ProductSheet

OMEN by HP Laptop 16-b0012nu (599T9EA)

Lift your play up. Way up.



Go beyond with OMEN by HP 16.1 inch Gaming Laptop. Powered by an Intel® Core™ processor[1] and powerful NVIDIA® 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.

Fast refresh rate during gaming

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

Customize with OMEN Gaming Hub

Your one-stop shop to elevate gameplay, from controlling every little performance to lighting options and more.

Featuring

Get a fresh perspective

Windows 11 provides a calm and creative space where you can pursue your passions through a fresh experience. From a rejuvenated Start menu, to new ways to connect to your favorite people, news, games, and content—Windows 11 is the place to think, express, and create in a natural way. [4]

Exceptional experience, anywhere

11th Gen Intel® Core™ processors bring the perfect combination of features to make you unstoppable. Get things done fast with high performance, instant responsiveness and best-inclass connectivity. ^[5]

NVIDIA® GeForce RTX™ 3060

The GeForce RTX™ 3060 lets you take on the latest games using the power of Ampere—NVIDIA's 2nd generation RTX architecture. Get incredible performance with enhanced Ray Tracing Cores and Tensor Cores, new streaming multiprocessors, and high-speed G6 memory. ^[6]

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. $^{[7]}$

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. ^[8]







Specifications

Operating system	Windows 11 Home	
Product color	Shadow black cover and base, shadow black aluminum keyboard frame	
Processor family	11th Generation Intel® Core™ i7 processor	
Processor	Intel® Core™ i7-11800H (up to 4.6 GHz with Intel® Turbo Boost Technology, 24 MB L3 cache, 8 cores, 16 threads) ^{[6}	
Chipset	Intel® HM570	
Memory	16 GB DDR4-3200 MHz RAM (2 x 8 GB)	
Internal Storage	1 TB PCIe® NVMe™ TLC M.2 SSD	
Product design	Paint finish cover and base, sandblasted keyboard frame	
Optical drive	Optical drive not included	
Graphics	Discrete	
Graphics (discrete)	NVIDIA® GeForce RTX™ 3060 Laptop GPU (6 GB GDDR6 dedicated)	
Graphics	Integrated	
Graphics (integrated)	Intel® UHD Graphics	
	40.9 cm (16.1") diagonal, FHD (1920 x 1080), 144 Hz, 7 ms response time, IPS, micro-edge, anti-glare, Low Blue	
Display	Light, 300 nits, 100% sRGB	
Display	16.1" diagonal, FHD (1920 x 1080), 144 Hz, 7 ms response time, IPS, micro-edge, anti-glare, Low Blue Light, 300 nits, 100% sRGB	
Display size (diagonal)	40.9 cm (16.1")	
Display size (diagonal)	16.1"	
Audio	Audio by Bang & Olufsen; DTS:X® Ultra; Dual speakers; HP Audio Boost	
Minimum dimensions (W x D x H)	36.92 x 24.8 x 2.3 cm (Dimensions vary by configuration)	
Minimum dimensions (W x D x H)	14.54 x 9.76 x 0.91 in	
Weight	Starting at 2.3 kg (Weight varies by configuration)	
Weight	Starting at 5.09 lb	
Keyboard	Full-size, 4-zone RGB backlit, shadow black keyboard and 26-Key Rollover Anti-Ghosting Key technology	
Pointing device	HP Imagepad with multi-touch gesture support; Precision Touchpad Support	
Input devices	IR Thermal sensor	
Webcam	HP Wide Vision 720p HD camera with integrated dual array digital microphones	
Ports	1 Thunderbolt [™] 4 with USB4 [™] Type-C [®] 40Gbps 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 mini DisplayPort™; 1 RJ-45; 1 AC smart pin; 1 headphone/microphone combo ^[19,20]	
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	4.01 kg	
Network interface	Integrated 10/100/1000 GbE LAN	
Wireless	Intel® Wi-Fi 6E AX210 (2x2) and Bluetooth® 5.2 combo (Supporting Gigabit data rate)	
Power supply type	230 W AC power adapter	
Battery type	6-cell, 83 Wh Li-ion polymer	
Battery life	Up to 6 hours and 45 minutes ^[3]	
Battery recharge time	Supports battery fast charge: approximately 50% in 45 minutes ^[5]	
Battery weight	0.69 lb	
Battery weight	315 g	
Ecolabels	EPEAT® registered	
Energy star certified	ENERGY STAR® certified	
Sustainable impact specifications	ifications Ocean-bound plastic in speaker enclosure; Contains recycled metal; Keyboard keycaps made with post-consumer recycled plastic	
Software included	McAfee LiveSafe™	
Software - Productivity & finance	1 month trial for new Microsoft 365 customers ^[24]	

ProductSheet | OMEN by HP Laptop 16-b0012nu (599T9EA)

Cloud service	25 GB Dropbox storage for 12 months ^[1]
UPC number	196337375789

Top Recommended Displays, Accessories and Services

Cases	
OMEN Transceptor 17 Duffel Bag	7MT82AA
Covers	
OMEN Transceptor 17 Sleeve	3J045AA
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
Keyboards	
OMEN by HP Sequencer Keyboard	2VN99AA
OMEN by HP Encoder Keyboard	6YW76AA
Headsets	
OMEN Blast Headset	1A858AA
Headphones	
OMEN Dyad Earbuds	8JE67AA

Messaging Footnotes

- [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. Intel's numbering, branding and/or naming is not a measurement of higher performance.
- [2] Thermal solution varies by configuration.
- [3] The Flicker-free capability eliminates screen flickering through integrating DC-dimming LED backlights.
- [4] 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 is automatically updated and enabled. High speed internet and Microsoft account required. ISP fees may apply and additional requirements may apply over time for updates. See http://www.windows.com.
- [5] 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 is not a measurement of higher performance.
- [6] ©2021 NVIDIA Corporation. NVIDIA, the NVIDIA logo, GeForce, and GeForce RTX are registered trademarks and/or trademarks of NVIDIA Corporation in the United States and other countries. All other trademarks and copyrights are the property of their respective owners.
- [7] All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.
- [8] 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.

Technical Specifications Footnotes

- [1] 25 GB of free Dropbox storage for 12 months from date of registration. For complete details and terms of use, including cancellation policies, visit the Dropbox website at https://www.dropbox.com/help/space/hp-promotion. Internet service required and not included.
- [3] Windows 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. Intel's numbering, branding and/or naming is not a measurement of higher performance.
- [7] Intel® Turbo Boost performance varies depending on hardware, software and overall system configuration. See http://www.intel.com/technology/turboboost/for more information.
- [19] For best results with HP Sleep and Charge, use a USB charging protocol standard cable or cable adapter with an external device.
- [20] SuperSpeed USB 20Gbps is not available.
- [24] Must activate within 180 days of Windows activation.

© 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.

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.

