

OMEN by HP 45L Gaming Desktop GT22-1090



Patented cooling, extreme performance.

Define the cutting edge with the OMEN 45L Desktop PC. Built with an Intel® processor, dazzling graphics, and extreme cooling with the patented liquid-cooled OMEN CRYO CHAMBER™ cooling system. Bring the fire and the ice.

Product overview

- **Behold, the chilliest machine in gaming.** The OMEN 45L takes cooling way up, with the OMEN CRYO CHAMBER™. This patented system uses the ambient air to create extreme cooling inside the system. The OMEN CRYO CHAMBER™ is also end user upgradable because ice is the new fire.⁽⁵⁷⁾
- **Beauty, meet Beast.** Tempered glass panels, a full-metal frame with toolless entry, and complete RGB control. Its one nifty spaceship.
- **Adaptation, battle station.** Built for extreme performance, and easy toolless upgradeability. The OMEN 45L is a one stop, can't stop, shop for DIY performance mastery. Dream, adapt, overcome.⁽⁵⁷⁾
- **Optimize and customize:** Step aboard the one-stop spec shop command center that is OMEN Gaming Hub. Tweak every last detail from intelligent overclocking, to SW-based fan control, BIOS access, RAM frequency and RGB.⁽⁵⁷⁾

Key specifications

- **Operating system:** Windows 11 Pro⁽¹⁾
- **Processor:** 13th Generation Intel® Core™ i9-13900KF processor^(2b)
- **Memory:** Kingston FURY 64 GB DDR5-5200 XMP RGB Heatsink RAM memory (4x16 GB)
- **Internal Storage:** 2 TB WD Black PCIe® Gen4 NVMe™ M.2 Solid State Drive^{(15)(58e)}
- **Graphics:** NVIDIA® GeForce RTX™ 4090 graphics card with 24 GB GDDR6X dedicated memory⁽¹³⁾
- **USB ports:** Front I/O: 2 USB Type-A 5Gbps signaling rate, 2 USB 2.0 Type-A; Rear: 2 USB Type-A 5Gbps signaling rate, 2 USB Type-A 10Gbps signaling rate, 2 USB 2.0 Type-A, 1 USB Type-C® 5Gbps signaling rate, 1 USB Type-C® 10Gbps signaling rate⁽⁴²⁾
- **Wireless:** Wi-Fi 6 (2x2) and Bluetooth® Combo (supporting gigabit data rate)⁽⁷⁾⁽¹⁹⁾⁽²⁶⁾
- **Warranty:** 1-year limited hardware warranty
- **Included:** 1-month of Xbox Game Pass Ultimate⁽⁶⁰⁾

Product features

- **Get a fresh perspective with Windows 11:** 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.⁽¹⁾
- **Extend beyond performance to let your PC do even more at once:** Offering more than just a performance score. 13th Gen Intel® Core™ Processor advances real-world computing and delivers more ultra-efficient multi-tasking.
- **NVIDIA® GeForce RTX™ 4090:** The NVIDIA® GeForce RTX™ 4090 graphics bring an enormous leap in performance, efficiency, and AI-powered graphics. Experience ultra-high performance gaming and incredibly detailed virtual worlds with ray tracing. It's powered by the NVIDIA Ada Lovelace architecture and comes with 24 GB of G6X memory.
- **WD Black PCIe® Gen4 NVMe™ M.2 SSD:** A Western Digital Black PCIe M.2 SSD boosts your entire system with faster response times and less loading.^(58e)
- **DTS: X Ultra Technology:** By producing authentic, spatially accurate 3D sound through any headset, this technology offers specially tuned audio modes for different game types to provide immersion for the best entertainment experience possible.⁽⁴⁷⁾
- **USB Type-C® 5Gbps signaling data rate:** Plug in your external storage with this USB Type-C® port, featuring 5Gbps signaling data rate. And it's reversible, so you never have to worry about plugging in upside down.⁽⁴²⁾⁽⁴³⁾
- **USB Type-C® 10Gbps signaling data rate:** Plug in your external storage with this USB Type-C® port, featuring 10Gbps signaling data rate. And it's reversible, so you never have to worry about plugging in upside down.⁽⁴²⁾⁽⁴³⁾
- **USB Type-A 5Gbps signaling data rate:** Plug in your external storage with this USB Type-A port, featuring 5Gbps signaling data rate.⁽⁴³⁾
- **USB Type-A 10Gbps signaling data rate:** Plug in your external storage with this USB Type-A port, featuring 10Gbps signaling data rate.⁽⁴³⁾

Additional product features

- **Kingston FURY DDR5 Memory:** With its high performance, everything from multi-tasking to playing games gets a boost.
- **Dual channel memory:** Two channels work simultaneously to double the communication speed between the memory controller and the RAM increasing system performance.
- **Effortlessly connected:** Enjoy a smooth wireless experience with a Wi-Fi 6 (2x2) and Bluetooth® combo.⁽¹⁹⁾⁽²⁶⁾
- **OMEN CRYO CHAMBER™:** Experience revolutionary cooling from the patented OMEN CRYO CHAMBER™ cooling system that enables the liquid cooler radiator to channel fresh, cold air from the surrounding environment to cool down the CPU.
- **OMEN Light Studio:** Control RGB lighting effects for all your connected and supported devices through one app. OMEN Light Studio makes it easy to personalize lighting options using a variety of effects like ambient, wave, interactive and more.
- **Enjoy 1-month of high-quality games.** Use the Xbox App to play hundreds of high-quality PC games with friends including new day one titles and get an EA Play membership. With games added all the time, you always have something new to play. Xbox Game Pass Ultimate also enables you to play console games on your Windows PC with cloud gaming, and chat with friends across PC, mobile, and Xbox console.⁽⁶⁰⁾

Designed with the planet in mind

- HP is dedicated to driving progress toward a more sustainable future and making responsible choices for the environment and our customers. We are innovating new ways to reduce the amount of materials in our products and packaging—and to use more recycled materials in their design. Together we can make a difference.
- Built with the environment in mind, the OMEN by HP 45L Gaming Desktop is designed using sustainable materials like:
 - Includes water-based paint^(63g)
 - HP's outer boxes and fiber cushions used in packaging are 100% sustainably sourced and recyclable.^(63e)
 - ENERGY STAR® certified⁽⁶²⁾
 - EPEAT® Gold registered⁽²⁷⁾

Warranty and support

Our Customer Support Team consistently provides quick, responsive assistance in the U.S., Canada and Latin America.

Included with your product:

- **HP's Hardware Limited Warranty:** Full warranty details are included with your product.
- **Technical Support for Software & initial set-up:** Warranty details are included with your product.

Support Options:

- **HP Support Assistant - HPSA:** Optimized to enhance your support experience. Help for your PC and HP printers whenever you need it.⁽⁵⁶⁾
- **Online Support:** For technical support with this product, visit HP Customer Support <http://support.hp.com>.⁽¹⁰⁾
- **Social Media Support:** To find solutions, ask questions, and share tips, join us on the HP Support Community at community.hp.com, on Twitter at twitter.com/HPsupport, and Facebook at facebook.com/HPsupport.⁽¹⁰⁾

Extend your coverage:

- **SmartFriend, part of HP Care:** Experts are available 24/7 to handle any tech issue, on any device, from any brand. Visit www.hp.com/go/smartfriend to learn more or call toll-free 1.844.814.1800 to get started.⁽⁹⁵⁾
- **Care Packs, part of HP Care:** Extend protection beyond the standard limited warranty. For more info, visit www.hp.com/go/carepack-services or call toll-free at 1.877.232.8009.⁽⁹³⁾



Specifications

Operating system	• Windows 11 Pro⁽¹⁾
Processor	• 13th Generation Intel® Core™ i9-13900KF processor ^(2b) • 24-core • Liquid cooling
Processor speed	• 3.00 GHz ^(2h)
Cache	• 36 MB Cache
Memory	• Kingston FURY 64 GB DDR5-5200 XMP RGB Heatsink RAM memory (4x16 GB) (expandable to 128 GB unbuffered with 32 GB DIMMs) ^(3a)
Internal storage	• 2 TB WD Black PCIe® Gen4 NVMe™ M.2 Solid State Drive ^{(15)(58e)}
Finish	• Tempered glass front bezel and side panel with EMC protection
Video graphics	• NVIDIA® GeForce RTX™ 4090 graphics card with 24 GB GDDR6X dedicated memory ⁽¹³⁾
Network interface	• 10/100/1000 Base-T Network ⁽²⁹⁾
Wireless connectivity	• Wi-Fi 6 (2x2) and Bluetooth® Combo (supporting gigabit data rate) ^{(7)(19e)(26)}
Sound	• 5.1 surround sound
Memory slots	• 4 DIMM (288-pin) (occupied)
Expansion slots	• 1 PCI-E Gen 5 (Gen 5 ready) x16 (occupied) • 1 PCI-E Gen 3 x4 (available) • 3 M.2 (2 for SSD, 1 for WLAN) (one available for SSD)
Expansion bays	• HDD: 2 internal 3.5" (two available) • SDD: 2 internal 2.5" (two available)
External ports	• Headphone/Microphone Combo, Microphone Jack • Front I/O: 2 USB Type-A 5Gbps signaling rate, 2 USB 2.0 Type-A • Rear: 2 USB Type-A 5Gbps signaling rate, 2 USB Type-A 10Gbps signaling rate, 2 USB 2.0 Type-A, 1 USB Type-C® 5Gbps signaling rate, 1 USB Type-C® 10Gbps signaling rate ⁽⁴²⁾ • HDMI • 3 DisplayPort™ ⁽⁵⁰⁾
Multi-display capable	• DisplayPort and HDMI capabilities, NVIDIA® Surround™ multi-display technology, support for Microsoft® DirectX® 12 ⁽¹³⁾
What's in the box	• 1-month of Xbox Game Pass Ultimate ⁽⁶⁰⁾
Power supply	• 1200 W 80 Plus Gold certified ATX power supply
Dimensions	• Unpackaged: 8.03 in (W) x 18.50 in (D) x 21.85 in (H) approx. • Packaged: 23.31 in (L/D) x 12.91 in (W) x 26.46 in (H) approx.
Weight	• Unpackaged: 49.82 lb approx. ⁽⁷⁶⁾ • Packaged: 55.56 lb approx.
Warranty and support	• 1-year limited hardware warranty. Additional information available at www.support.hp.com • 1-year limited technical support for software and initial setup (from date of purchase) ⁽⁵³⁾

Learn more at hp.com

⁽¹⁾ 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>. ^(2a) 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. Intel, Pentium, Intel Core, Celeron, Intel logo and the Intel Inside logo are trademarks of Intel Corporation in the U.S. and other countries. ^(2b) GHz refers to internal clock speed of the processor. Other factors besides clock speed may impact system and application performance. ^(3a) Based on system capability, actual spec offering may be different. Maximum upgradeability will vary by model. ⁽⁷⁾ Wi-Fi 5 or 6 is designed to support Gigabit data rate when transferring files between two devices connected to the same router. Requires a wireless router, sold separately, that supports 80MHz and higher channels. ⁽⁸⁾ Internet access required and not included. Subscription required after 30 days trial period. McAfee, LiveSafe and the McAfee logo are trademarks or registered trademarks of McAfee, Inc. in the United States and other countries. ⁽¹⁰⁾ Internet service required and not included. ⁽¹³⁾ ©2022 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. ⁽¹⁵⁾ Actual formatted capacity is less. Portion of internal storage is reserved for preloaded content. ^(19e) Wireless access point and internet service required and sold separately. Availability of public wireless access points limited. Wi-Fi 6 is backwards compatible with prior 802.11 specs. Wi-Fi 6 is designed to support gigabit data rate when transferring files between two devices connected to the same router. Requires a wireless router, sold separately, that supports 80MHz and higher channels. Only available in countries where Wi-Fi 6 is supported. ⁽²²⁾ New Dropbox users are eligible to get 100 GB of Dropbox space free for 12 months from date of registration. For complete details and terms of use, including cancellation policies, visit the Dropbox website at dropbox.com. ⁽²³⁾ HP BIOS Protection works with Windows 11 that ships with your PC. ⁽²⁶⁾ Bluetooth® is a trademark owned by its proprietor and used by HP Inc. under license. ⁽²⁷⁾ Based on U.S. EPEAT® registration according to IEEE 1680.1-2018 EPEAT®. EPEAT® status varies by country. Visit www.epeat.net for more information. ⁽²⁹⁾ Actual speeds may vary. ⁽⁴²⁾ USB Type-C® and USB-C® are trademarks of USB Implementers Forum. ⁽⁴³⁾ Actual throughput may vary. ⁽⁴⁷⁾ Listening to personal stereo equipment at full volume for long periods can damage the user's hearing. To reduce the risk of hearing damage, lower the volume and amount of time listening at full volume. ⁽⁵⁰⁾ DisplayPort™ and the DisplayPort™ logo are trademarks owned by the Video Electronics Standards Association (VESA®) in the United States and other countries. ⁽⁵³⁾ Call 1.800.474.6836 or support.hp.com for more information on Care Packs available after standard warranty expires. After standard warranty expires, an incident fee may apply. ⁽⁵⁶⁾ For more information visit hp.com/go/hpsupportassistant. (Link will vary outside of the U.S.) HP Support Assistant is only available on Windows-based PCs. Internet connection required for updating and connecting to HP Support. ⁽⁵⁷⁾ This device has been engineered for optimal performance. Upgrading PC may affect warranty coverage. ^(58e) Based on HP internal testing using CrystalDiskMark benchmarking software. Performance is sequentially read compared to a SATA SSD. ⁽⁶⁰⁾ 1 month trial offer - Promotional offers may be for new members only and/or not be valid for all members and are only available for a limited time. Credit card and Xbox account required. After promotional period, subscription automatically continues at the then-current regular price (subject to change), unless cancelled, plus applicable taxes. To stop being charged, cancel your subscription or turn off recurring billing in your Microsoft account (account.microsoft.com/services) or on your Xbox console, before the next billing date. For more details, see support.xbox.com/help/subscriptions-billing/manage-subscriptions/cancel-recurring-billing-or-subscription. Purchase of Xbox Game Pass Ultimate automatically upgrades your existing Xbox Live Gold, Xbox Game Pass (PC or Console), and/or EA Play membership(s) to Xbox Game Pass Ultimate at a conversion ratio each based on days remaining. Learn how this works at xbox.com/gamepass. See Microsoft xbox.com/en-US/legal/subscriptions-terms for more details. ⁽⁶²⁾ ENERGY STAR and the ENERGY STAR mark are registered trademarks owned by the U.S. Environmental Protection Agency. ^(63a) 100% outer box/corrugate cushion packaging made from sustainably sourced certified and recycled fibers. Fiber cushions made from 100% recycled wood fiber and organic material. Excludes plastic bags and plastic foam sheeting. ^(63b) Percentage of water-based paint varies by product. ⁽⁷⁶⁾ Weight and system dimensions may fluctuate due to configuration and manufacturing variances. ⁽⁸¹⁾ HP QuickDrop is preinstalled on this PC. Unlock use on secondary devices by downloading the app from iOS or Google Play store and connect to your PC. Limited to sharing to one device at a time. Must be linked to an HP PC. Not applicable to sharing content between two mobile devices. ⁽⁸³⁾ Service levels and response times for Care Packs may vary depending on your geographic location. Restrictions and limitations apply. Service starts at date of hardware purchase. HP Care Packs are sold separately. For details, visit hp.com/go/carepack-services. ⁽⁹⁵⁾ HP SmartFriend will support any major brand of computer and tablet running Microsoft Windows, OSx, iOS, Android, and Chrome OS. 24x7 support is available in English and in the US & Canada (excluding the Province of Quebec) only. Service availability varies by country/region. Internet connection required for remote support. Remote support not available for tablets. Not all service plans cover support for tablets. HP SmartFriend sold separately or as an add-on feature. Actual product may vary from image shown on datasheet. © Copyright 2023 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 shall be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein. Microsoft and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. All other trademarks are property of their respective owners. 03/16/2023_r1 ja

Software

Help and support	• myHP: myHP provides a simple setup and registration experience that welcomes you to your new HP PC. Customize, optimize, and secure your device with tips and tricks and easy-to-access settings, and receive helpful messages and information to keep things running smoothly. • HP Support Assistant: Help with your HP PC and printers whenever you need it. ⁽⁵⁶⁾
Security and protection	• HP BIOS Protection: Get peace of mind knowing your PC BIOS is protected. HP BIOS Protection automatically checks its health and recovers itself. ⁽²³⁾
Partner offers	• McAfee LiveSafe™: Protect your operating system with a free 30-day McAfee LiveSafe™ trial. ⁽⁸⁾ • Dropbox cloud storage: Store and synchronize your content online with Dropbox. Get 100GB of storage for one year to access, manage, and share your photos, music, and files from anywhere with Internet access. ⁽¹⁰⁾⁽²²⁾
System performance	• HP Connection Optimizer: Get consistent and reliable Wi-Fi performance with software that automatically switches between the most efficient wireless access points. ⁽¹⁰⁾
Work and lifestyle	• HP QuickDrop: Wirelessly transfer photos, videos, documents and more between your PC and mobile device. Easily snap a photo to share, send addresses for directions on-the-go, and view texts on your PC's screen. With HP QuickDrop, file transfers are easy, fast and reliable. ⁽¹⁰⁾⁽⁸¹⁾
Gaming and entertainment	• OMEN Gaming Hub: Your one place for everything to make your gaming experience better. From software enhancements to hardware control, and live services, OMEN Gaming Hub elevates play in an easy and simple way. • DTS: X® Ultra Technology: Authentic, spatially accurate 3D sound to provide the best entertainment experience. ⁽⁴⁷⁾ • OMEN Light Studio: Personalize lighting options using a variety of effects like ambient, wave, interactive and more through one app. • OMEN CRYO CHAMBER™: Experience revolutionary cooling from the patented OMEN CRYO CHAMBER™ cooling system that enables the liquid cooler radiator to channel fresh, cold air from the surrounding environment to cool down the CPU.

Additional information

Product number	• 7HBC8AA#ABA
Ad embargo date	• 03/12/2023
UPC code	• 197192422335
Country of origin	• Mexico
Pallet information	• Dimensions: 47.24 in (L/D) x 39.37 in (W) x 84.69 in (H) approx. • Total weight: 1032.96 lb approx. • Layers: 3 • Products per layer: 6 • Total products per pallet: 18

