

Philips OLED+ extends the power of the 5th Gen P5 Intelligent Dual Picture Engine

The OLED+986 and OLED+936 feature an enhanced version of Philips AI technology to establish new reference level PQ

- 5th Gen P5 with AI Intelligent Dual Picture Engine features a dedicated AI chip to introduce enhanced AI performance and offer exceptional PQ.
- Four sided Ambilight technology combines with the exceptional 5th Gen AI PQ to create a totally immersive viewing experience.
- New high-performance OLED panel with 20% more peak brightness to offer superb contrast, brilliant specular highlights, and incredible detail plus improved viewing angles.
- Unique ‘anti-burn-in’ technology protects the screens of flagship OLED sets.
- AI functionality adds Content Classification to automatically detect and indicate film content while offering viewing options.
- Ambient Intelligence intelligently incorporates the sets light sensor into the AI functionality to optimise PQ to the ambient lighting levels.
- AI Machine Learning Sharpness, AI Smart Bit Enhancement 2.0 and improved Perfect Natural Reality features.
- HDR10+ Adaptive – uses HDR10+ meta data to optimise content to the ambient environment on a scene-by-scene basis.
- Fast Motion Clarity mode – uses 120Hz black frame insertion for ultra-realistic smooth motion with increased sharpness.
- HDMI 2.1 functionality with VRR & Low Latency for the perfect gaming experience
- Calman Ready for automatic calibration to ensure absolute colour accuracy to industry standards.

Amsterdam, August 31st 2021 – The 2021 OLED+ sets feature a new enhanced version of Philips most power processing suite, the 5th Gen Intelligent Dual Picture Engine. The dual chip version of the 5th Gen P5 continues to be the only one to offer AI Smart Bit Enhancement 2.0 and AI Machine Learn Sharpness and an improved Perfect Natural Reality function but its latest development now adds AI Content Classification (including film detection) and Ambient Intelligence.

Both of the new OLED+ sets now feature the four-sided version of the unique Ambilight technology that combines with the superb PQ of the 5th Gen P5 to offer the ultimate, totally immersive viewing experience.

The new OLED+ sets also feature the latest high-performance OLED panels with a new Emission Layer and Micro Lens Array to offer a 20% improvement in peak light output and improved viewing angles.

The result from the combination of the 5th Gen P5, the latest OLED panel and Ambilight is a new reference quality picture with incredible contrast, brilliant specular highlights, exceptional detail in both bright and dark scenes, market leading sharpness, vivid but natural colours, accurate skin tones and fast, realistic motion reproduction - and all continually optimised to the local ambient light level.

Philips TV's enhanced AI functionality builds upon the already exceptional AI performance of the existing 2021 OLED sets by adding the extra power of a dedicated AI chip. New for 2021 is the addition of AI content classification with film detection and Ambient Intelligence to intelligently integrate the sets light sensor into the operation of the AI functionality.

Film detection allows the 5th Gen P5 to automatically 'flag' movies and offer the viewer the option to switch to either Filmmaker or Home Cinema Mode.

Ambient Intelligence uses a new measurement meter to intelligently adjust the presentation of both SDR and HDR content and provide the optimum contrast for the ambient light level in all viewing environments – offering better HDR performance for HLG, HDR10 & HDR10+ and even Dolby Vision sources via the *Dolby Bright mode*.

The new OLED+ sets also offer HDR10+ Adaptive which combines HDR10+ dynamic metadata with real-time ambient light information to allow automatically optimized brightness levels, adjusted to the viewing environment on a scene-by-scene basis.

The extra power of the Intelligent Dual Picture Engine makes the OLED+ sets unique in Philips OLED range in offering AI Smart Bit Enhancement 2.0, AI Machine Learning Sharpness, and an improved Perfect Natural Reality feature.

Rather than apply one sharpness setting/level across the whole picture of the image, the AI Machine Learning Sharpness feature applies 'local' sharpness enhancement within the frame, applying different settings in specific regions of the image to ensure optimal sharpness over the whole picture.

The AI Smart Bit Enhancement 2.0 feature solves the problem of losing detail when removing banding from very poor source content. By applying the extra processing power of the additional AI chip, the system can extend 8-bit video to near 14-bit precision in areas where banding occurs, resulting in smoother gradations without detail loss in other parts of the picture.

The enhanced AI system also features an AI improved version of Philips TV's unique Perfect Natural Reality technology which now converts SDR source content into an HDR-like picture with 30% more natural sharpness, thanks to a new highlight detection and enhancement feature - which combines with the systems enhanced contrast - creating a visibly more realistic image with deeper details, creating more depth impression especially with reflections, making the picture truly come to life.

The 2021 OLED+ models are also unique in the marketplace by protecting their high-performance OLED panels using Philips unique anti-burn-in system. The anti-burn-in solution uses an advanced logo detection function which monitors a grid of 32400 zones to very accurately detect static content and gradually reduce the intensity of its local light output to avoid burn-in and without compromising the output of other parts of the screen.

Philips TV's system removes the anti-burn problem for 95% of static images including logos and gaming content.

Also new for 2021 is the Fast Motion Clarity feature, which gives a subtle but ultra-realistic, smooth transition from image to image with increased sharpness but without introducing artefacts and avoids wide-area, field-flicker by running at 100Hz rather than the more usual 50Hz.

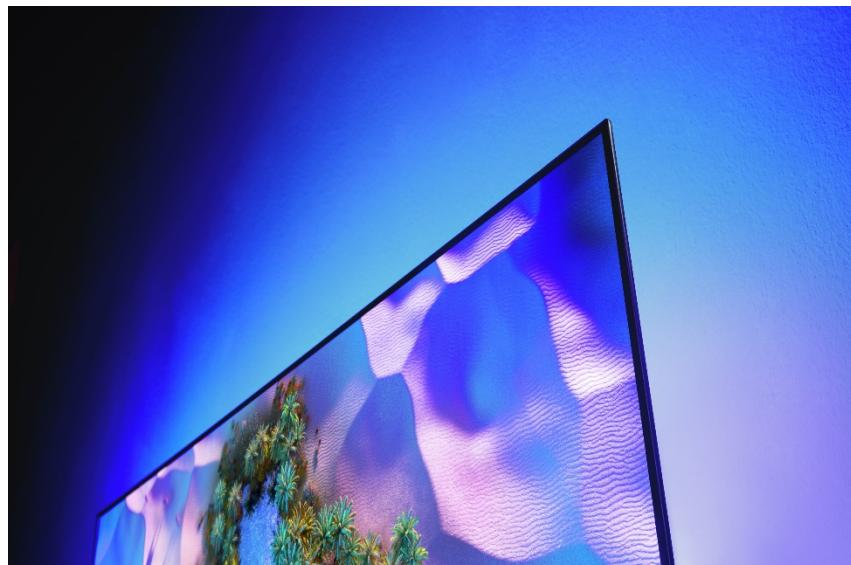
Fast Motion Clarity (FMC) avoids the 'sample & hold' motion blurring effect by using 120Hz Black Frame insertion to continuously write on screen images line-by-line, for a gradual transition from one image to the next, effectively operating as a scanning backlight.

Viewers will be offered four settings for FMC: Off, MIN, MID or MAX.

All of the superb picture quality of the 2021 OLED+ sets is also available to gamers thanks to the inclusion of HDMI 2.1 connectivity offering e-arc, VRR for 4K content from 48Hz to 120Hz at an impressive high speed of 48Gbps (444, 12 bit) while Freesync Premium and Auto Game mode are also added to the Auto latency Mode of the previous generation sets.

The result is a minimum latency of just 11ms (7ms from the platform and 4ms from the display), making the Philips 2021 OLED TVs among the fastest currently available.

Professional level calibration is also new for 2021 via the inclusion of the Calman Ready feature that brings easy access to auto-colour calibration allowing the set to be finely adjusted to ensure absolute colour accuracy to industry agreed standards.



About TP Vision

TP Vision is a consumer electronics key player in the world of audio visual digital entertainment. TP Vision concentrates on developing, manufacturing and marketing Philips branded TV sets (Europe, Russia, Middle East, South America, India and selected countries in Asia-Pacific) and Philips audio products (all around the Globe). We do this by combining the innovative Philips brand heritage with our design expertise, operational excellence, flexibility and speed of TPV Technology. With these combined strengths, we bring high-quality TV sets to the market: smart and easy to use with sophisticated styling. We believe in creating products that offer a superior audio and visual experience for consumers. With Philips TVs, TP Vision is a global leader in the hospitality market. TP Vision is the exclusive brand licensee of Philips TVs for the above listed countries and, on the global stage for the Philips audio products. TP Vision employs close to 2,000 people in several locations around the globe and is 100% owned by TPV, one of the world's leading monitor and LCD TV manufacturers, selling and marketing Philips branded TVs in China. TPV has been able to drive its growth over the years by leveraging its economies of scale and core competencies in R&D, manufacturing, logistic efficiency and quality.



News Release

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