PRODUCT SUMMARY

PREDATOR X45

Marketing Name
PREDATOR X45

Model Name
X45

Project Name
X45

FCS
Q1, 2023

Type
Hero

Project Team
Michelle Chao, Product Marketing
Ken Hsu, Product Management

PREDATOR X45

*The image example applies to PH315-53

PREDATOR X45
CURVED COLOSSAL OLED

Enjoy gaming at its finest with an OLED gaming monitor boasting UWQHD (3440x1440) resolution and 240Hz refresh rate with 0.01ms pixel response time. Equipped with Type-C and a built-in KVM switch, the X45 is the perfect gaming companion, suitable for console gamers as well as PC gamers.

Target Audience

Professional Gamer

Gamers in this category want a reliable machine that is futureproof, powerful and can handle the stress of being used daily.

Console Gamer

Gamers in this category want a large screen that allows for gaming together with friends and family. They want a machine that supports the latest generation of console games.
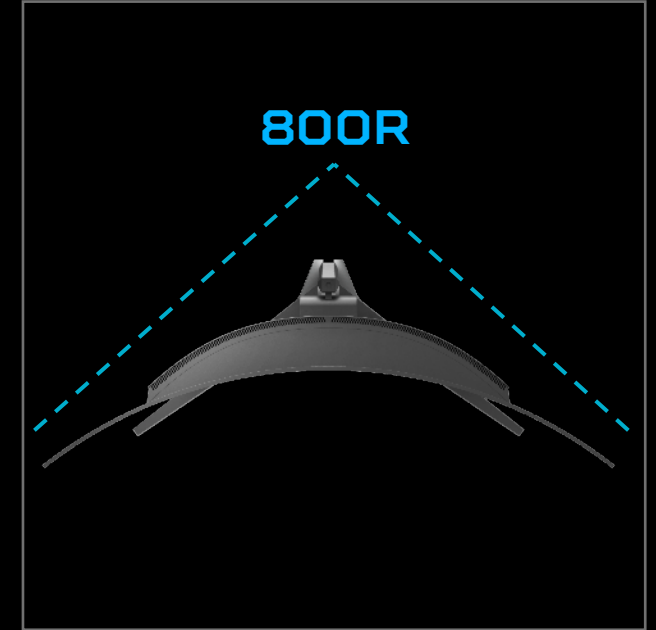
1. BRILLIANT COLORS

With a display of these mammoth-like proportions, everything must look good. The **OLED** display with **true 10Bit** is obligated to offer stunning contrast, cinematic color. And with the **DCI-P3 99% color gamut and HDR10,** colors are practically bursting out of the screen. **Image retention refresh** keeps the images from sticking.

2. SO MUCH SCREEN

Whether you want to use it as a TV replacement, the primary gaming display in your stream setup or as a single, standalone behemoth – none can deny the X45's majesty: **44.5 inches of pure, UWQHD glory.**

3. ULTIMATE IMMERSION

Featuring an incredible **800R** curvature, the X45 surrounds gamers in the gaming world.

4. TEAR-FREE FRAMES

Get in the game with the **AMD FreeSync Premium™** display. Each display is validated by AMD to bring you a smooth, **variable refresh rate (VRR)** gaming experience that eliminates tearing, stuttering, artifacts, and flicker.

5. FAST AND FURIOUS

If you want seamless gameplay at absolutely ridiculous levels of speed, you've come to the right place. With an **240Hz refresh rate** and **0.01ms pixel response time** your sessions will be fluid, unbroken and unmatched – with little to no ghosting.
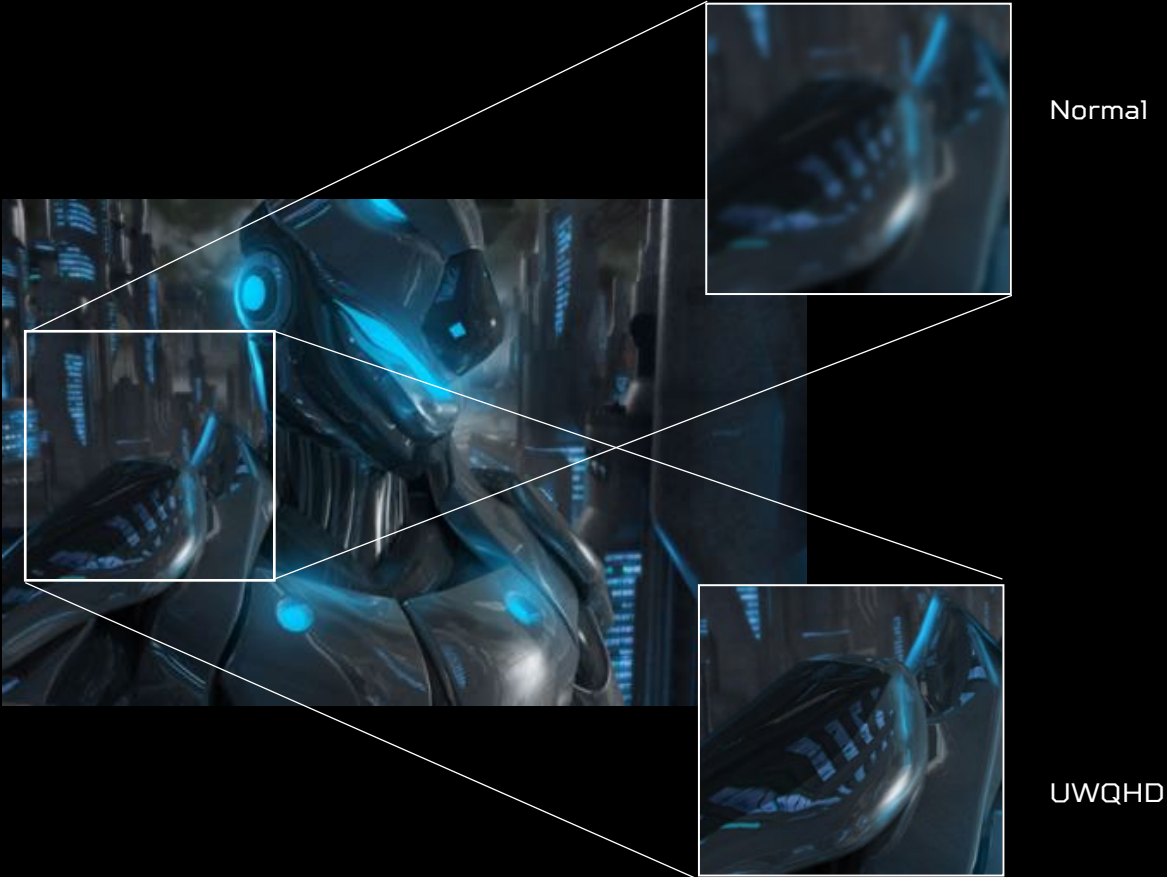

6. MANY PORTS

Only some of the best technology was included – with DisplayPort 1.4 port **and HDMI, allowing for console gaming.** A USB hub, complete with a **USB Type-C port (90W PD)**, provide a comfy home for all those extra peripherals.

UWQHD Resolution

X45 brings users into a perfect colorful world with UWQHD (3440x1440). The sharp UWQHD display is 21:9 in 3440x1440 high resolution, which is two times higher than Full HD displays. The enhanced sharpness can now be easily seen and takes your visual experience to a new level.

Normal

UWQHD

OLED

The X45 display uses an OLED panel, bringing users improved image quality with higher contrast, brightness, wider viewing angle, and a brilliant color range. Enjoy HDR picture quality with real blacks, less motion blur and faster response times. It also has lower power consumption.

Image retention refresh function allows users to 'refresh' the display to adjust the uniformity of the screen to avoid image sticking, an issue associated with OLEDs. Users can use this function anytime they want.
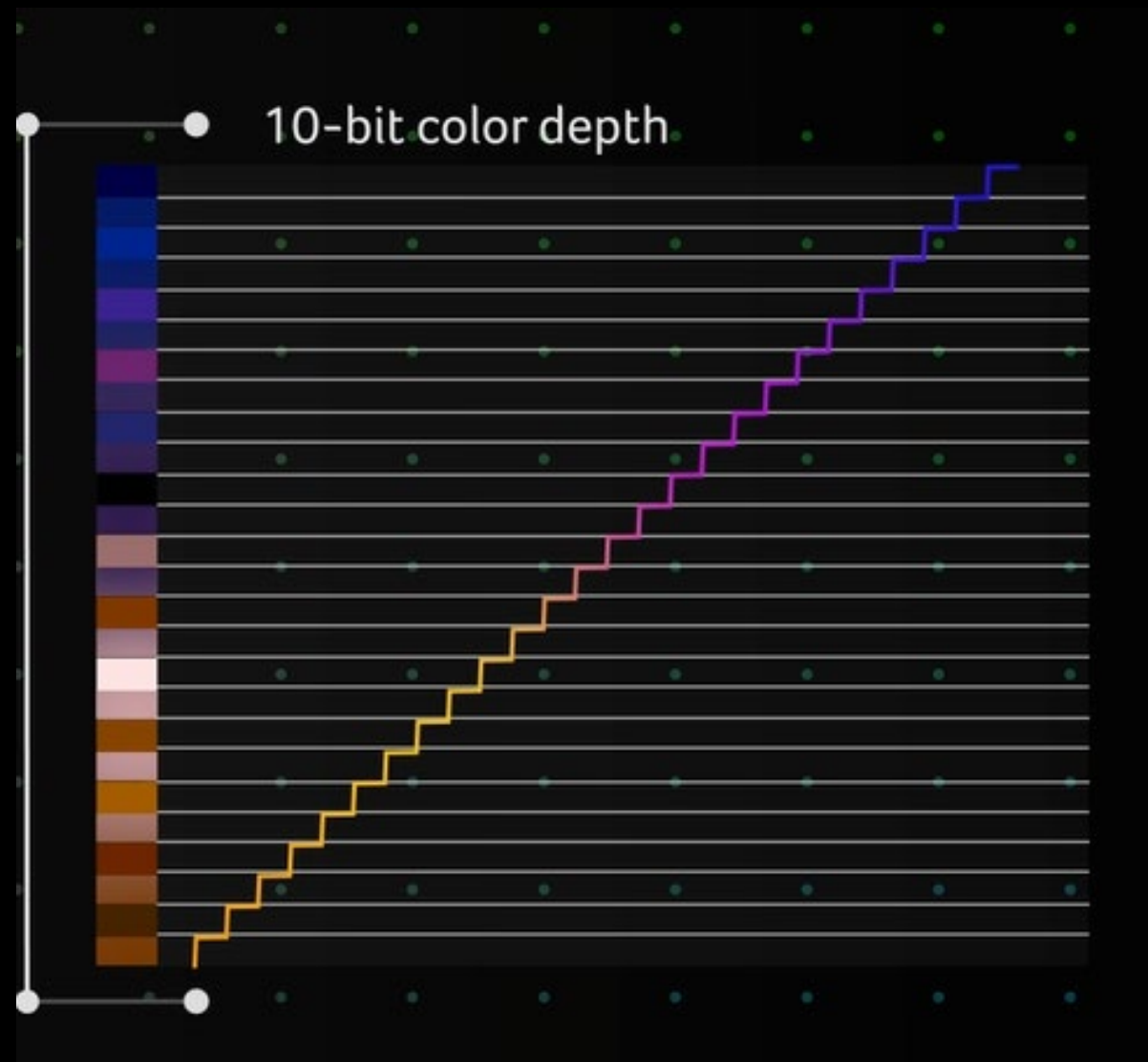
OLED Screen
Protection Mechanisms

In order to protect your OLED monitor, Acer has implemented several mechanisms that will extend the life of your monitor and keep your screen as good as new.

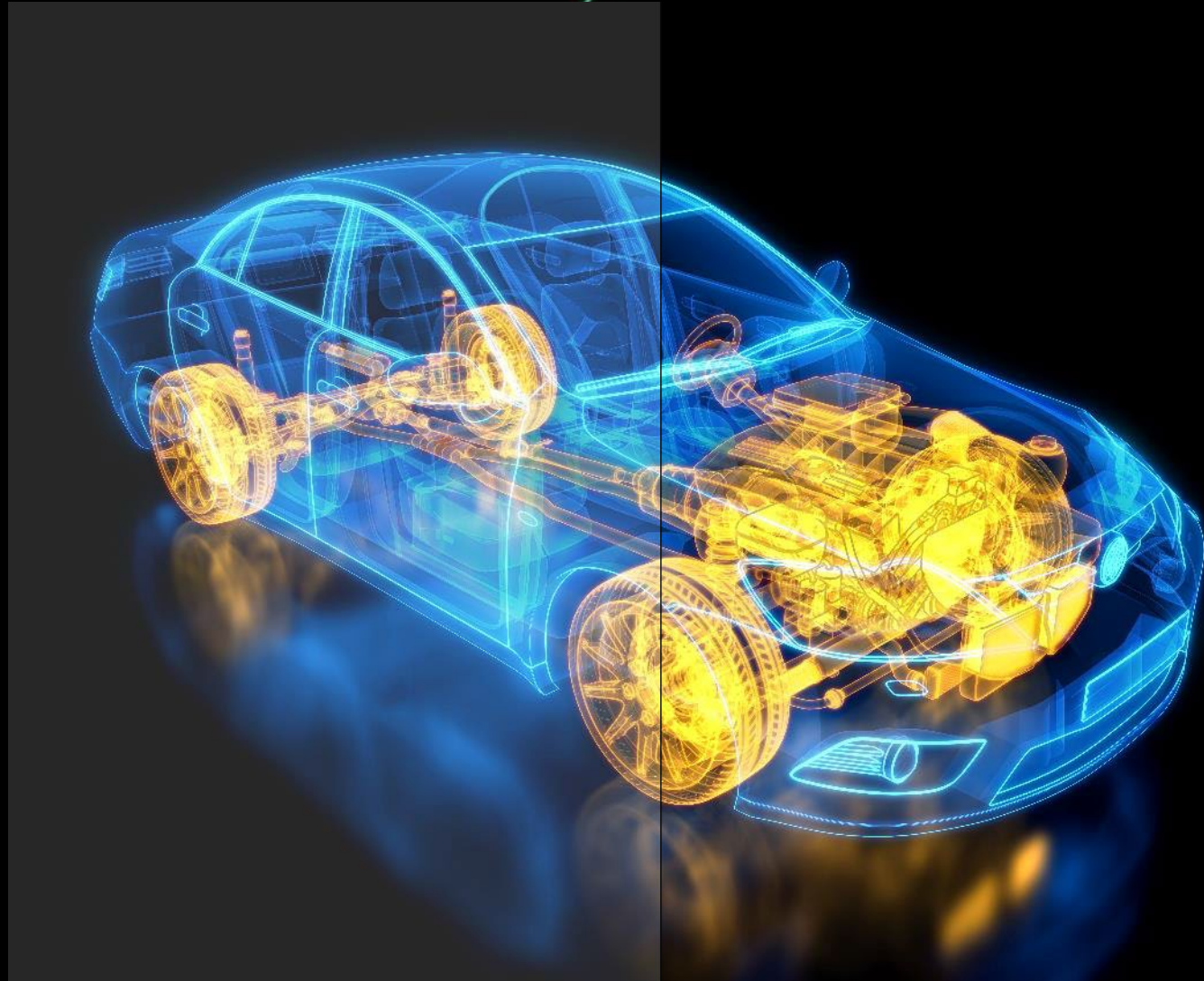| Function	Description
Display Saver (always on)	When there is no activity, the screen automatically dims
Constant Brightness	When a bright white window is open, the brightness is kept at a constant even when the window's size changes. This ensures comfort while viewing
Image Retention Refresh	Will refresh screen pixels after a set amount of time, so that pixels that are always on screen don't 'stick' and cause image retention (e.g. toolbar, icons, etc)
Screen Move (always on)	Automatically moves the pixels to prevent image sticking

True 10Bit

For monitors, bit depth is quite important as a higher bit depth reduces image banding. The banding results from a lower bit depth attempting to describe an image but with a smaller color pool. Predator monitors, which support up to 10 bits, will capture 64 times more color than their 8bit counterparts, allowing images to appear smoother and more realistic.

10 Bit Color

Perfect Blacks

OLED panel pixels can turn off completely, creating true blacks that standard LCDs cannot achieve. This creates the particularly brilliant colors and contrasts OLEDs are known for.
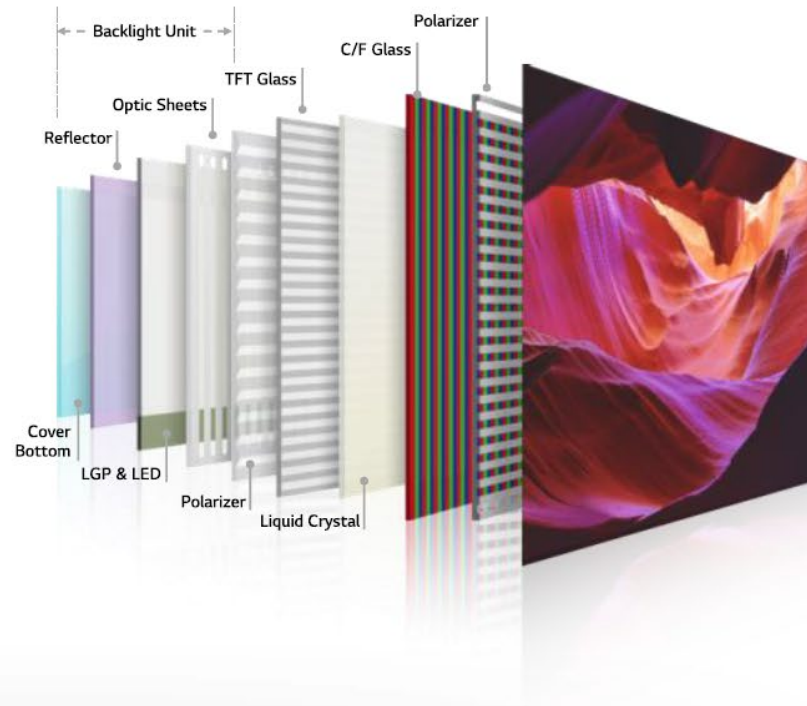

Non-OLED

OLED

Eco-Friendly

OLED panels use a lot less materials than standard LCDs. With less material waste, OLEDs are consequently more environmentally friendly.
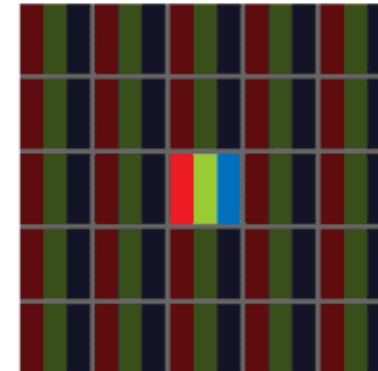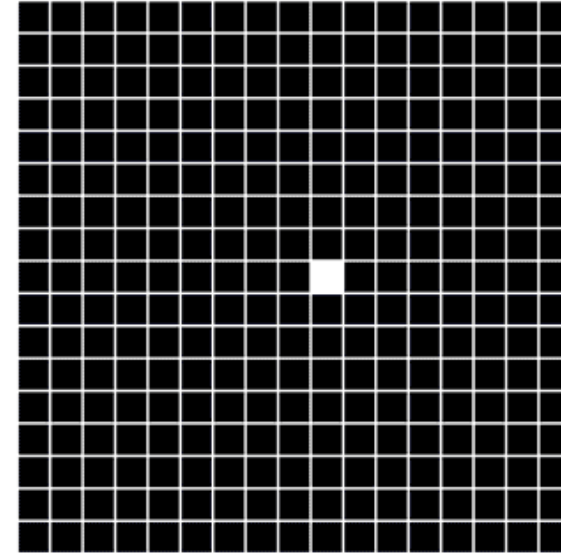
Zero Bright Dot

What are Bright Dots?

Bright dots, also known as stuck pixels, are sub-pixel defects which cause pixels to be permanently "on," resulting in certain pixels not updating correctly or displaying the correct color.

These are not to be confused with dark dots/dead pixels (which display as permanently "off," or black), which are not covered under the Zero Bright Dot policy.

* The apparent bright dot defect area should be larger than 1/2 the area of a sub-pixel and persistent in size under a pure black pattern to be considered a (1) bright dot defect. Subject to verification. Some exclusions may apply.

What is the Acer "Zero Bright Dot" policy?

Under the Acer Zero Bright Dot policy, your display may be eligible to be replaced during the duration of the limited warranty period if the number of bright dots is greater than the allowable number*. Specific policies vary depending on model and region.

Stuck bright pixel

Wide Viewing Angle

The OLED display's wide viewing angle feature is able to display color accurately to an ultra wide viewing angle so that no matter which angle you choose to view it from, your monitor will display colors perfectly with no difference in contrast ratio.

Predator Wide Viewing Angle monitor preserve image clarity and prime color from every angle up to 178。

Conventional monitor shows color shift and image distortion while viewing in different angles

240Hz Refresh Rate

X45 also features a high refresh rate of 240Hz. The 240Hz refresh rate speeds up the frames per second to deliver ultra-smooth 2D motion scenes. With a rapid refresh rate of 240Hz, X45 shortens the time it takes for frame rendering, lowers input lag and provides gamers with an excellent in-game experience.

240Hz

AMD FreeSync™ Premium

The monitor supports DisplayPort* & HDMI* on FreeSync™. That means this monitor can work with a FreeSync-supporting graphics card and driver software* to eliminate screen tearing, while minimizing lag and latency. With FreeSync™, the monitor's frames are synced with the graphics card's frames, which eliminates screen tearing and delivers very smooth gaming experiences.

1. Enabling smooth gameplay
2. Eliminating screen tearing
3. Minimizing lag and latency

NVIDIA G-SYNC® Compatible

Get a seamless, tear-free gaming experience and smooth, responsive visuals with this certified NVIDIA® G-SYNC® Compatible monitor. The display enables Variable Refresh Rates (VRR) by default on NVIDIA GeForce® GTX 10-Series and RTX® 20-Series graphics cards.
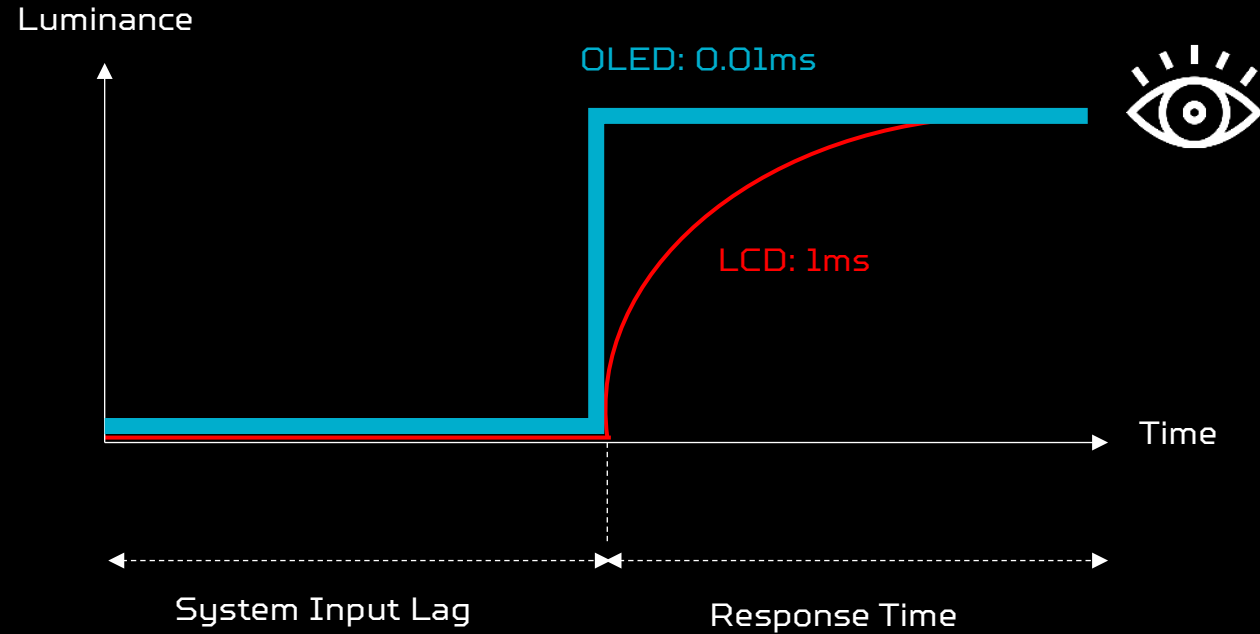
1. Enabling smooth gameplay
2. Eliminating screen tearing
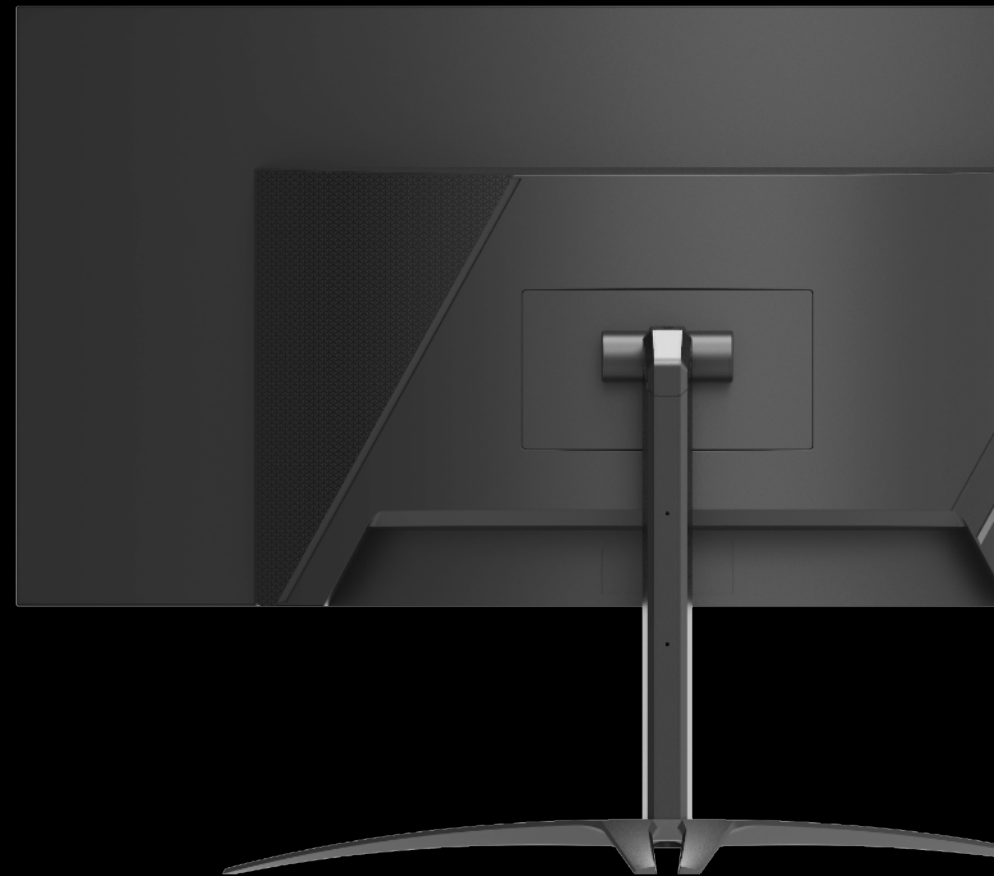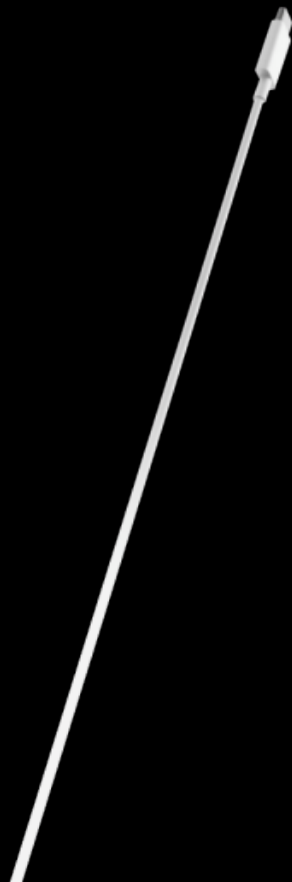3. Minimizing lag and latency

Pixel Response Time

What does a 0.01ms pixel response time mean to you? It means that the annoyances of motion blur or visual artifacts will be practically nonexistent. Perfect.

Pixels turn on and off at super fast rates, providing faster color changes compared to traditional lcds.

Luminance

OLED: 0.01ms

LCD: 1ms

Time

System Input Lag

Response Time

USB Type-C

With the availability of USB Type-C
PD 90W with top-speed data
transmission in reversible plug
orientations, productivity is enhanced.
It also cuts down the number of wires
currently needed to make the device
work and charges your phone directly.

Built-in KVM Switch

Monitors with Type-C and USB-B ports can work as KVM switches, enabling users to switch between desktops and laptops, without having to change monitors, keyboards, or mice.

HDR10

HDR is a display technology that creates deeper levels of black and white contrast, giving you a greater level immersion through realistic image recreation. Using scalar chip decoding and mapping technology, the Edge-lit LED panel and global dimming functionality, the display pulls you in to the lifelike contrast and color of HDR. It has global dimming LEDs arrays on the bottom which could dim in full/shut off the image completely to reach the optimal black & white levels. In short: Acer HDR displays support HDR10 format. It gives contrast with that realistic touch we have in real world.
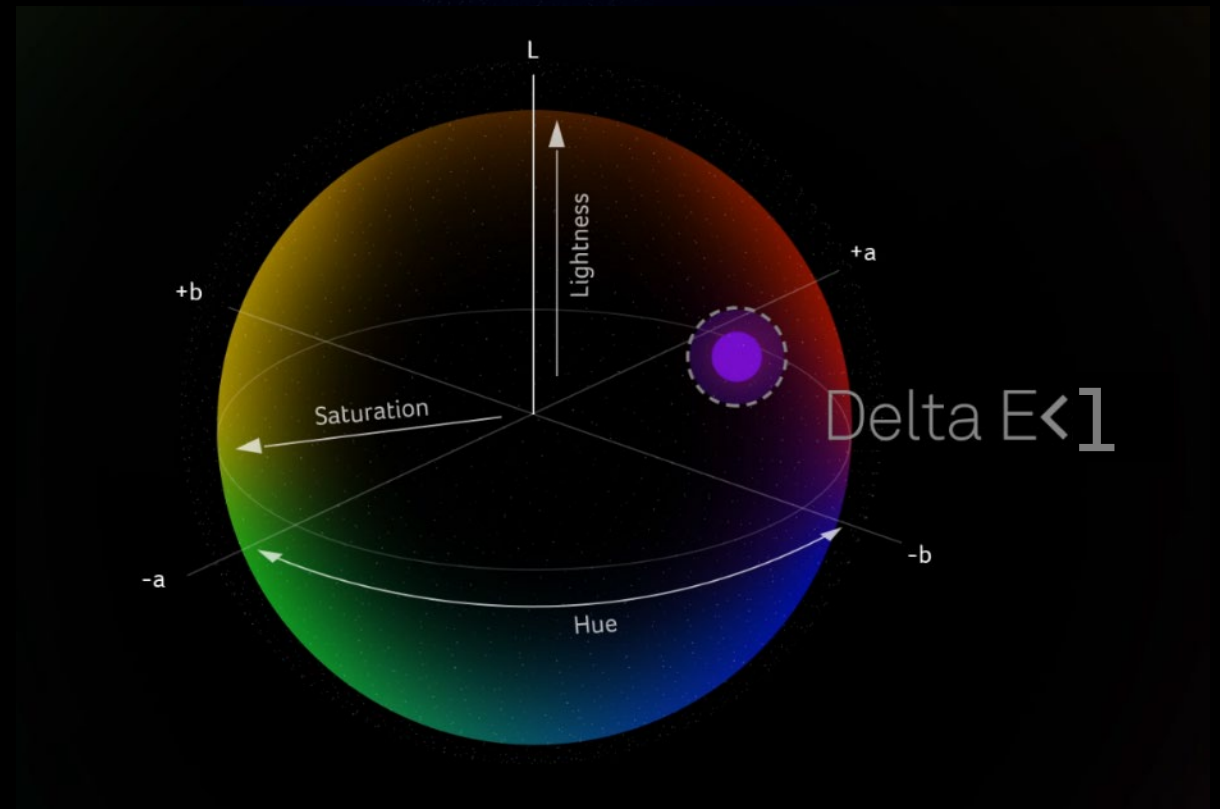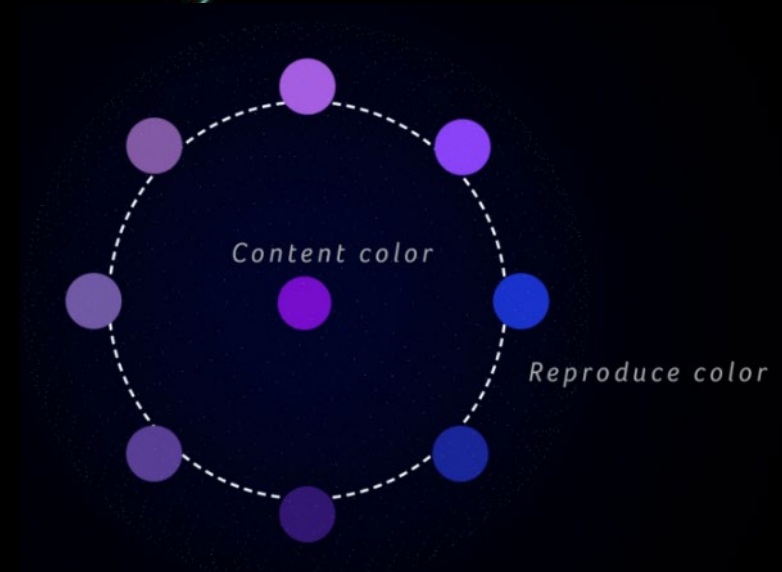
DCI-P3

DCI-P3 is the standardized format for high-definition television defined by the International Telecommunication Union – ITU, which is ideal for video editors during post-production work and animation designers who deal with color-critical projects. Acer Monitors are built to cover DCI-P3 color space, which is well known as the standard format for HDTVs. A native DCI-P3 color gamut ensures that every color is faithfully represented with optimal precision.

35.6% more color space than sRGB
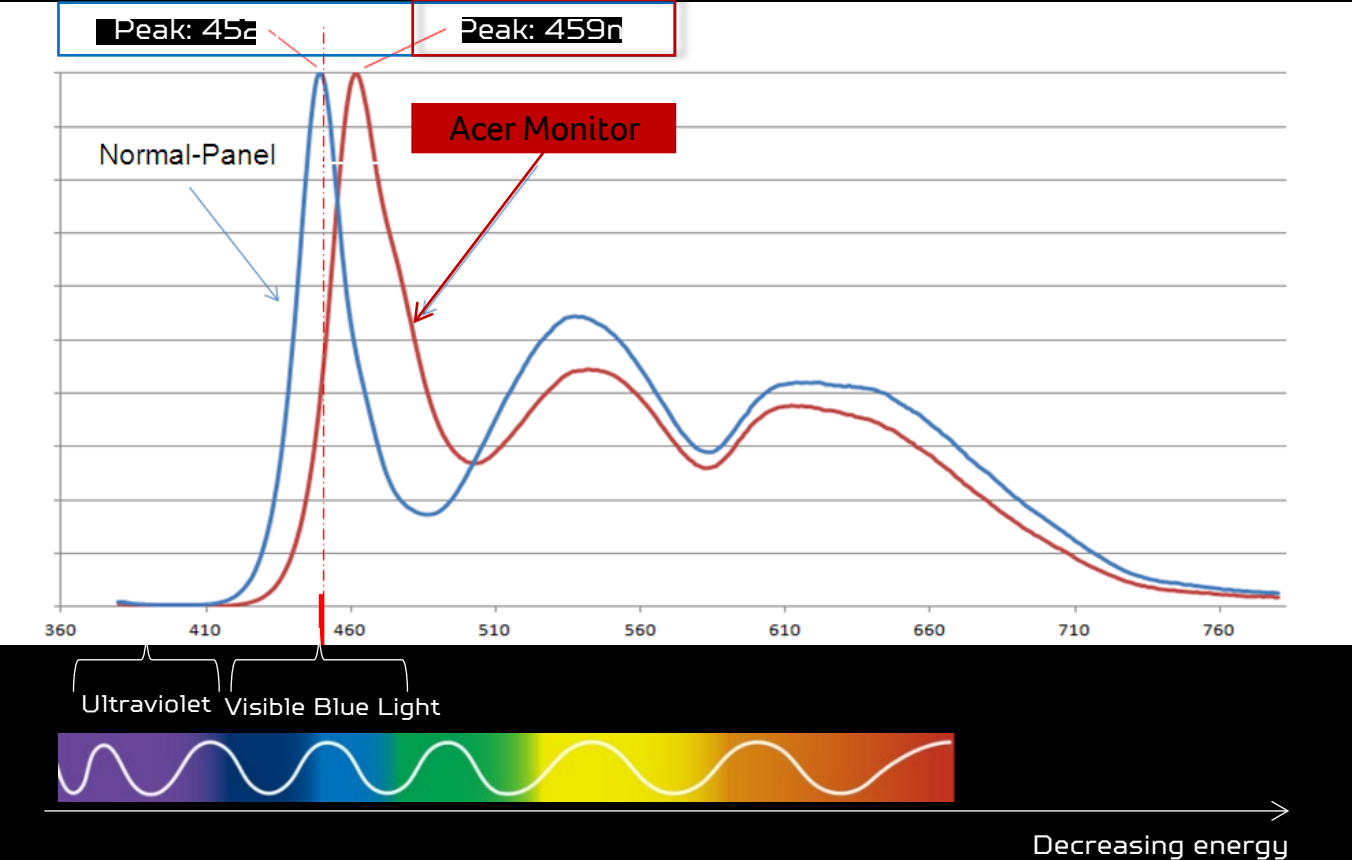
DCI-P3
sRGB
Adobe RGB

Delta E<1

Superb color accuracy Not all colors are represented accurately in monitors. As a result, a system of measurement known as Delta E is used to track the noticeable difference in colors. The lower number of Delta E, the less noticeable difference between content color & reproduced color.

BlueLightShield™ Pro

Advanced solution for eye protection

Acer **BlueLightShield Pro** technology shifts the white LED panel's blue light peak from normal to a less hazardous range,which effectively filters out harmful blue light.

BlueLightShield™ Pro

BlueLightShield Pro The display panel can further reduce blue light producing better image quality without sacrificing color accuracy and brightness.

Peak: 452

Peak: 459n

Acer Monitor

Normal-Panel

360   410   460   510   560   610   660   710   760

Ultraviolet   Visible Blue Light

Decreasing energy

BlueLightShield Pro
Produces better image quality

Normal panel
Color shift and brightness decay

Eyesafe 2.0 Certified

The new Eyesafe standard is the highest standard of eye protection. It encompasses the original TUV standards, but added additional requirements. Blue light toxicity factor vs. total lux must be less than 0.085. The blue light emission of the product must be lower than 100 W.m-2.str-1.

Original TUV Standard

- Blue light to luminance level less than 20%
- Blue to green ratio less than 2
- Raio of light in the range from 415nm-455nm to 400nm-500nm is less than 50%
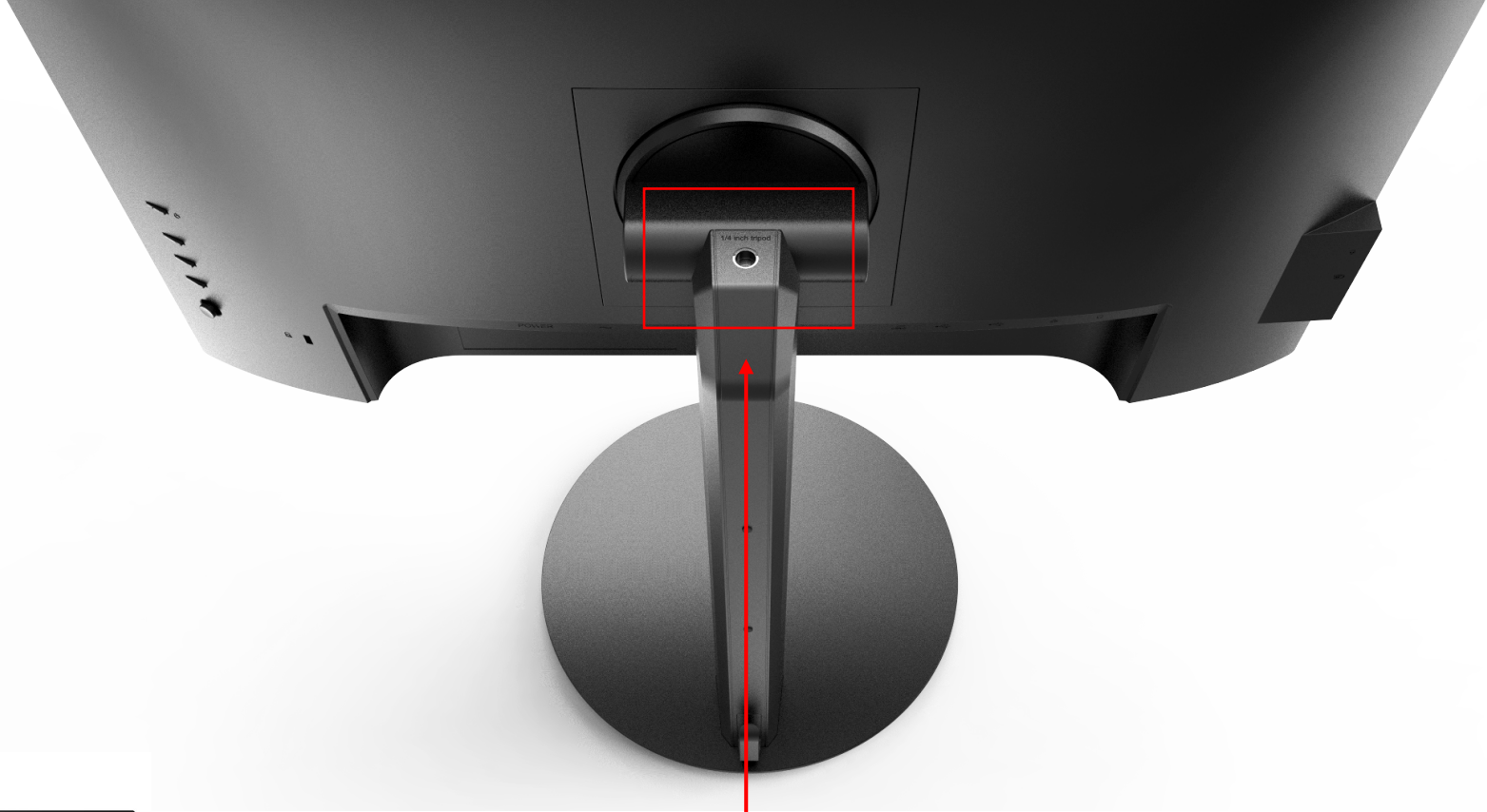
Eyesafe 2.0 Standard

- Blue light to luminance level less than 20%
- Blue to green ratio less than 2
- Ratio of light in the range from 415nm-455nm to 400nm-500nm is less than 50%
- Photobiological safety
- Maximum energy reduction
- Blue light toxicity limit

Tripod Design

A tripod mount socket is included on the monitor stand, allowing users to mount accessories such as a camera or monitor screen light.

Applications:
1. Webcam for livestreaming while gaming: Perfect for casual and professional gamers alike
2. Webcam for conferencing: Convenient for office and WFH scenarios
3. Monitor screen light: Supplementary light source to replace a desk light

Webcam

Monitor screen light

*All images used are for illustration purposes only.
Actual product may differ from images shown. Product specs and availability subject to change without notice.
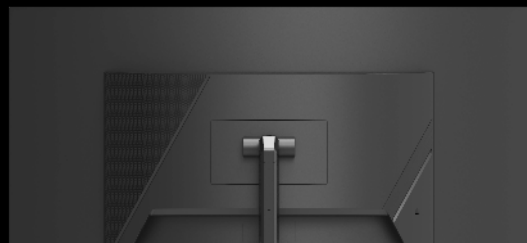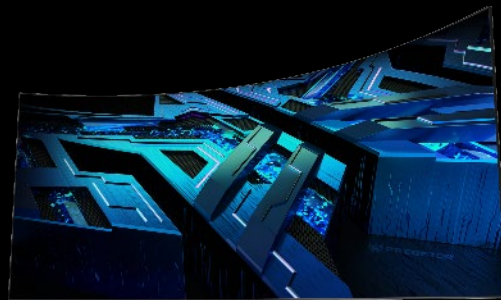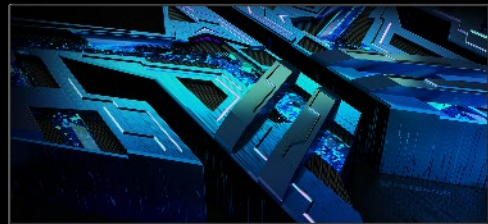
4-Sided Frameless Design

With its innovative design, this monitor boasts a seamless edge-to-edge display that eliminates borders on all four sides, offering an immersive viewing experience that draws you into the content like never before.

By removing the traditional bezels found on standard monitors, our borderless design maximizes screen real estate, allowing for a more expansive and uninterrupted viewing area.

PRODUCT VIEWS

SPECIFICATIONS

Product Name		Predator X45
Panel Specifications	Display Size	44.5"
	Panel type	OLED
	Max. Resolution and Refresh Rate	HDMI:3440x1440@100Hz DP:3440x1440@240Hz Type-C:3440x1440@240Hz
	Glare	No
	Response Time	0.01ms (PRT) / 0.03ms (GTG)
	Contrast Ratio	1,500,000:1
	Brightness	Typ. 150nits Peak 450nits Peak 1000nits @ HDR 3%
	Viewing Angle	178° (H), 178° (V)
	Color gamut	DCI-P3 99%
	Colors	1.07B
	Bits	10Bit
System Specifications	Input Signal	2HDMI(2.0)+1DisplayPort(1.4)+1Type-C(90W)+SPK+Audio out+USB 3.2x2+USB-B (2up 2down)
	VESA Wall Mounting	200x100mm
	Speaker	5Wx2
	Power Supply (100 - 240 V)	Internal
	Tilt/Swivel/Height Adjustment/Pivot	-5°~15°/+/- 15°/110mm/NA

THE BEST IS YET TO COME