



Philips  
LED-backlit LCD monitor  
with SmartImage

**S Line**  
23" (58.4 cm)  
Full HD (1920 x 1080)

**231S4QCB**



## Essential features, efficient performance

for maximum productivity

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

### Great performance

- IPS technology for full colors and wide viewing angles
- SmartContrast gives enhanced rich black details

### Designed for people

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

### Easy to experience

- SmartImage presets for easy optimized image settings
- SmartControl for easy performance tuning

### Sustainable Eco-design

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

# PHILIPS

# Highlights

## IPS technology



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 - even in 90 degree Pivot mode! Unlike standard TN panels, 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.

## 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.

## SmartErgoBase



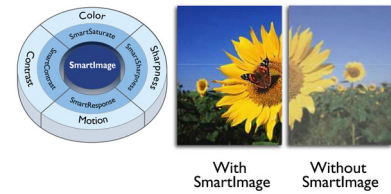
The SmartErgoBase is a monitor base that delivers ergonomic display comfort and provides cable management. The base's people-friendly height, swivel, tilt and rotation angle adjustments position the monitor for maximum comfort that can ease the physical strains of a long workday; cable management reduces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

## 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

## 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.



# Specifications

## Picture/Display

- LCD panel type: IPS 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): 14 (Gray to Gray) ms
- SmartResponse (typical): 7 ms (GTG\_BV)
- 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: 178° (H) / 178° (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 8.1 / 8 / 7

## Stand

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

## Power

- ECO mode: 12.7 W (typ.)
- On mode: 20 W (typ.) (EnergyStar 6.0 test method)
- Standby mode: <0.2 W (typ.)
- Off mode: <0.2 W (typ.)

- 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): 7.39 kg
- Product with stand (kg): 5.50 kg
- Product without stand (kg): 3.70 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 (backlight) hour(s)

## Sustainability

- Environmental and energy: EnergyStar 6.0, EPEAT Gold\*, 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, cETLus, FCC Class B, GOST, SASO, SEMKO, TCO 6.0, TUV Ergo, TUV/GS, WEEE

## Cabinet

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

## What's in the box?

- Monitor with stand
- Cables: VGA, Power
- User Documentation



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