b>Power supply type</b>	230 W Smart AC power adapter
<b>Battery type</b>	6-cell, 83 Wh Li-ion polymer
<b>Battery life</b>	Up to 9 hours <sup>[3]</sup>
<b>Battery recharge time</b>	Supports battery fast charge: approximately 50% in 45 minutes <sup>[5]</sup>
<b>Battery weight</b>	0.69 lb
<b>Battery weight</b>	315 g
<b>Sustainable impact specifications</b>	Ocean-bound plastic in speaker enclosure; Contains recycled metal; Keyboard keycaps made with post-consumer recycled plastic

## Additional specifications

<b>Battery capacity</b>	83
<b>Battery capacity uom</b>	Wh
<b>Battery cells number</b>	6
<b>Battery life</b>	Long Life
<b>Battery life video playback</b>	Up to 9 hours
<b>Battery type</b>	Li-ion polymer
<b>Bluetooth version</b>	Bluetooth® 5.2
<b>Brightness</b>	250 nits
<b>Camera brand</b>	HP Wide Vision
<b>Camera microphone</b>	integrated dual array digital microphones
<b>Camera resolution (vertical)</b>	720p
<b>Camera resolution standard</b>	HD
<b>Color</b>	Mica silver
<b>Color gamut</b>	45% NTSC
<b>Display</b>	40.9 cm (16.1") diagonal FHD display
<b>Display</b>	16.1" diagonal FHD display
<b>Display bezel</b>	micro-edge
<b>Display brightness</b>	250
<b>Display brightness uom</b>	nits
<b>Display panel technology</b>	IPS
<b>Display refresh rate</b>	144
<b>Display refresh rate uom</b>	Hz
<b>Display resolution (pixels)</b>	1920 x 1080
<b>Display resolution standard</b>	FHD
<b>Display size (diagonal) uom</b>	"
<b>Display size (diagonal, imperial)</b>	16.1
<b>Display size (diagonal, metric)</b>	40.9
<b>Display size (diagonal, metric) uom</b>	cm
<b>Display surface treatment</b>	anti-glare
<b>ECC memory</b>	non-ECC
<b>Fingerprint reader</b>	Fingerprint reader not available
<b>Graphics</b>	Discrete
<b>Graphics (discrete)</b>	AMD Radeon™ RX 6600M Graphics (8 GB GDDR6 dedicated)

<b>Graphics card brand</b>	AMD
<b>Graphics card family</b>	Radeon™
<b>Graphics card memory size</b>	8
<b>Graphics card memory size uom</b>	GB
<b>Graphics card memory type</b>	GDDR6
<b>Keyboard backlight</b>	RGB backlit
<b>Keyboard backlit zone</b>	4-zone
<b>Keyboard color</b>	mica silver
<b>Keyboard size</b>	Full-size
<b>Keyboard technology</b>	26-Key Rollover Anti-Ghosting Key technology
<b>MDA key selling point</b>	Windows 10 Home or other operating systems available
<b>Memory and storage</b>	16 GB memory; 512 GB SSD storage
<b>Memory layout (slots &amp; size)</b>	2 x 8 GB
<b>Memory module type</b>	DIMM
<b>Memory size</b>	16
<b>Memory size uom</b>	GB
<b>Memory speed</b>	3200
<b>Memory speed uom</b>	MHz
<b>Memory type</b>	DDR4
<b>Model Number</b>	RX 6600M
<b>Number of User-accessible Memory Slots</b>	2
<b>Number of memory slots</b>	2
<b>Package depth, imperial (most common size)</b>	21.73
<b>Package depth, metric (most common size)</b>	55.2
<b>Package dimensions (W x D x H)</b>	2.71 x 21.73 x 13.58 in
<b>Package height, imperial (most common size)</b>	13.58
<b>Package height, metric (most common size)</b>	34.5
<b>Package weight</b>	8.68 lb
<b>Package width, imperial (most common size)</b>	2.71
<b>Package width, metric (most common size)</b>	6.9
<b>Packaging unit of measure (imperial)</b>	in

<b>Packaging unit of measure (metric)</b>	cm
<b>Processor Brand</b>	AMD
<b>Processor cache</b>	16 MB L3
<b>Processor core</b>	8
<b>Processor family</b>	Ryzen™ 7
<b>Processor maximum frequency</b>	4.4
<b>Processor maximum frequency uom</b>	GHz
<b>Processor model</b>	5800H
<b>Processor threads</b>	16
<b>Product brand name</b>	HP
<b>Product long name specifications</b>	OMEN by HP Laptop 16-c0001nu, 16.1", FreeDOS, AMD Ryzen™ 7, 16GB RAM, 512GB SSD, AMD Radeon™ RX 6600M, FHD, Mica silver
<b>Storage capacity 01</b>	512
<b>Storage capacity uom 01</b>	GB
<b>Storage form factor 01</b>	M.2
<b>Storage interface 01</b>	PCIe®
<b>Storage interface protocol 01</b>	NVMe™
<b>Storage memory technology 01</b>	TLC
<b>Storage type</b>	SSD
<b>Storage type 01</b>	SSD
<b>Touchscreen</b>	No
<b>Wireless Model</b>	Wi-Fi 6E AX210
<b>Wireless antenna</b>	2x2
<b>Wireless standard</b>	Wi-Fi 6E
<b>Wireless supplier</b>	Intel®

[3] Windows 10 MobileMark 18 battery life will vary depending on various factors including product model, configuration, loaded applications, features, use, wireless functionality, and power management settings. The maximum capacity of the battery will naturally decrease with time and usage. See <https://bapco.com/products/mobilemark-2018/> for additional details.

[5] Recharges your battery up to 50% within 45 minutes when the system is off (using "shut down" command). Recommended for use with the HP adapter provided with the notebook, not recommended with a smaller capacity battery charger. After charging has reached 50% capacity, charging speed will return to normal speed. Charging time may vary +/-10% due to System tolerance. Available on select HP products. See <http://store.hp.com> for a full list of product features.

[6] Multi-core is designed to improve performance of certain software products. Not all customers or software applications will necessarily benefit from use of this technology. Performance and clock frequency will vary depending on application workload and your hardware and software configurations. AMD's numbering is not a measurement of clock speed.

*[7] Max Boost clock frequency performance varies depending on hardware, software and overall system configuration.*

*[19] For best results with HP Sleep and Charge, use a USB charging protocol standard cable or cable adapter with an external device.*

---



## Accessories

### Cases and Covers

★ : Recommended

#### Cases

OMEN Transceptor 17 Duffel Bag	7MT82AA ★
HP 17.3 Signature Slim Topload Case	TOE19AA
HP 17.3 Value Topload Case	TOE18AA
HP Prelude 17.3-inch Laptop Bag	34Y64AA

#### Covers

OMEN Transceptor 17 Sleeve	3J045AA ★
----------------------------	-----------

#### Backpacks

HP 17.3 in OMEN Gaming Backpack	K5Q03AA
HP Pavilion Gaming Backpack 300	6EU56AA
HP Pavilion Gaming Backpack 500	6EU58AA
OMEN by HP Gaming Backpack	4YJ80AA

### Keyboards/Mice and Input Devices

#### Mice

OMEN by HP Hard Mouse Pad 200	2VP01AA ★
OMEN by HP Outpost Mousepad	6CM14AA ★
OMEN by HP Photon Wireless Mouse	6CL96AA ★
OMEN by HP Mouse Pad 300	1MY15AA ★
OMEN by HP Reactor Mouse	2VP02AA ★
OMEN Vector Mouse	8BC53AA ★
OMEN by HP Mouse Pad 100	1MY14AA ★
HP 150 Wired Mouse	240J6AA
HP 150 Wireless Mouse	2S9L1AA
HP 220 Silent Wireless Mouse	391R4AA
HP 280 Silent Wireless Mouse	19U64AA
HP 930 Creator Wireless Mouse	1D0K9AA
HP Bluetooth Travel Mouse	6SP25AA
HP Bluetooth® Mouse 250	6CR73AA

HP Bluetooth® Mouse Z5000	2HW67AA	
HP Dual Mode Mouse	6CR71AA	
HP Dual Mode Mouse	6CR72AA	
HP ENVY Rechargeable Mouse 500	2LX92AA	
HP Elite Presenter Mouse	3YF38AA	
HP Pavilion Gaming Mouse 200	5JS07AA	
HP Pavilion Gaming Mouse 300	4PH30AA	
HP Pavilion Gaming Mouse 300	4PH31AA	
HP Spectre Rechargeable Mouse 700	3NZ70AA	
HP Spectre Rechargeable Mouse 700	3NZ71AA	
HP Spectre Rechargeable Mouse 700	4YH34AA	
HP Wired Mouse 100	6VY96AA	
HP Wired Mouse 1000	4QM14AA	
HP Wireless Mouse 200	2HU82AA	
HP Wireless Mouse 200	2HU83AA	
HP Wireless Mouse 200	2HU84AA	
HP Wireless Mouse 200	2HU85AA	
HP Wireless Mouse 200	2VY31AA	
HP Wireless Mouse 200	X6W31AA	
HP Wireless Mouse 220	258A1AA	
HP Wireless Mouse 220	3FV66AA	
HP Wireless Mouse 220	7KX10AA	
HP Wireless Mouse 220	7KX11AA	
HP Wireless Mouse 220	7KX12AA	
HP Wireless Mouse 220 with Pouch	6JA61AA	
HP Wireless Mouse 220 with Pouch	6JA62AA	
HP Wireless Mouse 250	3FV67AA	
HP Wireless Mouse X200	6VY95AA	
HP Wireless Mouse Z3700	4VY82AA	
HP Wireless Mouse Z3700	7UH87AA	
HP Wireless Mouse Z3700	7UH88AA	
HP Wireless Mouse Z4000	H5N61AA	
HP X1000 Mouse	H2C21AA	
HP X1500 Mouse	H4K66AA	obsolete
HP X220 Backlit Gaming Mouse	8DX48AA	
HP X3000 G2 Wireless Mouse	28Y30AA	

HP X3000 G2 Wireless Mouse	2C3M3AA	
HP X4500 Wireless (Black) Mouse	H2W16AA	obsolete
HP X500 Wired Mouse	E5C12AA	
HP X500 Wired Mouse	E5E76AA	
HP Z3700 Black Wireless Mouse	26V63AA	
HP Z3700 Black Wireless Mouse	V0L79AA	
HP Z3700 Blue Wireless Mouse	V0L81AA	
HP Z3700 Camo Wireless Mouse	171D7AA	
HP Z3700 Ceramic White Wireless Mouse	171D8AA	
HP Z3700 Forest Teal Wireless Mouse	171D9AA	
HP Z3700 Gold Wireless Mouse	X7Q43AA	
HP Z3700 Red Wireless Mouse	V0L82AA	
HP Z3700 Silver Wireless Mouse	X7Q44AA	
HP Z3700 White Wireless Mouse	V0L80AA	
HP Z5000 Bluetooth Mouse	E5C13AA	
HP Z5000 Dark Ash Silver Wireless Mouse	W2Q00AA	
OMEN Vector Essential Mouse	8BC52AA	
OMEN Vector Wireless Mouse	2B349AA	

## Keyboards

OMEN by HP Sequencer Keyboard	2VN99AA ★
OMEN by HP Encoder Keyboard	6YW76AA ★
HP Dual Mode Keyboard 1000	18J71AA
HP K2500 Wireless Keyboard	E5E78AA
HP Keyboard 100	2UN30AA
HP Pavilion Gaming Keyboard 550	9LY71AA
HP Pavilion Gaming Keyboard 800	5JS06AA
HP Pavilion Wired Keyboard 300	4CE96AA
HP Pavilion Wireless Keyboard 600	4CE98AA
HP Pavilion Wireless Keyboard 600	4CF02AA
OMEN Spacer Wireless TKL Keyboard	9BU31AA
OMEN by HP Encoder Keyboard	6YW75AA

## Keyboard and Mouse Kits

HP 150 Wired Mouse and Keyboard	240J7AA
HP 230 Wireless Mouse and Keyboard Combo	18H24AA

HP 330 Wireless Mouse and Keyboard Combination	2V9E6AA	
HP C2500 Desktop	J8F15AA	
HP C2710 Combo Keyboard	M7P30AA	obsolete
HP C6020 Wireless Desktop	P1F56AA	obsolete
HP Pavilion Keyboard and Mouse 200	9DF28AA	
HP Pavilion Wired Keyboard and Mouse 400	4CE97AA	
HP Pavilion Wireless Keyboard and Mouse 800	4CE99AA	
HP Pavilion Wireless Keyboard and Mouse 800	4CF00AA	
HP Wired Keyboard and Mouse 160	6HD76AA	
HP Wireless Keyboard and Mouse 250	6JU16AA	
HP Wireless Keyboard and Mouse 300	3ML04AA	

## Audio/Multimedia and Communication Devices

### Headsets

OMEN Blast Headset	1A858AA	★
HP Bluetooth Headset 400	2ZW81AA	
HP Bluetooth Headset 500	2J875AA	
HP Boom Mic Headset 150	2EM62AA	
HP Earbuds Black Headset 150	X7B04AA	
HP H2800 Black Headset	J8F10AA	
HP In-Ear Headphone 100	1KF54AA	
HP In-Ear Headset 150	2AP91AA	
HP Pavilion Gaming Headset 400	4BX31AA	
HP Pavilion Gaming Headset 600	4BX33AA	
HP Stereo Headset H2800	2AP94AA	
HP Stereo Headset H2800	2AP95AA	obsolete
HP X1000 Wireless Gaming Headset	7HC43AA	
OMEN by HP Headset 800	1KF76AA	
OMEN by HP Mindframe Prime Headset	6MF35AA	
OMEN by HP Mindframe Prime Headset	6MF36AA	

### Headphones

OMEN Dyad Earbuds	8JE67AA	★
HP Wireless Earbuds G2	169H9AA	

### Speakers

HP Black Bluetooth Speaker 350	2D802AA
HP Black Bluetooth Speaker 360	2D799AA
HP Blue Bluetooth Speaker 350	2D803AA
HP Blue Bluetooth Speaker 360	2D800AA
HP Gaming Speakers X1000	8PB07AA
HP Silver Bluetooth Speaker 350	2D804AA
HP Silver Bluetooth Speaker 360	2D801AA

## Networking Products

### Switches/Hubs/Routers/Converters/Repeaters

HP ENVY USB-C Hub	5LX63AA
-------------------	---------

## Graphics Cards

### Graphics Connectors/Adapters

HP HDMI to VGA Cable Adapter	X1B84AA
------------------------------	---------

## Batteries/Chargers/Adapters

### Power Adapters

HP Pavilion High Power Adapter 150W	2DR33AA
HP Pavilion USB-C to HDMI 2.0 Adapter	2PC54AA

## Docking and Port Replicators

### Docking Stations

HP Thunderbolt Dock 120W G2	2UK37AA	
HP Thunderbolt Dock 120W G2	2UK37ET	
HP Thunderbolt Dock 120W with HDMI Adapter	6HP48AA	
HP Travel USB-C Multi Port Hub	1C1Y5AA	
HP USB-C Dock	YOK80AA	obsolete
HP USB-C Dock G5	26D32AA	
HP USB-C Dock G5	5TW10AA	
HP USB-C Dock G5	5TW10ET	
HP USB-C Dock G5	5TW10UT	
HP USB-C Travel Hub G2	235N8AA	

# PC Drives and Storage

## PC DVD+RW Drives

HP USB External DVDRW Drive

F6V97AA

## Cables/Cable Kits/Cable Adapters

### Cable Adapters

HP USB Type-C to RJ45 Adapter

V8Y76AA

HP USB-C to HDMI 2.0

1WC36AA

HP USB-C to HDMI 2.0

1WC36UT

HP USB-C to RJ45 Adapter

V7W66AA

HP USB-C to RJ45 Adapter

V7W66UT

HP USB-C to USB-A Hub

Z6A00AA

HP USB-C to USB-A Hub

Z6A00UT

HP USB-C to USB-A Hub

Z8W90AA

obsolete

HP USB-C to VGA Adapter

N9K76AA

HP USB-C to VGA Adapter

N9K76UT

HP USB-C to VGA Display Adapter

P7Z54AA

## Disclaimer — Copyright

Intel, Core, Optane, Celeron, Pentium, Iris, XMM, and Thunderbolt are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries. AMD, Ryzen, Athlon, and Radeon are trademarks of Advanced Micro Devices, Inc. Bluetooth is a trademark owned by its proprietor and used by HP Inc. under license. NVIDIA and GeForce are trademarks and/or registered trademarks of NVIDIA Corporation in the U.S. and other countries. USB Type-C® and USB-C® are registered trademarks of USB Implementers Forum. DisplayPort™ and the DisplayPort™ logo are trademarks owned by the Video Electronics Standards Association (VESA®) in the United States and other countries. McAfee and McAfee LiveSafe are trademarks or registered trademarks of McAfee LLC in the United States and other countries. ENERGY STAR is a registered trademark of the U.S. Environmental Protection Agency. All other trademarks are the property of their respective owners.

© Copyright 2021 HP Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.