



Philips Signage Solutions  
D-Line Display

50"  
4K UHD  
500 cd/m<sup>2</sup>



50BDL4650D

## Smart and modular for an even longer lifetime

powered by Android

The 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
- Android SoC processor. Native and web apps
- Integrated Wi-Fi 6 and Bluetooth module

### **Care about you, your business and your audience**

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

### **Maximising the impact of your message**

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

# PHILIPS

# 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.

## 4G/LTE optional module

Select our optional 4G/LTE module for more predictable bandwidth and faster download speeds, providing you with a reliable backup connection in case of 24/7 work requirements or where local network connections are not possible.

## 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're ready for instant content protection.

## Integrated Wi-Fi 6

Integrated Wi-Fi 6 and Bluetooth module

## Modularity

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

## Powered by Android 11

Powered by Android 11 and with integrated Wi-Fi, your Philips D-Line delivers the ultimate, most secure and connected display

experience. Optimised for native Android apps, it enables 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 Wi-Fi 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 setup, monitoring and controlling displays, upgrading firmware, managing playlists and setting power schedules. Saves you time, energy and environmental impact.

# Specifications

## Connectivity

- Audio output: 3.5 mm jack
- Video input: DVI-I (x 1), DisplayPort 1.4 (x 1), HDMI 2.0 (x 2), USB 3.0 (x 2), VGA (via DVI)
- Audio input: 3.5 mm jack
- Other connections: 4G/LTE antenna connectors, Micro USB (x 1) (OTG), USB 2.0 (x 1)
- Video output: DisplayPort 1.4 (x 1)
- External control: RJ45, RS232C (in/out) 2.5 mm jack, IR (in/out) 3.5 mm jack
- Wi-Fi: Wi-Fi 6 + Bluetooth 5.2 (slide-in module)

## Picture/Display

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

## Convenience

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

## Sound

- Built-in speakers: 2 x 10 W RMS

## Power

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

## Supported Display Resolution

- Computer formats: 1920 x 1080, 60 Hz, 1024 x 768, 60 Hz, 1280 x 1024, 60 Hz, 1280 x 720, 60 Hz,

- 1440 x 900, 60 Hz, 1600 x 900, 60 Hz, 1680 x 1050, 60 Hz, 3840 x 2160, 30, 60 Hz, 640 x 480, 60 Hz, 800 x 600, 60 Hz
- Video formats: 1080i, 50, 60 Hz, 576i, 50 Hz, 576p, 50 Hz, 480p, 60 Hz, 480i, 60 Hz, 1080p, 50, 60 Hz, 720p, 50,60 Hz, 2160p, 50, 60 Hz

## Dimensions

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

## Operating conditions

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

## Multimedia Applications

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

## Internal Player

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

## Accessories

- Included Accessories: RS232 daisy-chain cable, Philips logo (x 1), AC Switch Cover, USB Cover (x 1), Screws, AC Power Cord, IR sensor cable (1.8 m) (x 1), Quick start guide, Remote control and AAA batteries, RS232 cable, Wi-Fi module, Wire Clamper (x 3)

## 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
- Warranty: 3 year warranty
- Regulatory approvals: CE, CCC, RoHS, CB, EMF, FCC, Class A, EnergyStar 8.0, UL



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