HP Pavilion Gaming Laptop – 16–a0747ng (19A50EA)

Overview

Big screen, small laptop

A 40.9 cm (16.1") display in a 39.6 cm (15.6") footprint, the Pavilion Gaming 16 Laptop PC is here to play. With a powerful Intel® processor and NVIDIA® graphics for dynamic gameplay and Audio by B&O for full immersion. Plus Wi-Fi 6[2], upgradeable storage and memory and the full range of I/O ports, you've got the ultimate on-the-go gaming experience at your fingertips.[1]

Powered for every move

The power to master any game. With a powerful Intel® processor and NVIDIA® graphics, this gaming laptop will tackle everything you throw at it. The enhanced thermals keep everything cool, so you can game harder, better, faster and longer.

Designed with the gamer in mind

Stay connected from anywhere thanks to fast wireless connectivity. The large PCIe SSD makes stashing files a snap. Plus there is a full range of I/O ports, so you've also got plenty of room for accessories.

Get lost in play

Make every level mesmerizing with a fast 40.9 cm (16.1") micro-edge display in a 39.6 cm (15.6") body. Along with enhanced Audio by B&O, you can see, do, hear and play more without carrying more.

Features

Windows 10

Do great things confidently with the familiar feel of Windows - only better.[3]

10th Generation Intel® Core™ processor

Experience power and responsive performance to boost your productivity. Enjoy immersive entertainment and game, stream and create content with accelerated performance.[4]

FHD IPS display

Enjoy crystal-clear images from any angle. With 178° wide-viewing angles and a vibrant 1920 x 1080 resolution, you'll always have a great view of your favorite content.[5]

Anti-glare panel

Enjoy the sun and your favorite content with this anti-glare panel. Non-reflective and low gloss means you'll get less glare while you're outside.

Highly accurate color

With the 72% NTSC color space, this HP display provides ideal color reproduction with minimal effort. Perfect for photos, videos—all your creative projects. [6]

Visibly brilliant detail

With 300 nits of brightness, view beautiful details, enhanced image quality, and distinct shades of color —even in bright lighting conditions.[6]

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[1] This device has been engineered for optimal performance. Upgrading PC may affect warranty coverage.

[2] Wi-Fi 6 (802.11ax) is not supported in Ukraine, Russia, and Indonesia where Wi-Fi settings will be optimized to local regulatory requirements (802.11ac).

[3] Not all features are available in all editions or versions of Windows. Systems may require upgraded and/or separately purchased hardware, drivers, software or BIOS update to take full advantage of Windows functionality. Windows 10 is automatically updated, which is always enabled. ISP fees may apply and additional requirements may apply over time for updates. See http://www.microsoft.com.

[4] 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. Intel's numbering, branding and/or naming is not a measurement of higher performance. Internet service required and not included. 4K content required to view full 4K images. Graphics output may be limited based on the maximum resolution of the display.

[5] Full high-definition (FHD) content is required to view FHD images.

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

Specifications

Operating system	Windows 10 Home 64
Product color	Shadow black, acid green chrome logo
Processor family	10th Generation Intel® Core™ i5 processor
Processor	Intel® Core™ i5-10300H (2.5 GHz base frequency, up to 4.5 GHz with Intel® Turbo Boost Technology, 8 MB L3 cache, 4 cores)[6,7]
Chipset	Intel® HM470
Memory	16 GB DDR4-2933 SDRAM (2 x 8 GB)
Internal Storage	512 GB PCIe® NVMe™ M.2 SSD
Product design	Paint finish
Optical drive	Optical drive not included
Display	40.9 cm (16.1") diagonal, FHD (1920 x 1080), 144 Hz, IPS, micro-edge, anti-glare, 300 nits, 72% NTSC
Display size (diagonal)	40.9 cm (16.1")
Audio features	Audio by B&O; Dual speakers; HP Audio Boost 1.0
Minimum dimensions (W x D x H)	37 x 26.25 x 2.35 cm *(Dimensions vary by configuration)*
Weight	Starting at 2.35 kg *(Weight varies by configuration)*
Keyboard	Full-size, acid green backlit, shadow black keyboard with numeric keypad
Pointing device	HP Imagepad with multi-touch gesture support; Precision Touchpad Support
Input devices	Accelerometer
Webcam	HP True Vision 720p HD camera with integrated dual array digital microphone
Ports	1 SuperSpeed USB Type-C® 5Gbps signaling rate (DisplayPort™ 1.4); 1 SuperSpeed USB Type-A 5Gbps signaling rate (HP Sleep and Charge); 1 SuperSpeed USB Type-A 5Gbps signaling rate; 1 HDMI 2.0; 1 RJ-45; 1 AC smart pin; 1 headphone/microphone combo[19]
Expansion slots	1 multi-format SD media card reader
Package dimensions (W x D x H)	6.9 x 55.2 x 34.5 cm
Package weight	3.07 kg
Network interface	Integrated 10/100/1000 GbE LAN
Wireless	Realtek RTL8822CE 802.11a/b/g/n/ac (2x2) Wi-Fi® and Bluetooth® 5 combo[14]
Power supply type	150 W Smart AC power adapter
Battery type	3-cell, 52.5 Wh Li-ion polymer
Battery life	Up to 5 hours and 45 minutes[3]

Battery recharge time	Supports battery fast charge: approximately 50% in 45 minutes[5]
Battery weight	210 g
Energy efficiency	ENERGY STAR® certified; EPEAT® Silver registered
Pre-installed software	Alexa; Netflix; ExpressVPN (30 day free trial); LastPass Premium (30 day free trial)[22]
Software included	McAfee LiveSafe™
Software – Productivity & finance	1 month trial for new Microsoft 365 customers[24]
Cloud service	Dropbox[1]
UPC number	195122190262
Warranty	2 year limited parts, labour, and pickup and return service
Limited warranty coverage and exceptions	You can expand the warranty coverage of your product to reach up to 3 years in total; for more information go to the "Options and accessories" web section on hp.com product pages.

Additional specifications

Additional information about HP	http://www.hp.com
Battery capacity	52.5
Battery capacity uom	Wh
Battery cells number	3
Battery life video playback	Up to 7 hours and 30 minutes
Battery type	Li-ion
Bluetooth version	Bluetooth® 5
Brightness	300 nits
Color gamut	72% NTSC
Datasheet photo 1	AHID/a22d218b77be477a4796a0a06abadbdf35a8ffc6
Datasheet photo 2	AHID/83ec5061bae5850f46ff59bb2461e38fa775c354
Datasheet photo 3	AHID/f80c3835fc8eb6f29aab5b94326f6081345e442d
Datasheet photo 4	AHID/71d72f4b12f0f4ace971a097a811a40c1739980a
Datasheet photo 5	Publication logos/pc-carepack-logo.jpg
Display bezel	micro-edge
Display brightness	300
Display brightness uom	nits
Display panel technology	IPS
Display refresh rate	144
Display refresh rate uom	Hz
Display resolution (pixels)	1920 x 1080
Display resolution standard	FHD
Display size (diagonal) uom	"
Display size (diagonal, imperial)	16.1
Display size (diagonal, metric)	40.9
Display size (diagonal, metric) uom	cm
Display surface treatment	anti-glare
ECC memory	No
Graphics	Discrete
Graphics (discrete)	NVIDIA® GeForce® GTX 1650 (4 GB GDDR6 dedicated)
Graphics card brand	NVIDIA®
Graphics card family	GeForce®
Graphics card memory size	4

Graphics card memory size uom	GB
Graphics card memory type	GDDR6
HP apps	OMEN Command Center; HP 3D DriveGuard; HP Audio Switch; HP CoolSense; HP JumpStart; HP Support Assistant
MDA key selling point	Windows 10 Home or other operating systems available
Memory and storage	16 GB memory; 512 GB SSD storage
Memory layout (slots & size)	2 x 8 GB
Memory module type	DIMM
Memory size	16
Memory size uom	GB
Memory speed	2933
Memory speed uom	MHz
Memory type	DDR4
Model Number	GTX 1650
Number of User-accessible Memory Slots	2
Number of memory slots	2
Package depth, imperial (extended size)	23.54
Package depth, imperial (most common size)	21.73
Package depth, metric (extended size)	59.8
Package depth, metric (most common size)	55.2
Package height, imperial (extended size)	13.58
Package height, imperial (most common size)	13.58
Package height, metric (extended size)	34.5
Package height, metric (most common size)	34.5
Package width, imperial (extended size)	2.71
Package width, imperial (most common size)	2.71
Package width, metric (extended size)	6.9
Package width, metric (most common size)	6.9

Packaging unit of measure (imperial)	in
Packaging unit of measure (metric)	cm
Processor Brand	Intel®
Processor base frequency	2.5
Processor base frequency uom	GHz
Processor cache	8 MB L3
Processor core	4
Processor family	Core™ i5
Processor frequency technology	Intel® Turbo Boost Technology
Processor generation	10th Generation
Processor maximum frequency	4.5
Processor maximum frequency uom	GHz
Processor model	10300H
Processor speed	2.5 GHz
Processor threads	8
Product brand name	HP
Product language options	#ABD
Service description	3-year pickup and return
Storage capacity 01	512
Storage capacity uom 01	GB
Storage form factor 01	M.2
Storage interface 01	PCIe®
Storage interface protocol 01	NVMe™
Storage type	SSD
Storage type 01	SSD
Technology logo, print 3	Publication logos/EPEAT_silver_3C11.jpg
Technology logo, print 4	Publication logos/energy_star_logo.jpg
Technology logo, print 6	Publication logos/mcafee_logo_with_tag_new.jpg
Technology logo, print 7	Publication logos/Nvidia_Geforce_GTX_icon_new.jpg
Touchscreen	No
Wireless Model	RTL8822CE
Wireless antenna	2x2
Wireless standard	802.11a/b/g/n/ac
Wireless supplier	Realtek

Accessories

Cases and Covers

Backpacks

HP Pavilion Gaming Backpack 500	**6EU58AA ★**
HP 15.6 Odyssey Backpack	7XG61AA
HP 15.6 Odyssey Backpack	7XG62AA
HP 15.6 Odyssey Sport Backpack - Facets Grey	5WK93AA
HP 15.6 Odyssey Sport Backpack - Facets White	5WK92AA
HP 17.3 in OMEN Gaming Backpack	K5Q03AA
HP 39.62 cm (15.6") Pavilion Accent Backpack Black/Gold	4QF96AA
HP 39.62 cm (15.6") Pavilion Accent Backpack Black/Silver	4QF97AA
HP ENVY Urban 15 Backpack	7XG56AA
HP ENVY Urban 39.62 cm (15.6") Backpack	3KJ72AA
HP Renew 15 Grey Backpack	1A211AA
HP Renew 15 Navy Backpack	1A212AA
HP Spectre Folio Backpack	8GF06AA
OMEN X by HP Transceptor Backpack	3KJ69AA
OMEN by HP Gaming Backpack	4YJ80AA

Cases

HP 39.62 cm(15.6") Pavilion Accent Black/Gold	4QF94AA
HP 39.62 cm(15.6") Pavilion Accent Black/Silver	4QF95AA
HP 43.94 cm (17.3") Value Topload Case	T0E18AA
HP Renew 14 Grey Slim Briefcase	1A214AA
HP Renew 14 Navy Slim Briefcase	1A215AA
OMEN Transceptor 17 Duffel Bag	7MT82AA

Covers

HP ENVY Urban 39.62 cm (15.6") Sleeve	3KJ70AA
HP Envy Urban 15.6 Sleeve	7XG60AA

Audio/Multimedia and Communication Devices

Headsets

HP Pavilion Gaming Headset 600	**4BX33AA ★**	
HP Pavilion Gaming Headset 400	**4BX31AA ★**	
HP Earbuds Black Headset 150	X7B04AA	
HP In-Ear Headset 150 (Marine Blue)	2AP91AA	
HP Stereo Headset H2800 (Black w. Silk Gold)	2AP94AA	
HP Stereo Headset H2800 (White w. Pike Silver)	2AP95AA	
HP X1000 Wireless Gaming Headset	7HC42AA	
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	
Omen X by HP Mindframe Headset	3XT27AA	

Speakers

HP Gaming Speakers X1000	8PB07AA

Headphones

OMEN Dyad Earbuds	8JE67AA

Keyboards/Mice and Input Devices

Keyboards

HP Pavilion Gaming Keyboard 800	**5JS06AA ★**	
HP Pavilion Gaming Keyboard 500	**3VN40AA ★**	obsolete
HP K1500 Keyboard	H3C52AA	
HP Pavilion Gaming Keyboard 550	9LY71AA	
HP Pavilion Wired Keyboard 300	4CE96AA	
HP Pavilion Wireless Keyboard 600 Black	4CE98AA	
HP Pavilion Wireless Keyboard 600 White	4CF02AA	
OMEN by HP Encoder Keyboard	6YW75AA	
OMEN by HP Encoder Keyboard	6YW76AA	
OMEN by HP Keyboard 1100	1MY13AA	
OMEN by HP Sequencer Keyboard	2VN99AA	

Mice

HP Pavilion Gaming Mouse 300	**4PH30AA ★**
HP Pavilion Gaming Mouse Pad 400	**5JH72AA ★**

HP Pavilion Gaming Mouse 200	**5JS07AA ★**
HP Pavilion Gaming Mouse Pad 300	**4PZ84AA ★**
HP Bluetooth Travel Mouse	6SP25AA
HP Bluetooth® Mouse Z5000	2HW67AA
HP Bluetooth® Mouse Z5000	E5C13AA
HP Dual Mode Black Mouse 300	6CR71AA
HP ENVY Rechargeable Mouse 500	2LX92AA
HP Elite Presenter Mouse	3YF38AA
HP Spectre Rechargeable Mouse 700	4YH33AA
HP Spectre Rechargeable Mouse 700	4YH34AA
HP Spectre Rechargeable Mouse 700 (Bordeaux Burgundy)	5VD59AA
HP Spectre Rechargeable Mouse 700 (Luxe Cooper)	3NZ70AA
HP Spectre Rechargeable Mouse 700 (Turbo Silver)	3NZ71AA
HP Wired Mouse 1000	4QM14AA
HP Wireless Mouse 200	X6W31AA
HP Wireless Mouse 200 (Empress Red)	2HU82AA
HP Wireless Mouse 200 (Pike Silver)	2HU84AA
HP Wireless Mouse 200 (Silk Gold)	2HU83AA
HP Wireless Mouse 220	3FV66AA
HP Wireless Mouse 220 (Lumiere Blue)	7KX11AA
HP Wireless Mouse 220 (Snow White)	7KX12AA
HP Wireless Mouse 220 (Sunset Red)	7KX10AA
HP Wireless Mouse 250	3FV67AA
HP Wireless Mouse X200	6VY95AA
HP Wireless Mouse Z3700	7UH85AA
HP Wireless Mouse Z3700	7UH86AA
HP Wireless Mouse Z3700	7UH88AA
HP Wireless Mouse Z3700	7UH89AA
HP Wireless Mouse Z3700 - White/Pink	4VY82AA
HP Wireless Mouse Z4000	H5N61AA
HP X220 Backlit Gaming Mouse	8DX48AA
HP X4500 Wireless (Metal Black) Mouse	H2W26AA
HP X500 Wired Mouse	E5E76AA
HP X900 Wired Mouse	V1S46AA
HP Z3700 Black Wireless Mouse	V0L79AA
HP Z3700 Blue Wireless Mouse	V0L81AA

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 Dark Ash Silver Wireless Mouse	W2Q00AA
OMEN Vector Essential Mouse	8BC52AA
OMEN Vector Mouse	8BC53AA
OMEN by HP Hard Mouse Pad 200	2VP01AA
OMEN by HP Mouse 400	3ML38AA
OMEN by HP Mouse 600	1KF75AA
OMEN by HP Mouse Pad 100	1MY14AA
OMEN by HP Mouse Pad 200	3ML37AA
OMEN by HP Mouse Pad 300	1MY15AA
OMEN by HP Outpost Mousepad	6CM14AA
OMEN by HP Photon Wireless Mouse	6CL96AA
OMEN by HP Reactor Mouse	2VP02AA
OMEN by HP Reactor Mouse	7ZF19AA

Keyboard and Mouse Kits

HP C2710 Combo Keyboard	M7P30AA
HP Pavilion Keyboard and Mouse 200	9DF28AA
HP Pavilion Wired Keyboard and Mouse 400	4CE97AA
HP Pavilion Wireless Keyboard and Mouse 800	4CF00AA
HP Pavilion Wireless Keyboard and Mouse 800 (Black)	4CE99AA
HP Wired Combo C2500	H3C53AA
HP Wireless Keyboard and Mouse 300	3ML04AA

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 USB-C™ to HDMI 2.0 Adapter	2PC54AA

Cables/Cable Kits/Cable Adapters

Cable Adapters

HP Spectre USB-C Travel Dock	2SR85AA
HP USB Type-C to RJ45 Adapter	V8Y76AA
HP USB-C to HDMI/ USB 3.0/ USB-C	1BG94AA
HP USB-C to USB-A Hub	Z8W90AA
HP USB-C to VGA Display Adapter	P7Z54AA

Docking and Port Replicators

Docking Stations

HP Thunderbolt Dock 120W with HDMI Adapter	6HP48AA

PC Drives and Storage

PC DVD+RW Drives

HP USB External DVDRW Drive	F6V97AA

Software

Security Management Software

★ : Recommended

Internet Security Management Software

Kaspersky Bundle Internet Security 3 devices	W7C40AA	obsolete
Kaspersky Bundle Internet Security 5 devices	W7C42AA	obsolete
Kaspersky Internet Security 3 devices	W7C39AA	obsolete
Kaspersky Internet Security 5 devices	W7C41AA	obsolete

Application Software

Desktop Application Software

Microsoft Office 2013 Home and Business English	N1R77AA	
Microsoft Office 2013 Home and Business French	N1R78AA	
Microsoft Office 2013 Home and Business German	N1R79AA	
Microsoft Office 2013 Home and Business Italian	N1R80AA	
Microsoft Office 2016 Home and Business Software	W7C38AA	obsolete
Microsoft Office 2016 Home and Business Software	X7Q47AA	
Microsoft Office 2016 Home and Business Software	X7W31AA	obsolete
Microsoft Office 2016 Home and Business Software	YG146AA	obsolete
Microsoft Office 2016 Home and Student Software	X7Q46AA	
Microsoft Office 365 Home	M7K88AA	
Microsoft Office 365 Home English	N1R69AA	
Microsoft Office 365 Home French	N1R70AA	
Microsoft Office 365 Home German	N1R71AA	
Microsoft Office 365 Home Italian	N1R72AA	
Microsoft Office 365 Personal	M7K89AA	
Microsoft Office 365 Personal English	N1R73AA	
Microsoft Office 365 Personal French	N1R74AA	
Microsoft Office 365 Personal German	N1R75AA	
Microsoft Office 365 Personal Italian	N1R76AA	
Microsoft® Office Home and Business 2016 English	T7T87AA	obsolete
Microsoft® Office Home and Business 2016 French	T7T88AA	obsolete
Microsoft® Office Home and Business 2016 German	T7T86AA	obsolete
Microsoft® Office Home and Business 2016 Italian	T7T89AA	obsolete

Microsoft® Office Home and Student 2016 English	T7T91AA	obsolete
Microsoft® Office Home and Student 2016 French	T7T92AA	obsolete
Microsoft® Office Home and Student 2016 German	T7T90AA	obsolete
Microsoft® Office Home and Student 2016 Italian	T7T93AA	obsolete

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Not all features are available in all editions or versions of Windows. Systems may require upgraded and/or separately purchased hardware, drivers, software or BIOS update to take full advantage of Windows functionality. Windows 10 is automatically updated, which is always enabled. ISP fees may apply and additional requirements may apply over time for updates. See http://www.microsoft.com.