

Philips  
LCD monitor with  
SmartImage lite

**E-line**  
28"/71.1 cm  
MHL Technology

**284E5QHAD**



## Vibrant images with MVA display with MHL technology

This big, attractive Philips display with slim bezel and MVA screen gives you awesome, vibrant colour images. Mobile HD link allows you to mirror your Smartphone, immersing you in powerful multimedia.

### **Entertainment with Mobile HD Link (MHL)**

- MHL technology for enjoying mobile content on a big screen
- Optional MHL cable allows for HD video audio playback
- Charge your mobile device while watching a movie
- HDMI-ready for Full HD entertainment
- Superb 14-watt stereo sound

### **Awesome picture quality**

- MVA display gives awesome images with a wide viewing angle
- 16:9 Full HD display for the best viewing experience
- TrueVision ensures lab quality images
- SmartImage Lite for an enhanced LCD viewing experience

### **Stylish design**

- Elegant design with slim bezel
- Superb glossy and textured finish
- VESA mount for convenience

**PHILIPS**

# Highlights

## MVA LED display

Philips' MVA LED display uses an advanced multi-domain vertical alignment technology that gives you super-high static contrast ratios for extra-vivid and bright images. While standard office applications are handled with ease, it is especially suitable for photos, web browsing, films, gaming and demanding graphical applications. Its optimised pixel management technology gives you a 176/176-degree extra-wide viewing angle, resulting in crisp images even in 90-degree pivot mode

## MHL technology



Mobile High-Definition Link (MHL) is a mobile audio/video interface for directly connecting mobile phones and other portable devices to high-definition displays. An optional MHL cable allows you to simply connect your MHL-capable mobile device to this large Philips MHL display and watch your HD videos come to life with full digital sound. Now not only can you enjoy your mobile games, photos, movies or other apps on its big screen, you can simultaneously charge your mobile device so you never run out of power halfway.

## SmartImage Lite

SmartImage Lite is an exclusive, leading edge Philips technology that analyses the content

displayed on your screen. Based on a scenario you select, SmartImage Lite dynamically enhances the contrast, colour saturation and sharpness of images and videos for ultimate display performance - all in real time with the press of a single button.

## Superb 14-watt stereo sound

A pair of high-quality stereo speakers built into a display device. They may be visible front firing, or invisible down firing, top firing, rear firing etc. depending on model and design.

## HDMI Ready



HDMI ready

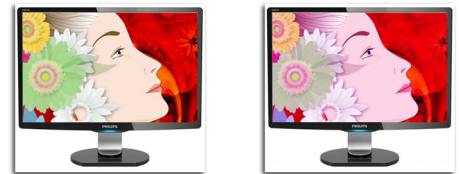
An HDMI-ready device has all the required hardware to accept High-Definition Multimedia Interface (HDMI) input, high quality digital video and audio signals all transmitted over a single cable from a PC or any number of AV sources including set-top boxes, DVD players and A/V receivers and video cameras.

## 16:9 Full HD



The Full HD screen has the widescreen resolution of 1920 x 1080p. This is the highest resolution of HD sources for the best possible picture quality. It is fully future-proof as it supports 1080p signals from all sources, including the most recent sources such as Blu-ray and advanced HD game consoles. The signal processing is extensively upgraded to support this much higher signal quality and resolution. It produces brilliant flicker-free progressive scan pictures with superb brightness and colours.

## TrueVision



TrueVision On

TrueVision Off

TrueVision is a proprietary Philips technology that uses an advanced algorithm for testing and aligning monitor display, which gives you the ultimate display performance. Philips ensures that TrueVision monitors leave the factory fine-tuned with this process giving you consistent colour and picture quality.



# Specifications

## Picture/Display

- LCD panel type: MVA
- Backlight type: W-LED system
- Panel Size: 28 inch/71.1 cm
- Effective viewing area: 619.8 (H) x 348.6 (V)
- Aspect ratio: 16:9
- Optimum resolution: 1920 x 1080 @ 60 Hz
- Response time (typical): 6.5 ms
- SmartResponse (typical): 4 ms (Grey to Grey)
- Brightness: 300 cd/m<sup>2</sup>
- Contrast ratio (typical): 3000:1
- SmartContrast: 20,000,000:1
- Pixel pitch: 0.32 x 0.32 mm
- Viewing angle: 176° (H)/176° (V), @ C/R > 10
- Picture enhancement: SmartImage Lite
- Display colours: 16.7 M
- Scanning Frequency: 30–83 kHz (H)/56–75 Hz (V)
- MHL: 1080p@30Hz
- sRGB

## Connectivity

- Signal Input: HDMI (digital, HDCP), MHL-HDMI (digital, HDCP), VGA (Analogue)
- Sync Input: Separate Sync, Sync on Green
- Audio (In/Out): PC audio-in, Headphone out

## Convenience

- Built-in Speakers: 7 watts x 2
- User convenience: Power On/Off, Menu, Volume, Input, SmartImage lite
- OSD Languages: Brazil Portuguese, Czech, Dutch, English, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Korean, Polish, Portuguese, Russian, Simplified Chinese, Spanish, Swedish, Turkish, Traditional Chinese, Ukrainian
- Other convenience: Kensington lock, VESA mount (100 x 100 mm)
- Plug and Play Compatibility: DDC/CI, Mac OS X, sRGB, Windows 7, Windows 8

## Stand

- Tilt: -5/20 degree

## Power

- On mode: 23.18 W (typ.) (EnergyStar 6.0 test method)
- Standby mode: 0.5 W (typ.)
- Off mode: 0.3 W (typ.)
- Power LED indicator: Operation - White, Standby mode - White (flashing)
- Power supply: External, 100-240 VAC, 50-60 Hz

## Dimensions

- Product with stand (mm): 663 x 485 x 237 mm
- Product without stand (mm): 663 x 390 x 54 mm
- Packaging in mm (W x H x D): 711 x 542 x 116 mm

## Weight

- Product with stand (kg): 4.73 kg
- Product without stand (kg): 4.21 kg
- Product with packaging (kg): 6.60 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: +12,000 ft (3658 m), Non-operation: +40,000 ft (12,192 m)
- MTBF: 30,000 hour(s)

## Sustainability

- Environmental and energy: EnergyStar 6.0, EPEAT Silver, RoHS, Lead-free, Mercury Free
- Recyclable packaging material: 100 %

## Compliance and standards

- Regulatory Approvals: BSMI, CE Mark, cETLus, FCC Class B, GOST, SASO, SEMKO, TCO 6.0, TUV/ISO9241-307, WEEE

## Cabinet

- Colour: Black Cherry
- Finish: Glossy



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\* This Philips display is MHL-certified. However, if your MHL device does not connect or work correctly, check with your MHL device FAQ or vendor directly for instructions. The policy of your device manufacturer may require you to purchase its brand-specific MHL cable or adapter in order for it to work

\* Requires optional MHL-certified mobile device and MHL cable (not included). Please check with your MHL device vendor for compatibility.

\* Standby/Off energy saving of ErP is not applicable for the MHL charging functionality

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