



Philips  
LCD monitor with  
SmartImage

- S-line
- 23" / 58.4cm
- Full HD display

231S4LCS



## Sustainable productivity

with energy efficient ergonomic LED display

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

### Sustainable Eco-design

- 25% recycled material with EPEAT Gold
- 100% recyclable packaging
- PVC-BFR free housing

### Great performance

- LED technology ensures natural colors
- TrueVision ensures lab quality images

### Designed for people

- SmartErgoBase enables people-friendly ergonomic adjustments
- Low bezel-to-table height for maximum reading comfort

### Easy to experience

- Modern Touch controls
- SmartImage presets for easy optimized image settings
- SmartControl for easy performance tuning

**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.

## SmartErgoBase

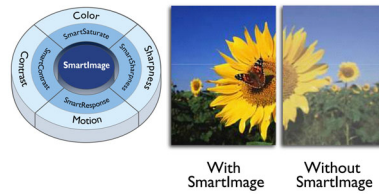
The SmartErgoBase is a monitor base that delivers ergonomic display comfort and provides cable management. The base's people-friendly height, swivel, tilt and rotation angle adjustments position the monitor for maximum comfort that can ease the physical strains of a long workday; cable management reduces cable clutter and keeps the workspace neat and professional.

## Low bezel-to-table height



The Philips monitor, thanks to its advanced SmartErgoBase, can be lowered down almost to desk level for a comfortable viewing angle. Low bezel-to-table height is the perfect solution if you use bifocals, trifocals or progressive lens glasses for your computing work. Additionally, it allows for users with greatly different heights to use the monitor in their preferred angle and height settings, helping them reduce fatigue and strain.

## 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!

## TrueVision



TrueVision is a proprietary Philips technology that uses advanced algorithm for testing and aligning monitor display which gives you the ultimate display performance that is 4 times more stringent than Windows sRGB requirements. Only Philips ensures each and every monitor that leaves the factory is fine tuned with this process so you can get consistent color and picture quality.

## EPEAT Gold

Philips EPEAT GOLD certified monitors ensure protection for human health and environment, and are highly energy efficient ensuring low emissions of climate changing green house gases. EPEAT program helps

purchasers evaluate, compare and select Monitors based on 51 environmental criteria supported by US EPA. GOLD certification ensures that at least 30% of plastic used is Post Consumer Resin, which ensures reduction in use of toxic and hazardous materials. EPEAT Gold is valid only where Philips registers the product. Please visit [www.epeat.net](http://www.epeat.net) for registration status in your country.

## 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

## Touch controls

Touch controls are intelligent, touch sensitive icons that replace protruding buttons that lets the user adjust the monitor to their requirement. Responding to your lightest touch, Touch control gives the monitor a modern feel

## 100% recyclable packaging

"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 some selected models we utilize upto 65% post consumer recycled plastics. Strict adherence to RoHS standards ensure substantial reduction or elimination of toxic substances like Lead, for example. Mercury content in monitors with CCFL backlight has been reduced significantly, while eliminated in monitors with LED backlight completely. Visit Philips @ <http://www.asimpleswitch.com/global/> to learn more.

## PVC-BFR free housing

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



# Specifications

## Picture/Display

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

## Connectivity

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

## Convenience

- User convenience: SmartImage, Brightness, SmartPower, Menu, Power On/Off
- Control software: SmartControl Premium
- OSD Languages: English, French, German, Italian, Portuguese, Russian, Simplified Chinese, Spanish
- Other convenience: Kensington lock, VESA mount (100x100mm)
- Plug & Play Compatibility: DDC/CI, Mac OS X, sRGB, Windows 8/7/Vista/XP

## Stand

- Height adjustment: 110 mm
- Pivot: 90 degree
- Swivel: -65/65 degree
- Tilt: -5/20 degree

## Power

- ECO mode: 15.3 W (typ.)
- On mode: 21.3 W (EnergyStar 5.0 test method)

- Standby mode: 0.1W
- Off mode: 0.1W
- Power LED indicator: Operation - White, Standby mode- White (blinking)
- Power supply: 100-240VAC, 50-60Hz, Built-in

## Dimensions

- Packaging in mm (WxHxD): 620 x 401 x 167 mm
- Product with stand (mm): 547 x 507 x 227 mm
- Product without stand (mm): 547 x 343 x 60 mm

## Weight

- Product with packaging (kg): 6.81 kg
- Product with stand (kg): 4.92 kg
- Product without stand (kg): 3.03 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: 30,000 hour(s)

## Sustainability

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

## Compliance and standards

- Regulatory Approvals: BSMI, CE Mark, FCC Class B, GOST, SASO, SEMKO, TCO 6.0, TUV Ergo, TUV/GS, UL/cUL, WEEE

## Cabinet

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



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