OMEN by HP 31.5 inch QHD 165Hz Gaming Monitor – OMEN 32q (780K1AA)



Overview

TAKE YOUR FUN UP A NOTCH

Reach new possibilities with the OMEN by HP 31.5-inch QHD 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.

165Hz

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].



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.

HDR

SEE A WORLD YOU CAN STEP INTO

Mistake virtual for IRL while you explore your favorite worlds with the crisp visuals of QHD resolution[3]. For lifelike gameplay, escape into a wide array of vibrant colors, hues, and shades with the 99% sRGB and 95% DCI-P3 color gamut[1]. Even in shadow, easily make out details and shading with HDR and up to 400 nits of brightness[1]. •

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.

QHD Resolution

Get lost in the captivating definition and sharp details of 3.7 million pixels. 2560 x 1440 Quad HD resolution transforms all your content for a remarkable entertainment experience on this 31.5" diagonal monitor.^[3]

165Hz refresh rate

Crisp action and responsive gameplay with virtually no artifacting or screen tearing.^[1]

HDR

More Colors to Play With

Explore new worlds with richer colors thanks to a peak brightness of 400 nits.^[1]

Get deeper hues and a wide array of colors with 99% sRGB and 95% DCI-P3 for precisely recreated colors so lifelike you get lost in your gameplay.^[1]

1ms GTG Response Time with Overdrive

AMD FreeSync™ Premium Technology

Eliminates motion blur for crisp, fluid gameplay no matter what's happening on-screen.^[1]

Game confidently with a high refresh rate, low framerate compensation, and low latency.^[2]

[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] Quad high-definition (QHD) content required to view QHD 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.

Specifications

| Display size (diagonal) | 31.5" |
|---|--|
| Panel technology | IPS |
| Display size (diagonal) | 80 cm (31.5") |
| Aspect ratio | 16:9 ^[1] |
| Native resolution | QHD (2560 x 1440) ^[1,2] |
| 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; 1920 x 1200; 2560 x 1440 |
| Pixel pitch | 0.27 x 0.27 mm |
| Brightness | 400 nits ^[1] |
| Contrast ratio | 1000:1 ^[1] |
| Response time (typical) | 1ms GtG (with overdrive) |
| Minimum dimensions (W x D x H) | 71.35 x 5.25 x 42.62 cm (without stand) |
| Minimum dimensions (W x D x H) | 28.09 x 2.07 x 16.78 in (without stand) |
| Dimensions With Stand (W \times D \times H) | 71.35 x 24.33 x 61.88 cm |
| Weight | 8.98 kg (with stand) |
| Weight | 19.8 lb (with stand) |
| Display features | On-screen controls; Pivot rotation; Anti-glare; Height adjustable; AMD Freesync™ Premium; Gaming Console Compatible; HP Eye Ease (Eyesafe® certified); HDR |
| Onscreen controls | Management; Information; Exit; Input; Color; Image; Power; Menu; Gaming |
| Display colors | Up to 16.7 million colors supported |
| Display scan frequency (horizontal) | 30-255 kHz |
| Display scan frequency (vertical) | 60-165 Hz (DisplayPort™); 55-144 Hz (HDMI) |
| Camera | No integrated camera |
| Power | 100 - 240 VAC 50/60 Hz |
| Power consumption | 83 W (maximum), 48 W (typical), 0.5 W (standby) |
| Operating temperature range | 5 to 35°C |
| Operating humidity range | 20 to 80% RH |
| Sustainable impact 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 |

| Certifications and compliances | BIS; BSMI; CB; CCC; CE; CEL; CSA; EAC; FCC; ISO 9241-307; KC/KCC; NOM; PSB; TUV Bauart; TUV LBL; VCCI; 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) |
|--------------------------------|--|
| Physical security | None |
| Management Software | OMEN Gaming Hub |
| UPC number | (A2K) 197029618016; (AB0) 197029618054; (AB1) 197029618078; (AB2) 197029618108; (AB4) 197029618115; (ABG) 197029618122; (ABJ) 4573595845715; (ACJ) 197029618139; (AKL) 197029618146; (AR6) 197029618153; (UUF) 197029618160 |
| What's in the box | Monitor; DisplayPort™ cable; Warranty card; Quick Setup Poster; AC power cord ^[7] |

Additional specifications

| Audio port | 1 x 3.5 mm Audio Jack (Audio Out) |
|----------------------------------|---|
| Backlight lamp life | 30,000 hours |
| Backlight type | Edge-lit |
| Base area footprint (imperial) | 8.85 x 9.25 in |
| Base area footprint (metric) | 22.49 x 23.49 cm |
| Bezel | 3-sided borderless |
| Color gamut | 99% sRGB; 95% DCI-P3 |
| Country of origin | Made in China |
| Curvature | Flat |
| Datasheet photo 1 | AHID/52a910acc958d57aeebcc68ee4cfba2c425d276d |
| Datasheet photo 2 | AHID/9ce99338f68003ddb736b46c22b9d43370efdf4c |
| Datasheet photo 3 | AHID/3be0a51fa101f968b07cd0ec46fe303180083d19 |
| Datasheet photo 4 | AHID/47e1983cf6739d785a96f843805f46fcb25b438d |
| Detachable stand | Yes |
| Display area (imperial) | 27.45 x 15.44 in |
| Display area (metric) | 69.73 x 39.23 cm |
| Display contrast ratio (dynamic) | 1000000:1 |
| DisplayPort™ | 1 DisplayPort™ 1.4 |
| Flicker-free | Yes |
| HDCP | Yes, DisplayPort™ and HDMI |
| HDMI | 2 HDMI 2.0 |
| HDR | HDR 400 |
| Hardness | ЗН |
| Haze | 25% |
| Height adjustment range | 100 mm |
| Horizontal viewing angle | 178° |
| Low blue light | Yes, HP Eye Ease (Eyesafe [®] Certified) |
| Non-Operating Humidity Range | 5-95% |
| Operating temperature range | 41 to 95°F |
| Package dimensions (W x D x H) | 32.32 x 6.85 x 20.51 in |
| Package dimensions (W x D x H) | 82.1 x 17.4 x 52.1 cm |
| Package weight | 13.43 kg |
| Package weight | 29.6 lb |
| | |

| Pallet (layers) | 4 |
|--|------------------------------------|
| Pallet dimensions | 41.5 x 32.72 x 87.64 in |
| Pallet dimensions (W x D x H) | 105.4 x 83.1 x 222.6 cm |
| Pallet weight | 744.96 lb |
| Pallet weight | 338.62 kg |
| Panel bit depth | True 8 bit |
| Pixels per inch (ppi) | 92 ррі |
| Power supply type | Internal |
| Product brand name | HP |
| Product dimensions with stand (W x D x H) | 28.09 x 9.58 x 24.36 in |
| Products per pallet | 24 |
| Products per pallet layer | 6 |
| Refresh rate (maximum) | 165 Hz |
| Resolution (maximum) | QHD (2560 x 1440 @ 165 Hz) |
| Screen treatment | Anti-glare |
| Stand color | Black |
| Tilt | -5 to +20° |
| UNSPSC code | 43211902 |
| VESA mounting | 100 mm x 100 mm (bracket included) |
| Vertical viewing angle | 178° |
| Viewable diagonal size | 31.5" (80 cm) |
| pivot | ±90° |
| | |

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

[2] DisplayPort m 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 2560 x 1440 at 60 Hz with 8-bit color using one DisplayPort m , HDMI. The video card of the connected PC must be capable of supporting 2560 x 1440 and include one DisplayPort m or one HDMI outputs to drive the monitor at the Preferred Mode.

[7] Included cables may vary by country.

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