



Philips Brilliance  
LCD monitor, LED  
backlight

**S Line**  
23" (58.4 cm)  
Full HD display

**231S4LSS**

## Sustainable productivity

with energy efficient LED display

The Philips LED display using 25% recycled materials and PVC, BFR free housing is ideal for eco-friendly productivity

### Great performance

- LED technology ensures natural colors
- SmartContrast gives enhanced rich black details
- TrueVision ensures lab quality images

### Sustainable Eco-design

- 0.1 watt Soft-Off mode
- SmartPower: Up to 50% power saving
- PVC-BFR free housing
- 100% recyclable packaging
- Zero mercury content

### Easy to experience

- Screen tilts to your ideal, individualized viewing angle
- SmartControl for easy performance tuning
- SmartImage presets for easy optimized image settings

# PHILIPS

# Highlights

## LED technology

White LED's are solid state devices which light up to full, consistent brightness faster saving startup time. LED's are free from mercury content which allows for eco-friendly recycling and disposal process. LED's allow for better dimming control of LCD backlight, resulting in super high contrast ratio. It also gives superior color reproduction thanks to consistent brightness across the screen.

## SmartImage



SmartImage is an exclusive leading edge Philips technology that analyzes the content displayed on your screen and gives you optimized display performance. This user friendly interface allows you to select various modes like Office, Photo, Movie, Game, Economy etc., to fit the application in use. Based on the selection, SmartImage dynamically optimizes the contrast, color saturation and sharpness of images and videos for ultimate display performance. The Economy mode option offers you major power savings. All in real time with the press of 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.

## TrueVision



TrueVision is a proprietary Philips technology that uses advanced algorithm for testing and aligning monitor display which gives you the ultimate display performance. Philips ensures TrueVision monitors leave the factory fine-tuned with this process giving you consistent color and picture quality.

## PVC-BFR free housing

This Philips monitor housing is free from brominated flame retardant and polyvinyl chloride (PVC-BFR free)

## Zero mercury content

Philips monitors with LED backlighting are free of Mercury content, one of the most toxic natural substances, which affects humans and animals. This reduces the environmental impact of the display throughout its life-cycle, from manufacturing to disposal.

## SmartPower

SmartPower is an artificial intelligent technology which dynamically analyzes the content of the screen image to achieve power saving. The backlight intensity can be controlled automatically and pre-set by the system to reduce the power consumption by

up to 50%, which saves substantially on energy costs

## SmartControl for easy tuning

PC software for fine tuning display performance and settings. Philips offers users two choices for display setting adjustment. Either navigate the multilevel On Screen Display menu through buttons on the display itself or use the Philips SmartControl software to easily adjust the various display settings in a familiar way

## Sustainability

Philips is committed to use sustainable, eco-friendly materials across its monitor range. All body plastic parts, metal chassis parts and packing materials use 100% recyclable materials. In selected models, we utilize  $\geq$  65% Post-Consumer Recycled plastics, ensuring reduction in waste. Strict adherence to RoHS standards ensure substantial reduction or elimination of toxic substances like Lead and Mercury. Our display housing is made up of PVC/BFR free material. For more information, please visit Philips @ <http://www.asimpleswitch.com/global/> to learn more.

## 0.1 Watt Standby mode

0.1 watt Soft-Off mode

## Screen tilts

Screen tilts to your ideal, individualized viewing angle



# Specifications

## Connectivity

- Signal Input: DVI-D (digital, HDCP), VGA (Analog)
- Sync Input: Separate Sync, Sync on Green

## Picture/Display

- Panel Size: 23 inch / 58.4 cm
- Aspect ratio: 16:9
- LCD panel type: TFT-LCD
- Backlight type: W-LED system
- Pixel pitch: 0.265 x 0.265 mm
- Optimum resolution: 1920 x 1080 @ 60Hz
- Brightness: 250 cd/m<sup>2</sup>
- Display colors: 16.7M
- Contrast ratio (typical): 1000:1
- SmartContrast: 20,000,000:1
- Response time (typical): 5 ms
- Viewing angle: 170° (H) / 160° (V), @ C/R &gt; 10
- Picture enhancement: SmartImage
- Effective viewing area: 509.18 (H) x 286.41 (V)
- Scanning Frequency: 30 - 83 kHz (H) / 56 - 75 Hz (V)
- sRGB

## Convenience

- Plug & Play Compatibility: DDC/CI, Mac OS X, sRGB, Windows 7/Vista/XP
- User convenience: SmartImage, Brightness, SmartPower, Menu, Power On/Off
- OSD Languages: English, French, German, Italian, Portuguese, Russian, Simplified Chinese, Spanish
- Other convenience: Kensington lock, VESA mount (100x100mm)
- Control software: SmartControl Premium

## Stand

- Tilt: -5/20 degree

## Power

- ECO mode: 15.3W (typ.)
- Power supply: 100-240VAC, 50-60Hz, Built-in

- Off mode: 0.1W
- On mode: 21.3W (typ.) (EnergyStar 5.0 test method)
- Standby mode: 0.1W
- Power LED indicator: Operation - White, Standby mode- White (blinking)

## Dimensions

- Product with stand (mm): 547 x 431 x 207 mm
- Packaging in mm (WxHxD): 589 x 478 x 139 mm
- Product without stand (mm): 547 x 343 x 60 mm

## Weight

- Product with packaging (kg): 5.84 kg
- Product with stand (kg): 3.68 kg
- Product without stand (kg): 3.03 kg

## Operating conditions

- Temperature range (operation): 0°C to 40°C °C
- MTBF: 30,000 hour(s)
- Relative humidity: 20%-80 %
- Temperature range (storage): -20°C to 60°C °C

## Sustainability

- Environmental and energy: EnergyStar 5.0, RoHS
- Recyclable packaging material: 100 %
- Specific Substances: PVC / BFR free housing, Mercury free
- Recycled material: 25%

## Compliance and standards

- Regulatory Approvals: BSMI, CE Mark, FCC Class B, GOST, SASO, SEMKO, TUV Ergo, TUV/GS, UL/cUL, WEEE

## Cabinet

- Finish: Texture
- Foot: Black
- Front bezel: Silver
- Rear cover: Black

