Datasheet

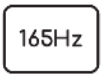
OMEN by HP 23.8 inch FHD 165Hz Gaming Monitor - OMEN 24

TAKE YOUR FUN UP A NOTCH

Reach new possibilities with the OMEN by HP 23.8-inch FHD 165Hz Gaming Monitor. Quick performance and vibrant color let you get lost in the games you love most, while the sleek design functions to look and feel great on your desk.

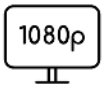


*Product image may differ from actual product



NO LAG. ALL SPEED.

Frame by frame, experience all the action with no distractions. To keep things smooth, this display boasts a fast 165Hz refresh rate and 1ms GTG response time with Overdrive to cut motion blur[1], so every pixel keeps up with you. Leave screen tearing and lag in the dust, thanks to AMD FreeSync™ Premium technology[2].



SEE A WORLD YOU CAN STEP INTO

Mistake virtual for IRL while you explore your favorite worlds. For lifelike gameplay, escape into a wide array of vibrant colors, hues, and shades with the 99% sRGB and 90% DCI-P3 color gamut[1]. Focus on the finer details from any angle, thanks to Full HD resolution[3] and IPS panel technology.



REFINE YOUR PLAY SPACE

Made to impress in and out of game, the new OMEN look blends sophistication and fun to elevate what a gaming setup can look like. It's equipped with ports perfect for connecting your gaming PC, console, and even a work PC. Thanks to the easy cable management and the adjustable stand, your desk will be just how you like it.



ALL YOUR FUN, CUSTOM

Play around with every possible setting in OMEN Gaming Hub[4]—a one-stop shop for customizing your ecosystem. Make your monitor, any PC, and select accessories work better together the way you want. From hardware to software enhancements, OGH elevates play in an easy and simple way.

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Featuring

FHD Resolution
Focus on the finer details and enjoy clear images with the 1920 x 1080 Full HD resolution on this 23.8" diagonal monitor.[3]

165Hz refresh rate
Crisp action and responsive gameplay with virtually no artifacting or screen tearing.[1]

More Colors to Play With
Get deeper hues and a wide array of colors with 99% sRGB and 90% DCI-P3 for precisely recreated colors so lifelike you get lost in your gameplay.[1]

1ms GTG Response Time with Overdrive
Eliminates motion blur for crisp, fluid gameplay no matter what's happening on-screen.[1]

AMD FreeSync™ Premium Technology
Game confidently with a high refresh rate, low framerate compensation, and low latency.[2]

VESA Certified AdaptiveSync
VESA Certified AdaptiveSync guarantees higher refresh rates and low latency, optimized for gaming.[5]

Plenty of ports
Easily connect your devices with two HDMI 2.0 ports, one DisplayPort™ 1.4, and one 3.5 mm headphone jack.[6]

New Design Unlocked
The new OMEN look blends sophistication and fun to elevate your gaming setup.

IPS Technology
Image accuracy and consistency across wide 178-degrees viewing angles, no matter where you stand.

VESA Certified ClearMR 5000
Easily compare the amount of motion blur between VESA Certified ClearMR displays with Clear Motion Ratio (CMR).[7]

Console Compatible
Over 140 test cases to ensure it's compatible with your choice of console.

Fully adjustable stand
Find comfort while you game with tilt, pivot, and 100 mm height adjustments.

HP Eye Ease with Eyesafe® Certification
Keep your screentime comfortable with beautiful colors while reducing blue light.

OMEN Gaming Hub
From software enhancements to hardware control, and live services, OGH elevates play in an easy and simple way.[4]

Materials that Matter
Contains 85% post-consumer recycled plastics.[8]

Thoughtful Product Packaging
100% recyclable packaging that can stay out of landfills.[9,10]

Mindful metals
Engineered to contain 10% recycled metals.[11]

Effortless Joypad OSD Button
Easy on-screen display settings with the joypad OSD button.

Integrated Cable Management
Help keep your workspace clean and organized.

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Product number	780D9AA#ABB:; #A2N; #ABT; #ABU; #ABV; #ABY; #ACQ; #UUG; #UUZ
UPC number	197029614261
Display size	60.5 cm (23.8")
Display colors	Up to 16.7 million colors supported
Aspect ratio	16:9 [1]
Display type	IPS
Pixel pitch	0.28 x 0.28 mm
Response time	1ms GtG (with overdrive) [1]
Brightness	300 nits [1]
Contrast ratio	1000:1 [1]
Display contrast ratio (dynamic)	10000000:1
Product color	Black
Display color gamut	99% sRGB; 90% DCI-P3
Resolution (maximum)	FHD (1920 x 1080 @ 165 Hz)
Resolutions supported	640 x 480; 720 x 400; 800 x 600; 1024 x 768; 1280 x 720; 1280 x 800; 1280 x 1024; 1440 x 900; 1600 x 900; 1680 x 1050; 1920 x 1080
Display scan frequency (horizontal)	30-210 kHz
Display scan frequency (vertical)	60-165 Hz
Display features	On-screen controls; Pivot rotation; Anti-glare; Height adjustable; AMD Freesync™ Premium; Gaming Console Compatible; HP Eye Ease (Eyesafe® certified)
Physical security features	None
Environmental specifications	Low Halogen; Molded paper pulp cushion inside box is 100% sustainably sourced and recyclable; Outside box and corrugated cushions are 100% sustainably sourced and recyclable; 85% ITE-derived closed loop plastic [3,4,5,6]
Energy efficiency	Energy efficiency class: E; On-mode power consumption: 40 W (maximum); Annual energy consumption: 18 kWh; Standby: 0.5 W (standby); Power consumption (on-mode): 40 W (maximum); Power consumption (off-mode): 25 W (typical)
Display User Control Options	Management; Information; Exit; Input; Color; Image; Power; Menu; Gaming
Webcam	No integrated camera
Operating temperature range	5 to 35°C
Operating temperature range	41 to 95°F
Operating humidity range	20 to 80% RH
Power supply	100 - 240 VAC 50/60 Hz
VESA mount	100 mm x 100 mm (bracket included)
Pixels per inch (ppi)	93 ppi
Panel bit depth	True 8 bit
Vertical viewing angle	178°
Horizontal viewing angle	178°
Bezel	3-sided borderless
Tilt	-5 to +23°
Pivot	±90°
Height adjustment range	100 mm
Hardness	3H
Screen treatment	Anti-glare
Flicker-free	Yes
Low blue light	Yes, HP Eye Ease (Eyesafe® Certified)
Port and connectors	2 HDMI 2.0; 1 DisplayPort™ 1.4; 1 x 3.5 mm Audio Jack (Audio Out)
HDCP	Yes, DisplayPort™ and HDMI
Management software	OMEN Gaming Hub [8]
Warranty	1 year limited warranty
Certifications and compliances	Australian-New Zealand MEPS; BIS; BSMI; CB; CCC; CE; CEL; CSA; EAC; FCC; ISO 9241-307; KC/KCC; NOM; PSB; TUV Bauart; TUV LBL; VCCI; Vietnam MEPS; WEEE; ISC; California Energy Commission (CEC); WW application; ICE; Ukraine certificates; TÜV Flicker free certified; UAE safety; UAE RoHS; South Africa safety; Microsoft WHQL Certification (Windows 11 and Windows 10)
What's in the box	Monitor; DisplayPort™ cable; Warranty card; Quick Setup Poster; AC power cord [7]
Country of origin	Made in China
Dimensions (W x D x H)	53.94 x 5.2 x 32.15 cm (without stand)
Weight	6.35 kg (with stand)
Package dimensions (W x D x H)	59.5 x 16.4 x 40.7 cm
Package weight	9.33 kg
Pallet (layers)	5
Products per layer	12
Products per pallet	60
Pallet dimensions	120 x 99.4 x 218 cm
Pallet weight	595 kg
Base area footprint	19.99 x 18.99 cm

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Messaging Footnotes

[1] All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary, either higher or lower.
[2] Requires a monitor and AMD Radeon graphics, both with FreeSync Premium support. AMD FreeSync™ Premium requires mandatory low framerate compensation and at least 120 Hz refresh rate at minimum FHD. See www.amd.com/freesync for complete details. Confirm capability with your system manufacturer before purchase. GD-161.
[3] Full high-definition (FHD) content required to view FHD images.
[4] Account required for full functionality. See OMEN Gaming Hub terms and conditions. Support level for non-HP products may be subject to change. Some animation effects may consume more CPU resources.
[5] VESA Certified Adaptive Sync is the high-performance Monitor and Display Compliance Test Specification from VESA specifying display visual performance on variable refresh rate displays. See https://www.adaptivesync.org/ for more details.
[6] AC Power cord and DisplayPort™ cable included. All other cables sold separately.
[7] VESA Certified ClearMR is the high-performance Monitor and Display Compliance Test Specification from VESA that provides a clear numerical value based on the ratio of clear pixels to blurry pixels. See https://www.clearmr.org/ for more details.
[8] Recycled plastic content percentage is based on the definition set in the IEEE 1680.1-2018 EPEAT® standard.
[9] 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. Any plastic cushions are made from >90% recycled plastic. Excludes plastic bags and plastic foam sheeting.
[10] Recycling facilities not available in all locations.
[11] Recycled metal is expressed as a percentage of the total weight of the metal according to ISO 14021 definitions for metal parts over 25 grams.

Technical Specifications Footnotes

[1] All specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.
[2] DisplayPort™ 1.4 or HDMI 2.0 required to drive panel at its native resolution. The video card of the connected PC must be capable of supporting 1920 x 1080 at 60 Hz with 8-bit color using one DisplayPort™, HDMI. The video card of the connected PC must be capable of supporting 1920 x 1080 and include one DisplayPort™ or one HDMI outputs to drive the monitor at the Preferred Mode.
[3] External power supplies, WWAN modules, power cords, cables and peripherals excluded. Service parts obtained after purchase may not be Low Halogen.
[4] ITE Derived Closed Loop Plastic percentage is based on the definition set in the IEEE 1680.1-2018 standard.
[5] 100% outer box packaging and corrugated cushions made from sustainably sourced certified and recycled fibers.
[6] Molded pulp cushions are made from 100% recycled wood fiber and organic materials.
[7] Included cables may vary by country.
[8] Host PC requires Windows 10. OMEN Gaming Hub is available on the Microsoft store.

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June 2023