

PHILIPS



Philips Unite LED
6000 Panels

Signage Solutions

27"

Direct View LED



27HDL6500IR

Philips Unite LED 6000 Series panels

Premium performance. Seamless integration.

The Philips Unite 6000 Series redefines professional LED performance. Purposefully engineered and expertly specified to bring ease of installation together with advanced features and stunning visual quality. Ideal for true business impact.

Vivid brightness – up to 1000 nits

- Enabling bolder visuals – even in lighter environments.

Precision calibration – colour accuracy

- Multi-layer calibration for consistency across modules.
- Advanced colours, gradients and greyscale.

Brilliant COB LED + critical redundancy

- 0.7 fine pixel pitch for ultra-sharp visuals.
- Dual power and data for fail-safe performance.
- Ideal for control rooms and high visual dependency needs.

Ultra-smooth picture motion

- High refresh rates deliver flicker-free, fluid motion

Flexible configurations

- Modular design adapts to any space or resolution need.
- 5G connection with simplified cabling and reduced costs.

Highlights

Brilliant Flip Chip COB LED for advanced quality

Delivering advanced quality visuals with an ultra-fine 0.7 mm pixel pitch. Vibrant colours, deep blacks and uniform brightness create an immersive visual experience, ideal for high-impact professional settings. Cool common cathodes bring stability, reliability and higher definition together with lower energy consumption for reduced cost of ownership.

Mission critical redundancy

The 27HDL6500IR with 7HDL6578IM/00, and the 27HDL6400IR with 7HDL6493IM/00 Philips Unite LED 6000 Series options include built-in power and data redundancy. Providing continuous operation even during component failure, these solutions are ideal for high-stakes environments such as control rooms and broadcasting studios, where uptime is non-negotiable.

Ultra-smooth picture motion

With refresh rates up to 3840 Hz, Philips Unite LED 6000 Series panels deliver flicker-free, seamless visuals. Ideal for playing fast-moving content or live feeds, and for mission-critical applications where every frame counts.

Vivid brightness – up to 1000 nits

Up to 1000 nits of brightness ensure vibrant, high-contrast imagery even in areas with high ambient light. Ideal for well-lit spaces such as lobbies, shopping centres and retail spaces, or broadcasting environments that demand visual impact.

Precision calibration – colour accuracy

Factory and multi-layer calibration guarantee uniform brightness and colour accuracy across all modules. The result? Consistent image quality that maintains brand integrity and professional standards at any scale. Ideal for bringing revenue-generating advertising on board. Multilayer greyscale calibration ensures flawless dark tone uniformity, vibrant colour accuracy and ultra-smooth detail. Meanwhile, automatic recalibration keeps visuals perfect – ideal for premium LED installations.

Colour depth that stands out

Higher colour depth enhances gradients, eliminates banding and brings content to life with more detail and realism. Advanced greyscale brings greater texture quality to imagery while also supporting faster processing

times. Ensuring premium performance for branding perfection, unrivalled presentations and immersive displays.

Optimised for every environment

Designed for flexibility, the advanced brightness control, calibration layers and performance tuning features within the Philips Unite LED 6000 Series simplify integration and operation, adapting to lighting and content needs, and delivering content without compromise. Front access makes servicing and maintenance easier, with each of the modules in a cabinet able to be removed easily, and direct access to the power supply, hub board and wiring.

Efficient configuration with 5G connection

The advanced receiving card within the Philips Unite LED 27HDL6500IR supports 5G network cable input, with a higher loading capacity enabling the use of just one receiving card per panel. Resulting in fewer cables and full compatibility with the NovaStar COEX ecosystem.

Specifications

Picture/Display

Brightness (nits): 1000 nit
Brightness uniformity: $\geq 95\%$
Calibration (brightness/colour): Brightness
Colour temperature adjust range: 4000~9500
(by software)
Colour temperature default: 6500 K \pm 500 K
Contrast ratio: 5000:1
Bit-depth (bit): 16
Frame frequency (Hz): 50~60
Refresh rate (Hz): ≤ 3840 Hz
Colour uniformity: ± 0.012 Cx, Cy
Colour coordinates: 0.313, 0.325 (± 0.012 Cx, Cy)
Viewing angle ($^{\circ}$) H/V: >160/160
Scan rate: 64

Power

Input voltage: AC100~240 V (50 and 60 Hz)
BTU/M2: 2106
Cabinet Max Power consumption (W): 125
Cabinet Typical Power consumption (W): 60
Power consumption/M2 (W): 617
Power supply unit: HWT-403V8-2S-SS

Operating conditions

Temperature range (operation): -20 - 45 $^{\circ}$ C
Temperature range (storage): -20 - 50 $^{\circ}$ C
Humidity range (operation)[RH]: 10%-80% RH
Humidity range (storage) [RH]: 10%-85% RH
Working environment (indoor/outdoor): Indoor

Cabinet

Cabinet area (m2): 0.2025
Cabinet resolution (W x H): 768 x 432 pixels
Data connector: RJ45
Power connector: C13/C14
Receiving card quantity: 2
Receiving card brand: NovaStar
Weight (kg): 5.12 kg (\pm)
Cabinet construction: Die-Casting Aluminium
Cabinet Size (W x H x D in mm):
600 x 337.5 x 33.14
Cabinet size (inches): 27.1"
Receiving card type: CA50E

Module

LED type: COB
Pixel constitution: 1R1G1B_Flip Chip
Pixel pitch (mm): 0.78125

Module size (W x H in mm):

150 x 168.75 x 2.0 mm (tolerance: +0/-0.1)
LED Pole type: Common Cathode
LED Lifetime (hrs, half brightness): 100,000
Conformal coating (UV-resistant): No
Flatness of LED module with back shell:
 ≤ 0.25 mm
Module Resolution (W x H in pixels): 192 x 216
Included: Black screen power saving, Flash
memory, Dynamic power saving

Miscellaneous

Warranty: 2 years
Regulatory approvals: FCC SDOC, Part 15, Class
A, EN55032, EN55035, EN61000-3-2, EN61000-3-
3, IEC/UL60950, IEC/UL62368, CE, RoHS

Packaging Data

Gross weight (KG): 8.649 kg(\pm 430 g)
Package size (W x H x D mm): 800*475*186 mm
Net weight: 5.05Kg(\pm 250g)
Carton/Paper Weight: 3.099 kg(\pm 155 g)
Plastic Weight: 0.5 kg(\pm 24 g)

