

PHILIPS



D-Line Display

Signage Solutions

50"

4K UHD

500 cd/m²



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

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're 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, 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

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/m²
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%

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)

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, RoHS, CB, EMF, FCC, Class A, Energy Star 8.0, UL

