



Philips Brilliance  
LCD monitor, LED  
backlight with  
PowerSensor

**P-line**

23"/58.4 cm Full HD IPS display

**Brilliance**

**231P4QPYEB**



## Sustainable eco design display

with PowerSensor saves energy bills

The Philips PowerSensor IPS LED display, which uses 65% post consumer recycled plastics and PVC, BFR-free housing, is ideal for eco-friendly productivity

### **Sustainable Eco-design**

- PowerSensor saves up to 80% energy costs
- Zero power consumption with 0 watt hard switch
- 65% post consumer recycled plastics with TCO Edge
- PVC-BFR free housing

### **Brilliant performance**

- IPS LED wide view technology for image and colour accuracy
- DisplayPort offers audio and video over a single, long cable
- Built-in stereo speakers for multimedia

### **Designed for people**

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

### **Easy to experience**

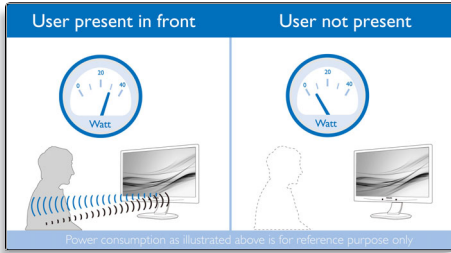
- SmartImage presets for easy optimised image settings
- USB Hub with four ports for easy connections

**PHILIPS**

sense and simplicity

# Highlights

## PowerSensor



PowerSensor is a built-in 'people sensor' that transmits and receives harmless infrared signals to determine if the user is present and then automatically reduces monitor brightness when the user steps away from the desk, cutting energy costs by up to 80 percent and prolonging monitor life

## IPS technology



IPS displays use an advanced technology that gives you extra wide viewing angles of 178/178 degrees, 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 colours, making it ideal not only for Photos, movies and web browsing, but also for professional applications, which demand colour accuracy and consistent brightness at all times.

## DisplayPort

DisplayPort is a digital link from PC to monitor without any conversion. With higher capabilities than DVI standard, it is fully capable to support up to 15 metre cables and 10.8 Gbps/sec data transfer. With this high performance and zero latency, you get the fastest imaging and refresh rates — making DisplayPort the best choice for not only general office or home use, but also for the more demanding gaming and films, video

editing and more. It also keeps interoperability in mind via the use of various adapters.

## SmartErgoBase

The SmartErgoBase is a monitor base that delivers ergonomic display comfort and provides cable management. The user-friendly height, swivel, tilt and rotation angle adjustments of the base allow the monitor to be positioned for maximum comfort to help ease the physical strains of a long workday. In addition, cable management reduces cable clutter and keeps the workspace neat and professional.

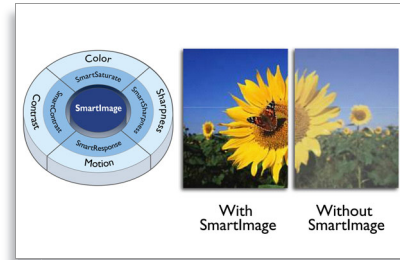
## Four Ports USB 2.0 HUB

USB Hub allows user to conveniently connect their plug and play multimedia devices such as USB memory devices, camera, portable HDD, Web camera, PDA, Printer and many other devices which have USB connection available. The conveniently located USB 2.0 Hub on the monitor allows USB 2.0 signals to pass through to the computer. Note that many devices like cameras and HDD may need to be powered On independently, as they have higher power requirements than the monitor USB Hub can provide.

## Low bezel-to-table height

Thanks to its advanced SmartErgoBase, the Philips monitor 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 users of different heights to use the monitor at their preferred angle and height settings, helping them to reduce fatigue and strain.

## SmartImage



SmartImage is an exclusive leading edge Philips technology that analyses the content displayed on your screen and optimises your 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 optimises the contrast, colour saturation and sharpness of images and videos for ultimate display performance. The Economy mode option offers you major power savings. All in real time at the touch of a single button!

## TCO Edge

TCO Edge certification is given to products that go beyond existing eco-labelling programmes. Over and above standard TCO requirements, it further mandates that the product uses a minimum of 65% post-consumer recycled plastics, is energy efficient, uses minimal hazardous materials, has 100% recyclable packaging and, amongst other requirements, is designed for easy recycling. You can rest assured that this Philips monitor is a cutting edge technology product, which is best in class ICT, benefitting you and the planet while helping you make a responsible green IT purchase!

## PVC-BFR free housing

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

## Zero power consumption

At the flick of the 0 watt hard switch, which is conveniently located at the back of the monitor, you can completely cut off your monitor from AC power. This results in zero power consumption, reducing your carbon footprint even further



# 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 @ 60 Hz
- Response time (typical): 14 ms
- SmartResponse (typical): 7 ms (Grey to Grey)
- Brightness: 250 cd/m<sup>2</sup>
- Contrast ratio (typical): 1000:1
- 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 colours: 16.7 M
- Scanning Frequency: 30–83 kHz (H)/56–75 Hz (V)
- sRGB

## Connectivity

- Signal Input: DisplayPort, DVI-D (digital, HDCP), VGA (Analogue)
- USB: USB 2.0 x 4
- Sync Input: Separate Sync, Sync on Green
- Audio In/Out: PC audio-in, Headphone out

## Convenience

- Built-in Speaker: 1.5 W x 2
- User convenience: SmartImage, Volume, PowerSensor, 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 (100 x 100 mm)
- Plug and Play Compatibility: DDC/CI, Mac OS X, sRGB, Windows 7/Vista/XP

## Stand

- Height adjustment: 130 mm
- Pivot: 90 degree
- Swivel: -65/65 degree
- Tilt: -5/20 degree

## Power

- ECO mode: 18 W
- On mode: 29.1 W (EnergyStar 5.0 test method)
- Standby mode: 0.3 W
- Off mode: Zero watts with Zero switch
- Power LED indicator: Operation - White, Standby mode - White (flashing)
- Power supply: 100-240 VAC, 50-60 Hz, Built-in

## Dimensions

- Product with stand (mm): 547 x 515 x 220 mm
- Product without stand (mm): 547 x 343 x 60 mm
- Packaging in mm (W x H x D): 600 x 400 x 263 mm

## Weight

- Product with stand (kg): 5.23 kg
- Product without stand (kg): 3.09 kg
- Product with packaging (kg): 7.70 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% %
- MTBF: 30,000 hour(s)

## Sustainability

- Environmental and energy: PowerSensor, EnergyStar 5.0, EPEAT Gold, TCO edge, RoHS
- Recyclable packaging material: 100 %
- Post-consumer recycled plastic: 65%
- 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 5.2, TUV Ergo, TUV/GS, UL/cUL, WEEE

## Cabinet

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



Issue date 2012-07-06

Version: 1.0.1

12 NC: 8670 000 89125  
EAN: 87 12581 64126 9

© 2012 Koninklijke Philips Electronics N.V.  
All Rights reserved.

Specifications are subject to change without notice.  
Trademarks are the property of Koninklijke Philips  
Electronics N.V. or their respective owners.

[www.philips.com](http://www.philips.com)