

Philips  
LCD monitor with  
SmoothTouch

## B Line

22 (21.5" / 54.6 cm diag.)  
1920 x 1080 (Full HD)

222B9TN



# Brilliant interactive display with SmoothTouch

A sturdy, water and dust resistant touch screen monitor for flexible use anywhere. Offering simple and intuitive use across applications, greatly boosts up productivity.

### Brilliant interactive display

- SmoothTouch display for natural, fluid touch response
- Stylus for fluid and accurate performance with more control
- Monitor front surface meets IP65 for water & dust resistance
- 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
- USB 3.1 high speed data transfer
- DisplayPort connection for maximum visuals
- VESA mount allows for flexibility

# PHILIPS

# 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



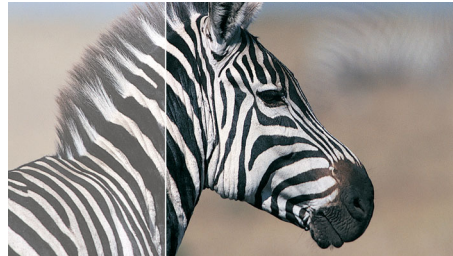
For less than perfect environments, you need a monitor that's designed to hold up to the splashes of water and dust that happen in the everyday world. Ingress Protection (IP) ratings defined in international standard IEC/EN 60529, are used to define levels of sealing effectiveness of electrical enclosures 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.

## 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 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

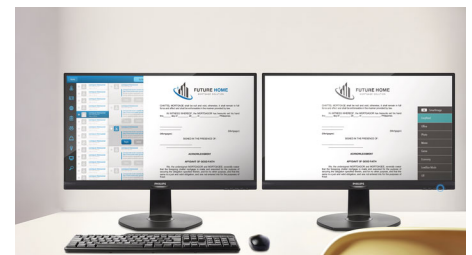
damage and affect vision over time. Developed for wellbeing, Philips LowBlue Mode setting uses a smart software technology to reduce harmful shortwave blue light.

## 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.

## EasyRead mode



EasyRead mode for a paper-like reading experience

## HDMI Ready



HDMI-ready

An HDMI-ready device has all the required hardware to accept High-Definition Multimedia Interface (HDMI) input. A HDMI cable enables high-quality digital video and audio all 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).



SmoothTouch



Water and Dust Resistant



SmartContrast



LowBlue Mode



Flicker-free



EasyRead



HDMI



Built-in Speaker



Full HD 1080p

# Specifications

## Picture/Display

- LCD panel type: TFT-LCD (TN)
- Backlight type: W-LED system
- Panel Size: 21.5 inch / 54.6 cm
- Effective viewing area: 476.64 (H) x 268.11 (V)
- Aspect ratio: 16:9
- Optimum resolution: 1920 x 1080 @ 60Hz
- Pixel Density: 102 PPI
- Response time (typical): 1 ms (Gray to Gray)\*
- Brightness: 250 cd/m<sup>2</sup>
- Contrast ratio (typical): 1000:1
- SmartContrast: 50,000,000:1
- Pixel pitch: 0.248 x 0.248 mm
- Viewing angle: 170° (H) / 160° (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: Glare
- Touch active area: 476.64 mm (H) x 268.11 mm (V)
- Operation system: Windows 10 / 8.1 / 8 / 7; Android 7.1 / 7.0 / 6.0 / 5.0 / 4.4; certain Linux versions\*
- Palm rejection area: >= 30 x 30 mm
- 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 3.1x2 (1 w/fast charging)\*
- Sync Input: Separate Sync, Sync on Green
- Audio (In/Out): PC audio-in, Headphone out

## Convenience

- Built-in Speakers: 2 W x 2
- 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, Ukrainian

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

## Power

- ECO mode: 10.3 W (typ.)
- On mode: 16.7 W (typ.)
- Standby mode: < 0.5 W (typ.)
- Off mode: < 0.3 W (typ.)
- Energy Label Class: A
- Power LED indicator: Operation - White, Standby mode- White (blinking)
- Power supply: External, 100-240VAC, 50-60Hz

## Dimensions

- Product without stand (mm): 515 x 317 x 45 mm
- Packaging in mm (WxHxD): 575 x 420 x 161 mm

## Weight

- Product without stand (kg): 4.17 kg
- Product with packaging (kg): 6.62 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 (demonstrated): 70,000 hrs (excluded backlight)

## Sustainability

- Environmental and energy: EPEAT\*, TCO Certified Edge, RoHS, WEEE
- Recyclable packaging material: 100 %
- Specific Substances: PVC / BFR free housing, Mercury free, Lead free

## Compliance and standards

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

## Cabinet

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

## What's in the box?

- Monitor with stand
- Cables: HDMI cable, USB-A to B cable, Power cable
- User Documentation
- Accessory: Stylus touch pen x 1 (black)



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\* Response time value equal to SmartResponse  
\* 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.  
\* Fast charging complies with USB BC 1.2 standard  
\* EPEAT rating is valid only where Philips registers the product. Please visit <https://www.epeat.net/> for registration status in your country.  
\* The monitor may look different from feature images.