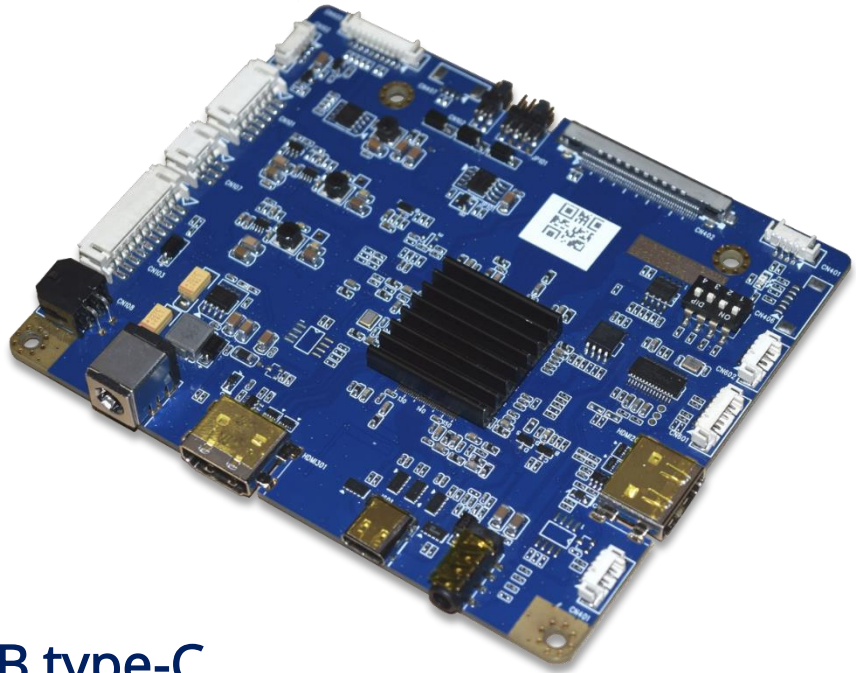


# powerDisplay

## PD-FHD02

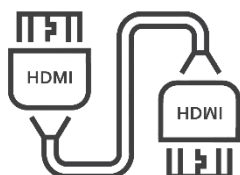
version 4.0

### multifunction LCD Controller with USB type-C



The PD-FHD02 is a multi-function LCD controller for display panels with an LVDS interface and maximum resolution of 1920 x 1200 pixels (WUXGA). The controller features twin HDMI inputs and a USB type-C connector for power, audio and video over a single cable (alt-DP mode).

The PD-FHD02 is supplied with a range of modular and complimentary sensor and control sub-boards (for monitoring) and is suitable for multiple display applications such as industrial monitors, digital signage and embedded applications.



#### KEY FEATURES:

Supports input sources from VGA up to 1920x1200 (WUXGA)

Panel logic (VCC) of 3.3/5/10/12V from a single +12V input

2 x HDMI inputs (HDCP 1.4) with up to 12-bit processing

USB type-C input (v1.2) / Power Delivery (v3.0) allows for single cable connection for power, video and audio

4 position DIP switch for multiple firmware configurations (16 combinations)

UART, RS-232, IR and I<sup>2</sup>C for monitoring & control with support for Ambient light, Temperature and Fan Control sensors

DATASHEET

Revision No. 1  
Publish Date: 06.12.2018

[www.powerdisplay.com](http://www.powerdisplay.com)

# Specifications

<b>Input Sources</b>	2 x HDMI 1.4a Digital Input Interfaces with HDCP 1.4 USB type-C (v1.2) and Power Delivery (v3.0)	VGA up to 1920x1200 (WUXGA) HDMI 1.4 Video Resolutions: WUXGA @ 60Hz SXGA, WXGA, XGA, SVGA, VGA @ 75Hz
<b>Power Input</b>	+12V DC (PH2.0mm, Molex or DC connectors)	1920 x 1200, 1920 x 1080 1680 x 1050, 1600 x 1200, 1600 x 900 1440 x 900, 1366 x 768
<b>Panel Power (VCC)</b>	3.3/5/10/12 Volts (via jumper)	1280 x 1024, 1280 x 800, 1280 x 768 1024 x 768, 1024 x 600 800 x 600, 800 x 480, 640 x 480
<b>Communication</b>	RS-232, Ethernet, I2C, UART and IR Remote	
<b>Backlight</b>	Analog DC and PWM dimming (via jumper)	
<b>USB</b>	Built in USB2.0 hub for touch screen connectivity (channelled out via USB type-C cable)	AdobeRGB and sRGB compliant Image rotation directly from within OSD menu: 90,180,270 degrees Support for non-linear scaling from 4:3 to 16:9 or 16:9 to 4:3 Built in OSD internal pattern generator for LCD quality control, inspection & testing
<b>Panel signals</b>	18/24-bit single / dual channel LVDS (JAE 51 pin connector)	
<b>Audio</b>	Digital Audio SPDIF & line-out	
<b>Operating Temperature</b>	20° to + 80°C - 4° to + 176°F	
<b>Relative Humidity</b>	5% to 85%, non-condensing	
<b>MTBF</b>	+100,000 hours	
<b>Warranty</b>	2 years	<b>Optional accessories:</b> Four or six button OSD Ambient Light Sensor LED Driver DC-DC board (+24V/+12V DC output) Remote Control Brushless Fans

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