

# PHILIPS

## Open-frame touch-screen monitor

B Line

22 (21.5"/54.6 cm diag.)

1920 x 1080 (Full HD)

222B1TFL



## Brilliant interactive display with SmoothTouch

Philips open-frame touch monitor provides optimal flexibility for mounting. A sturdy, water and dust resistant, edge-to-edge design to fit your needs. Great brightness performance and anti-glare display creates outstanding picture clarity.

### Brilliant interactive display

- SmoothTouch display for natural, fluid touch response
- IPS LED wide view technology for image and colour accuracy
- 16:9 Full HD display for crisp, detailed images
- EasyRead mode for a paper-like reading experience
- Less eye fatigue with Flicker-Free technology
- LowBlue Mode for easy-on-the-eyes productivity
- SmartContrast for rich black details
- Monitor front surface meets IP65 for water and dust resistance
- Anti-glare coating (AG) for reducing the visual interference

### Easy to experience

- HDMI ensures universal digital connectivity
- DisplayPort connection for maximum visuals
- VESA mount allows for flexibility

# Highlights

## SmoothTouch



This Philips display uses Projected capacitive 10-point touch technology for fluid response. You can fully utilise the new capabilities of touch-based applications and bring your older applications to life. Touch-type with 10 fingers or play exciting interactive games with your friends. Collaborate with colleagues interactively at work or school environment and increase your productivity and efficiency.

## Water- and dust-resistant



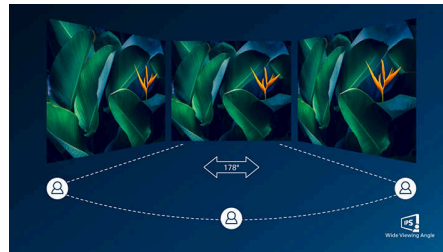
For less-than-perfect environments, you need a monitor that's designed to hold up to the splashes of water and dust that happen in the everyday world. Ingress Protection (IP) ratings defined in international standard IEC/EN 60529, are used to define levels of sealing effectiveness of electrical enclosures against intrusion from foreign bodies and moisture. This Philips display meets the international IP rating for water and dust resistance. It will hold up to the water splashes and dust that happen in the everyday world.

## Anti-glare coating



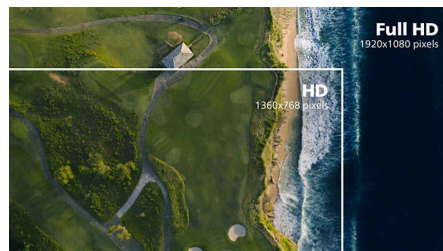
Anti-Glare Coating, abbreviated AG, can reduce the glare of your touch monitor screen. This chemical process is made in the back of the touch glass and therefore you don't need an additional film to have comfort in your eyes. Images are crystal clear with pure colour and great clarity.

## 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. Unlike standard TN panels, IPS displays give you remarkably crisp images with vivid colours, making them ideal not only for Photos, movies and web browsing, but also for professional applications that demand colour 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 colours, expect a true-to-life picture.

## SmartContrast



SmartContrast is a Philips technology that analyses the contents you are displaying, automatically adjusting colours 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.

## LowBlue Mode



Studies have shown that just as ultra-violet rays can cause eye damage, shortwave-length blue light rays from LED displays can cause eye damage and affect vision over time. Developed for wellbeing, the Philips LowBlue Mode setting uses a smart software technology to reduce harmful shortwave blue light.



# Highlights

## 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.

## HDMI Ready



An HDMI-ready device has all the required hardware to accept High-Definition Multimedia Interface (HDMI) input. An HDMI cable enables

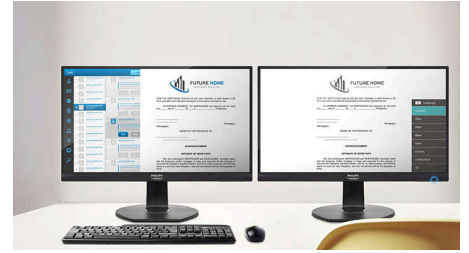
high-quality digital video and audio to be transmitted over a single cable from a PC or any number of AV sources (including set-top boxes, DVD players, A/V receivers and video cameras).

## DisplayPort connection



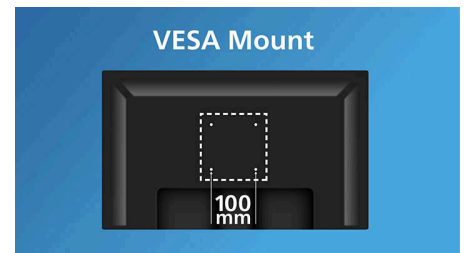
DisplayPort is a digital link from PC to monitor without any conversion. With higher capabilities than DVI standard, it is fully capable to support up to 15 metre cables and 10.8 Gbps/sec data transfer. With this high performance and zero latency, you get the fastest imaging and refresh rates — making 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.

## EasyRead mode



EasyRead mode for a paper-like reading experience

## VESA mount



VESA mount allows for flexibility



# Specifications

## Picture/Display

**Panel Size:** 21.5 inch/54.6 cm  
**Aspect ratio:** 16:9  
**LCD panel type:** IPS technology  
**Backlight type:** W-LED system  
**Pixel pitch:** 0.24795 x 0.24795 mm  
**Brightness:** 400 cd/m<sup>2</sup>  
**Display colours:** 16.7 M  
**Colour gamut (typical):** NTSC 72% (CIE 1931)  
**Contrast ratio (typical):** 1000:1  
**SmartContrast:** 50,000,000:1  
**Response time (typical):** 4 ms (Grey to Grey)\*  
**Viewing angle:** 178° (H)/178° (V), @ C/R &gt; 10  
**Picture enhancement:** SmartImage  
**Maximum resolution:** 1920 x 1080 @ 75 Hz\*  
**Effective viewing area:** 476.064 (H) x 267.786 (V)  
**Scanning Frequency:** 30–85 kHz (H) / 48–75 Hz (V)  
**sRGB**  
**Flicker-free**  
**Pixel Density:** 102 PPI  
**LowBlue Mode**  
**EasyRead**

## Touch

**Brightness:** 340 nits (typ.)  
**Ingress protection:** IP65 - front only  
**Operating system:** Windows 10 / 8.1 / 8 / 7;  
 Android 11 / 10 / 9 / 8\*  
**Sealability:** Touchscreen sealed to bezel;  
 Touchscreen sealed to LCD  
**Touch active area:** 476.064 mm (H) x  
 267.786 mm (V)  
**Touch glass hardness:** 7 H  
**Touch interface:** USB  
**Touch method:** Stylus, Finger, Glove\*  
**Touchpoints:** 10 points  
**Touch technology:** Projected capacitive  
**Palm rejection area:** &gt;= 30 x 30 mm  
**Touch glass coating:** AG coating (Haze: 5% +/-  
 3%, Gloss: 80 +/- 10)

## Connectivity

**Signal Input:** VGA (Analogue), DVI-D (digital,  
 HDCP), DisplayPort 1.2, HDMI 1.4  
**Sync Input:** Separate Sync, Sync on Green  
**Audio (In/Out):** Audio out  
**USB::** USB 3.2 x 1 (Upstream), USB 3.2 x 2  
 (Downstream with 1 fast charge B.C 1.2), mini  
 USB x 1

## Convenience

**Plug and Play Compatibility:** DDC/CI, sRGB,  
 Windows 10 / 8.1 / 8 / 7  
**User convenience:** SmartImage, Input,  
 Brightness, Menu, Power On/Off  
**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, OSD  
 keypad control, VESA mount (100 x 100 mm)  
**Control software:** SmartControl

## Power

**ECO mode:** 11.2 W (typ.)  
**Power supply:** External, 100–240 VAC, 50–60 Hz  
**Off mode:** 0.3 W (typ.)  
**On mode:** 20.1 W (typ.)  
**Standby mode:** 0.3 W (typ.)  
**Power LED indicator:** Operation - White, Standby  
 mode - White (flashing)  
**Energy Label Class:** E

## Dimensions

**Packaging in mm (W x H x D):** 595 x 390 x  
 121 mm  
**Product without stand (mm):** 522 x 315 x 49 mm

## Weight

**Product with packaging (kg):** 7.54 kg  
**Product without stand (kg):** 4.91 kg

## Operating conditions

**Altitude:** Operation: +12,000 ft (3658 m), Non-  
 operation: +40,000 ft (12,192 m)  
**Temperature range (operation):** 0°C to 40 °C  
**Relative humidity:** 20%-80 %  
**Temperature range (storage):** -20°C to 60 °C  
**MTBF (demonstrated):** 70,000 hrs (excluded  
 backlight)  
**Installation or placement:**  
 Landscape/Portrait/Face up  
**Operational time:** 24/7

## Sustainability

**Environmental and energy:** RoHS  
**Recyclable packaging material:** 100 %  
**Specific Substances:** PVC/BFR free housing,  
 Mercury free

## Compliance and standards

**Regulatory Approvals:** CB, CE Mark, FCC Class B,  
 SEMKO, UKRAINIAN, ICES-003, CU-EAC, EAEU  
 RoHS, TUV Ergo, TUV/GS, TUV Eye Comfort  
 certified

## Cabinet

**Finish:** Texture  
**Front bezel:** Black  
**Rear cover:** Black

## What's in the box?

**Cables:** HDMI cable, DP cable, USB-A to B cable,  
 Power cable  
**Monitor**  
**User Documentation**  
**L-Brackets system**  
**OSD keypad**



\* "IPS" word mark / trademark and related patents on  
 technologies belong to their respective owners.  
 \* The maximum resolution works for either HDMI input or  
 DP input.  
 \* Response time value equal to SmartResponse  
 \* NTSC Area based on CIE 1976  
 \* sRGB Area based on CIE1931  
 \* Glove material and thickness: Nitrile (0.15 mm), Cotton  
 (0.31 mm), CPE (0.03 mm), PVC (0.12 mm)  
 \* Please refer to "SmoothTouch" in the user manual for more  
 details on operating system support when using the touch  
 function.  
 \* The monitor may look different from feature images.