

**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 fit your needs. Great brightness performance and anti-glare display creates an outstanding picture clarity.

#### **Brilliant interactive display**

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

#### Easy to experience

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





# Highlights

#### **SmoothTouch**



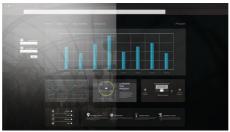
This Philips display uses Projected capacitive 10 point touch technology for fluid response. You can fully utilize the new capabilities of touch based applications, and bring your older applications to life. Touch-type with 10 fingers, or play exciting interactive games with your friends. Collaborate 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 international the IP rating for water and dust resistance, it will hold up to 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 color and great clarity.

#### **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. 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.

#### 16:9 Full HD display



Picture quality matters. Regular displays deliver quality, but you expect more. This display

features enhanced Full HD 1920  $\times$  1080 resolution. With Full HD for crisp detail paired with high brightness, incredible contrast and realistic colors expect a true to life picture.

#### **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.

#### 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, Philips LowBlue Mode setting uses a smart software technology to reduce harmful shortwave blue light.



















## **Specifications**

#### Picture/Display

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

#### **Touch**

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

#### **Connectivity**

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

## Convenience

- User convenience: SmartImage, Input, Brightness, Menu. Power On/Off
- Control software: SmartControl
- 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, Ukranian

- Other convenience: Kensington lock, OSD keypad control, VESA mount (100x100mm)
- Plug & Play Compatibility: DDC/Cl, sRGB, Windows 10 / 8.1 / 8 / 7

#### **Power**

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

#### **Dimensions**

- Product without stand (mm): 522 x 315 x 49 mm
- Packaging in mm (WxHxD): 595 x 390 x 121 mm

- Product without stand (kg): 4.91 kg
- Product with packaging (kg): 7.54 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), Nonoperation: +40,000ft (12,192m)
- MTBF (demonstrated): 70,000 hrs (excluded backlight)

#### **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, ÚKRAINIAN, ICES-003, CU-EAC, EAEU RoHS, TUV Ergo, TUV/GS, TUV Eye Comfort certified

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

#### What's in the box?

- Monitor
- Cables: HDMI cable, DP cable, USB-A to B cable, Power cable
- User Documentation



Issue date 2021-06-09

Version: 2.1.1

12 NC: 8670 001 72404 EAN: 87 12581 77293 2 © 2021 Koninklijke Philips N.V. All Rights reserved.

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

www.philips.com

- "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 CIE1976
- \* 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 user manual for more details of
- operating systems support in touch function.

  \* The monitor may look different from feature images.