

Philips  
LCD monitor with  
SoftBlue Technology

## E Line

22 (21.5" / 54.6 cm diag.)  
Full HD (1920 x 1080)

224E5EDSB



# SoftBlue Technology

developed for the wellbeing of your eyes

Designed for you: The elegant new Philips E-line monitor features new SoftBlue Technology for easy on the eyes brilliantly colored images.

### Superb Picture Quality

- SoftBlue Technology easy on the eyes and maintains color
- AH-IPS display gives awesome images with wide viewing angles
- 16:9 Full HD display for crisp detailed images
- Less eye fatigue with Flicker-free technology
- SmartImage Lite for easy optimized image settings
- SmartControl Lite: For quick and easy display tuning
- SmartContrast for deep black level details

### Stylish design

- Minimalistic looks with Ultra Narrow Bezel
- Superb glossy and texture finish
- VESA mount for convenience

### Experience immersive multimedia

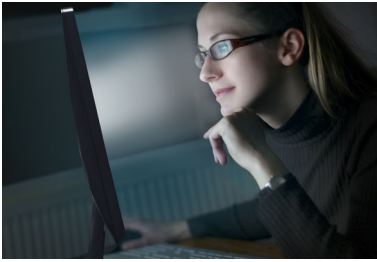
- MHL technology for enjoying mobile content on big screen



# PHILIPS

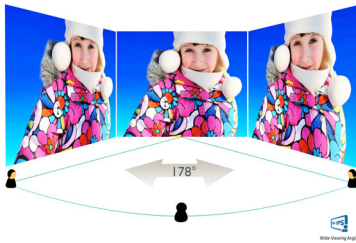
# Highlights

## SoftBlue Technology



SoftBlue LED technology uses a smart technology to reduce harmful shortwave blue light without affecting the color or image of the display. SoftBlue LED technology is certified by international testing organizations TUV Rheinland to reduce harmful blue light.

## AH-IPS technology



AH-IPS displays use an advanced technology which gives you extra wide viewing angles of 178/178 degree, making it possible to view the display from almost any angle. Unlike standard TN panels, AH-IPS displays gives you remarkably crisp images with vivid colors, making it ideal not only for Photos, movies and web browsing, but also for professional applications which demand color accuracy and consistent brightness at all times.

## 16:9 Full HD display



Picture quality matters. Regular displays deliver quality, but you expect more. This display features enhanced Full HD 1920 x 1080

resolution. With Full HD for crisp detail paired with high brightness, incredible contrast and realistic colors expect a true to life picture.

## Flicker-free technology

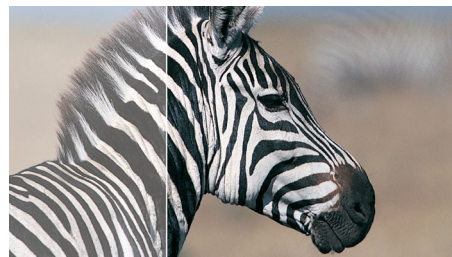


Due to the way brightness is controlled on LED-backlit screens, some users experience flicker on their screen which causes eye fatigue. Philips Flicker-free Technology applies a new solution to regulate brightness and reduce flicker for more comfortable viewing.

## SmartImage Lite

SmartImage Lite is an exclusive, leading edge Philips technology that analyzes the content displayed on your screen. Based on a scenario you select, SmartImage Lite dynamically enhances the contrast, color saturation and sharpness of images and videos for ultimate display performance - all in real time with the press on a single button.

## SmartContrast



SmartContrast is a Philips technology that analyzes the contents you are displaying, automatically adjusting colors and controlling backlight intensity to dynamically enhance contrast for the best digital images and videos or when playing games where dark hues are displayed. When Economy mode is selected, contrast is adjusted and backlighting fine-tuned for just-right display of everyday office applications and lower power consumption.

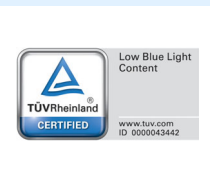
## Ultra Narrow Bezel

Utilizing latest technology panels, the new Philips displays are designed with minimalistic approach by limiting the outer bezel thickness to about 2.5mm. Combined with in-panel black matrix strip of around 9mm, the overall bezel dimensions are reduced significantly allowing for minimal distractions and maximum viewing size. Especially suited for multi-display or tiling setup like gaming, graphics design and professional applications, the Ultra narrow bezel display gives you the feeling of using one large display.

## MHL technology



Mobile High Definition Link (MHL) is a mobile audio/video interface for directly connecting mobile phones and other portable devices to high-definition displays. An optional MHL cable allows you to simply connect your MHL capable mobile device to this large Philips MHL display, and watch your HD videos come to life with full digital sound. Now not only you can enjoy your mobile games, photos, movies, or other apps on its big screen, you can simultaneously charge your mobile device so you never run out of power half way.



## TUV Certified Low Blue Light

Philips displays with SoftBlue LED technology are certified by TUV Rheinland Low Blue Light testing standard (2PFG) to reduce harmful blue light.



# Specifications

## Picture/Display

- LCD panel type: AH-IPS LCD
- Backlight type: W-LED system
- Panel Size: 21.5 inch / 54.6 cm
- Effective viewing area: 476.1 (H) x 267.8 (V)
- Aspect ratio: 16:9
- Optimum resolution: 1920 x 1080 @ 60Hz
- Response time (typical): 14 (GtG) ms
- SmartResponse (typical): 5 ms (GtG)
- Brightness: 250 cd/m<sup>2</sup>
- Contrast ratio (typical): 1000:1
- SmartContrast: 20,000,000:1
- Pixel pitch: 0.248 x 0.248 mm
- Viewing angle: 178° (H) / 178° (V), @ C/R > 10
- Picture enhancement: SmartImage Lite
- Display colors: 16.7 M
- Scanning Frequency: 30 -83 kHz (H) / 56 -76 Hz (V)
- MHL: 1080p@30Hz
- sRGB
- SoftBlue
- Flicker-free

## Connectivity

- Signal Input: MHL-HDMI (digital, HDCP), VGA (Analog), DVI-D (digital, HDCP)
- Sync Input: Separate Sync, Sync on Green
- Audio (In/Out): HDMI audio out

## Convenience

- User convenience: Power On/Off, Menu, Volume, Input, SmartImage lite
- OSD Languages: Brazil Portuguese, Czech, Dutch, English, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Korean, Polish, Portuguese, Russian, Simplified Chinese, Spanish, Swedish, Traditional Chinese, Turkish, Ukrainian
- Other convenience: Kensington lock, VESA mount (100x100mm)
- Plug & Play Compatibility: DDC/CI, Mac OS X, sRGB, Windows 7, Windows 8

## Stand

- Tilt: -5/20 degree

## Power

- On mode: 15.25 W (typ.) (EnergyStar 6.0 test method)
- Standby mode: 0.5 W (typ.)
- Off mode: 0.3 W (typ.)
- Power LED indicator: Operation - White, Standby mode- White (blinking)
- Power supply: External, 100-240VAC, 50-60Hz

## Dimensions

- Product with stand (mm): 500 x 394 x 213 mm
- Product without stand (mm): 500 x 306 x 47 mm
- Packaging in mm (WxHxD): 562 x 466 x 106 mm

## Weight

- Product with stand (kg): 3.14 kg
- Product without stand (kg): 2.82 kg
- Product with packaging (kg): 5.01 kg

## Operating conditions

- Temperature range (operation): 0°C to 40°C °C
- Temperature range (storage): -20°C to 60°C °C
- Relative humidity: 20%-80 %
- Altitude: Operation: +12,000ft (3,658m), Non-operation: +40,000ft (12,192m)
- MTBF: 50,000 (Excluding backlight) hour(s)

## Sustainability

- Environmental and energy: EnergyStar 6.0, EPEAT Silver, RoHS, Lead-free, Mercury Free
- Recyclable packaging material: 100 %

## Compliance and standards

- Regulatory Approvals: CE Mark, FCC Class B, CU, EAC, SASO, KUCAS, cETLus, SEMKO, TUV/ISO9241-307, EPA, WEEE, PSB, CECF, VCCI, KCC, KC, TUV Cert. - blue light cut-off, BSMI

## Cabinet

- Color: Black Cherry / Black
- Finish: Glossy / textured



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12 NC: 8670 001 30938  
EAN: 87 12581 73602 6

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\* This Philips display is MHL certified. However, in case your MHL device does not connect or work correctly, check with your MHL device FAQ or vendor directly for direction. The policy of your device manufacturer may require you to purchase their brand specific MHL cable or adapter in order to work

\* Requires optional MHL certified mobile device and MHL cable. (not included) Please check with your MHL device vendor for compatibility.

\* Standby/Off energy saving of ErP is not applicable for the MHL charging functionality

\* For complete list of MHL-enabled products refer to [www.mhlconsortium.org](http://www.mhlconsortium.org)

\* "IPS" word mark / trademark and related patents on technologies belong to their respective owners.

\* Smart response time is the optimum value from either GtG or GtG (BW) tests.