



Philips Signage Solutions
D-Line Display

50"

4K UHD
500cd/m²

SignageSolutions

50BDL4650D

Smart and modular for an even longer lifetime

powered by Android

Philips D-Line is designed to engage your audience and delight customers. Powered by Android 11 for easy software integrations, this versatile display is suitable for impact in any setting.

Innovative solutions for any signage application

- Save and play content with internal memory
- Integrated WiFi 6 and Bluetooth module
- Android SoC processor. Native and web apps

Maximizing the impact of your message

- Connect and control your content via the cloud
- Catch the Wave for revolutionary results

Care about you, your business and your audience

- 4G/LTE optional module for reliable connection
- FailOver. Ensure your display never goes blank
- Modularity - longer product lifetime

PHILIPS

Specifications

Picture/Display

- Diagonal screen size: 49.5 inch / 125.7 cm
- Panel resolution: 3840 x 2160
- Optimum resolution: 3840 x 2160 @ 60Hz
- Brightness: 500 cd/m²
- Contrast ratio (typical): 4000:1
- Dynamic contrast ratio: 500,000:1
- Aspect ratio: 16:9
- Response time (typical): 8 ms
- Pixel pitch: 0.2854 x 0.2854 mm
- Display colors: 1.07 Billion
- Viewing angle (H / V): 178 / 178 degree
- Picture enhancement: 3/2 - 2/2 motion pull down, Motion compens. deinterlacing, Dynamic contrast enhancement, Progressive scan
- Operating system: Android 11
- Panel technology: VA
- Haze: 25%

Connectivity

- Video input: DVI-I (x 1), DisplayPort 1.4 (x1), HDMI 2.0 (x2), USB 3.0 (x2), VGA (via DVI)
- Video output: DisplayPort 1.4 (x1)
- Audio input: 3.5 mm jack
- Audio output: 3.5mm jack
- External control: RJ45, RS232C (in/out) 2.5 mm jack, IR (in/out) 3.5 mm jack
- WiFi: WiFi 6 + Bluetooth 5.2 (slide-in module)
- Other connections: 4G/LTE antenna connectors, Micro USB (x1) (OTG), USB 2.0 (x1)

Supported Display Resolution

Computer formats

Resolution	Refresh rate
1920 x 1080	60Hz
1024 x 768	60Hz
1280 x 1024	60Hz
1280 x 720	60Hz
1440 x 900	60 Hz
1600 x 900	60Hz
1680 x 1050	60Hz
3840 x 2160	30, 60Hz
640 x 480	60Hz
800 x 600	60Hz

Video formats

Resolution	Refresh rate
1080i	50, 60Hz
576i	50Hz
576p	50Hz
480p	60Hz
480i	60Hz
1080p	50, 60Hz
720p	50, 60 Hz
2160p	50, 60Hz

Dimensions

- Set dimensions (W x H x D): 1128.4 x 649.0 x 63.5 mm
- Set dimensions in inch (W x H x D): 44.43 x 25.55 x 2.50 inch
- Bezel width: 14.9 mm (Even bezel)
- Product weight (lb): 32.52 lb
- Product weight: 14.75 kg
- Wall Mount: 400 (H)x 400 (V) mm, M6

Convenience

- Placement: Landscape (24/7), Portrait (24/7)
- Tiled Matrix: Up to 10 x 15
- Keyboard control: Hidden, Lockable
- Signal loop through: RS232, IR Loopthrough, DisplayPort
- Network controllable: RS232, External 4G mPCIe slot, RJ45, WiFi
- Energy saving functions: Smart Power
- Screen saving functions: Pixel Shift
- WiFi protocol: a b g n, 802.11 ax, 802.11 ac

Power

- Standby power consumption: <0.5 W
- Mains power: 100 ~ 240 VAC, 50 ~ 60 Hz
- Consumption (Typical): TBD W
- Consumption (Max): TBD
- Energy Label Class: G

Operating conditions

- Temperature range (operation): 0 ~ 40 °C
- Temperature range (storage): -20 ~ 60 °C
- Altitude: 0 ~ 3000 m
- MTBF: 50,000 hour(s)
- Humidity range (operation)[RH]: 20 - 80% RH (No condensation)
- Humidity range (storage) [RH]: 5 - 95% RH (No condensation)

Sound

- Built-in speakers: 2 x 10W RMS

Accessories

- Included Accessories: RS232 daisy-chain cable, Philips logo (x1), AC Switch Cover, USB Cover (x1), Screws, AC Power Cord, IR sensor cable (1.8 m) (x1), Quick start guide, Remote control & AAA batteries, RS232 cable, WiFi module, Wire Clamper (x3)

Multimedia Applications

- USB Playback Audio: AAC, HEAAC, MPEG
- USB Playback Picture: BMP, JPEG, PNG
- USB Playback Video: MPEG, H.263, H.264, H.265, AVI, MP4, MPEG4, VP8, VP9, WEBM

Miscellaneous

- On-Screen Display Languages: English, French, German, Spanish, Polish, Turkish, Russian, Italian, Simplified Chinese, Traditional Chinese, Arabic, Japanese, Danish, Dutch, Finnish, Norwegian, Portuguese, Swedish
- Regulatory approvals: CE, CCC, RoHS, CB, EMF, FCC, Class A, EnergyStar 8.0, UL
- Warranty: 3 year warranty

Internal Player

- CPU: 2x A72 + 4x A53
- GPU: ARM Mali-T860 MP4
- Memory: 4GB RAM
- Storage: 32 GB eMMC

Highlights

Internal Memory



Save and play content with internal memory. Upload your media into the display and playback content immediately. Working in conjunction with the internal browser, it also serves as a memory cache when streaming online content. If the network ever fails, the internal memory keeps content running by playing a cached version of the content, ensuring that your media stays up even if the network goes down.

FailOver

Critical for demanding commercial applications, FailOver is a revolutionary technology that automatically plays back-up content on screen in the unlikely event of a media player failure. Simply select a primary input connection and a FailOver connection and you are ready for instant content protection.

Modularity

Extend your display into the future with our modular approach. Bringing opportunities for longer product lifetime with easily detached and replaced components, and a firm focus on sustainability, with reduced WEEE disposal.

Powered by Android 11

Powered by Android 11 and with integrated WiFi, your Philips D-Line delivers the ultimate, most secure and connected display experience. Optimised for native Android apps, and enabling you to install web apps and software directly onto the display, eliminating the need for an external media player.

SmartBrowser

Connect and control your content via the cloud with our integrated HTML5, Chromium-based browser. Design your content online and connect a single display, or your entire network, either landscape or portrait, in 4k UHD resolution. Simply connect to the internet via WiFi or with an RJ45 cable.

PPDS Wave

Unlock the power, versatility and intelligence inside your Philips D-Line displays remotely with Wave. This evolutionary cloud platform puts you fully in control, with simplified installation and set-up, monitoring and controlling displays, upgrading firmware, managing playlists and setting power schedules. Saving you time, energy and environmental impact.



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