

Overview

HP B321 31.5-inch LED Digital Signage Display

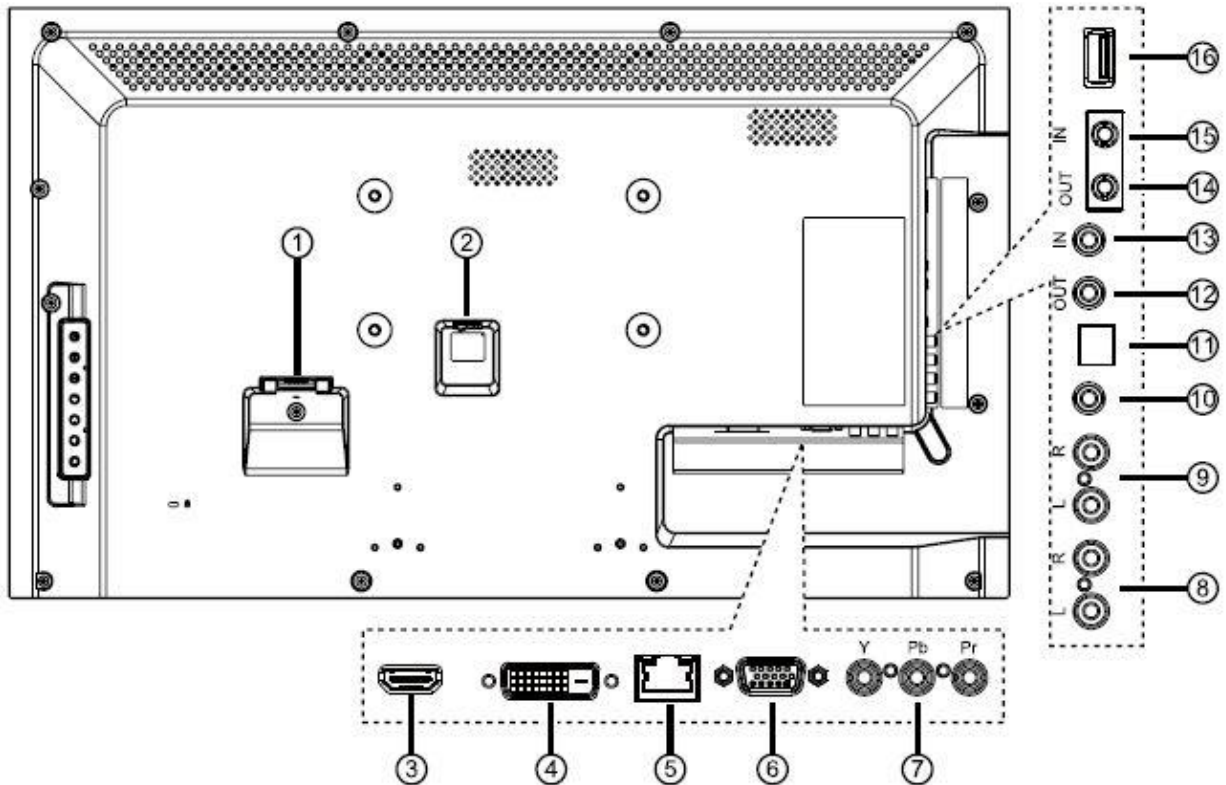


1. Power/LED

Turns the monitor on or off.
LED:
fully powered = green
dc power off (eco is low power standby) = amber
dc power off (eco is normal) = red

Overview

Input/Output Terminals



1. AC power input
2. Main power on/off switch
3. HDMI video/audio input
4. DVI-D video input
5. RJ-45 – LAN control function
6. VGA video input
7. YPbPr component video input

8. Audio in (RCA)
9. Audio out (RCA)
10. Audio in (3.5 mm)
11. S/PDIF out
12. IR out (3.5 mm)
13. IR in (3.5 mm)
14. RS232 out (2.5 mm)
15. RS232 in (2.5 mm)
16. USB port

Overview

Introduction

Bring an essential digital signage display into your organization at a very affordable price point with the HP B321 31.5-inch LED Digital Signage Display, designed for use in conference rooms, reception areas, hallways, and anywhere you want to publicly distribute content during normal business hours.

Key benefits

- Broadcast your content in Full HD¹ on a screen that's visible to the entire room.
- Connect easily to your choice of data source with a range of essential inputs.
- Reduce power consumption and help lower your costs with an intelligent design.
- Quickly and easily mount the display using the integrated VESA mount hole pattern.⁵
- Bring a DSD into your smaller spaces with the compact 31.5-inch diagonal screen size.
- Get award-winning service and support by phone or online.

Model

HP B321 – F6N37AA

Panel	Type	E-LED
	Viewable Image Area	80 cm (31.5 in) widescreen; diagonally measured
	Panel Active Area (W x H)	69,84 x 39,28 cm (27.49 x 15.46 in)
	Aspect Ratio	16:9
	Viewing Angle (typical)	Up to 178° horizontal/178° vertical (10:1 minimum contrast ratio)
	Brightness (typical)*	350 cd/m ²
	Static Contrast Ratio (typical)*	3000:1
	Dynamic Contrast Ratio (typical)*	N/A
	Response Time (typical)*	7.6 ms gray to gray
	Pixel Pitch	0.36375 mm
	Color Gamut	72% (before calibration)
	Color Support**	Can display up to 16.7 million colors
	*All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.	
	** With the use of FRC technology.	
On Screen Display (OSD) Controls	Buttons or Switches	Power / Input /Menu / ▲Up, ▼ Down/ +Plus, - Minus
	Languages	English, German, French, Italian, Spanish, Russian, Polish, Turkish, Simplified Chinese
	User Controls	Brightness, Contrast, Color, Image Control, OSD Control, Language, Information, Factory Reset, Input Control, Audio Control

Technical Specifications

Signal Interface/ Performance	Horizontal Frequency	28 to 92 kHz		
	Vertical Frequency	48 to 85 Hz		
	Recommended Resolution	1920 x 1080 @ 60 Hz		
	Max Resolution	1920 x 1080 @ 60 Hz		
	Preset VESA Graphic Modes (non-interlaced)		1920 x 1080 @ 60 Hz	
			1680 x 1050 @ 60 Hz	
			1600 x 900 @ 60Hz	
			1440 x 900 @ 60Hz	
			1280 x 1024 @ 60 Hz	
			1280 x 800 @ 60 Hz	
			1280 x 720 @ 60 Hz	
			1024 x 768 @ 60 Hz	
			800 x 600 @ 60 Hz	
		720 x 400 @ 70 Hz		
	640 x 480 @ 60 Hz			
Video/ Other Inputs	Maximum Pixel Clock Speed	165 MHz		
	User Programmable Modes	N/A		
	Anti-Glare	Yes		
	Default Color Temperature	Standard (10000K)		
	Plug and Play	Yes		
	Input Signal	VGA (RGB), DVI-D, HDMI (HDCP support on DVI and HDMI), YPbPr component video		
	Output	N/A		
	USB	(1) USB 2.0 input for playing multimedia files		
	LAN (RJ45)	(1) RJ45 Input for command and control and playing media files from a PC over the Ethernet connection		
	RS232	(1) input and (1) output		
	Audio	(1) 3.5mm audio input; (2) RCA inputs L/R; (2) RCA outputs L/R; (1) S/PDIF output		
	Speakers	(2) 5W integrated speakers		
	IR	(1) input and (1) output for receiving and sending the IR control signals		
Power	Video Cables included	(1)VGA, (1) HDMI		
	Video Cable Lengths	1,8 m (5.9ft)		
	Power Supply	Internal		
	Input Power	90 ~ 264 VAC		
	Frequency	47~63Hz		
	Typical Power Consumption	55 W		
	Maximum	65 W		
	Power Saving	Sleep: 0.5 W		
	Power Cable Length	1,8 m (5.9 ft)		
	Mechanical	Dimensions (W x D x H)	Unpacked (head only)	74,5 x 3,98 x 43,95 cm (29.33 x 1.56 x 17.31 in)
Packaged			82,1 x 11,9 x 55,7 cm (32.33 x 4.69 x 21.93 in)	
Bezel Width		All four sides	19 mm (0.74 in)	
Weight - maximum		Unpacked	6,6 kg (14.5 lb)	

Technical Specifications

		Packaged	9 kg (19.8 lb)
	Tilt Range	None	
	Swivel Range	None	
	Height Adjustable	None	
	Pivot Rotation	None	
	Base (feet/stand)	There is no stand.	
Environmental	Temperature - Operating	0° to 40° C (32° to 104° F)	
	Temperature - Non-operating	-20° to 60° C (-4° to 140° F)	
	Humidity - Operating	20% to 80% non-condensing	
	Humidity - Non-operating	5% to 95%, 38.7° C max wet-bulb	
	Altitude - Operating	0 to 2000 m (0 to 6,561 ft)	
	Altitude - Non-operating	0 to 5000 m (0 to 16,404 ft)	
	White LED Backlights	Yes	
	CCFL Panel	No	
	Arsenic-Free Display Glass	Yes	
	Low Halogen³	Yes	
	Mercury- Free Display Backlighting	Yes	
Environmental Data	Eco-Label Certifications & declarations	This product has received or is in the process of being certified to the following approvals and may be labeled with one or more of these marks:	

- IT ECO declaration
- US ENERGY STAR®
- EPEAT® Silver registered in the United States. See <http://www.epeat.net> for registration status in your country

Energy Consumption (in accordance with US

ENERGY STAR® test method)

	115VAC, 60Hz	230VAC, 50Hz	100VAC, 60Hz
Normal Operation	35.72 W	34.76 W	35.83 W
Sleep	0.29 W	0.31 W	0.28 W
Off	0.29 W	0.31 W	0.28 W

Heat Dissipation*

	115VAC, 60Hz	230VAC, 50Hz	100VAC, 60Hz
Normal Operation	122 BTU/Hr	119 BTU/Hr	123 BTU/Hr
Sleep	1 BTU/Hr	1 BTU/Hr	1 BTU/Hr
Off	1 BTU/Hr	1 BTU/Hr	1 BTU/Hr

* Heat dissipation is calculated based on the measured watts, assuming the service level is attained for one hour.

Additional Information

- This product is in compliance with the Restrictions of Hazardous Substances (RoHS) directive - 2002/95/EC.
- This HP product is designed to comply with the Waste Electrical and Electronic Equipment (WEEE) Directive - 2002/96/EC.
- This product is in compliance with California Proposition 65 (State of California; Safe Drinking Water and Toxic Enforcement Act of 1986).
- This product is in compliance with the IEEE 1680 (EPEAT) standard at the Silver level, see www.epeat.net

Technical Specifications

- Plastics parts weighing over 25 grams used in the product are marked per ISO 11469 and ISO1043.
- This product contains 0.4% post-consumer recycled plastic (by wt.)
- This product is 97.5% recycle-able when properly disposed of at end of life.

Packaging Materials

External:	PAPER/Cardboard & misc	1458 g
Internal:	PLASTIC/EPE-Expanded Polyethylene	39 g
	PLASTIC/EPS (Expanded Polystyrene)	184 g

RoHS Compliance

Hewlett-Packard is committed to compliance with all applicable environmental laws and regulations, including the European Union Restriction of Hazardous Substances (RoHS) Directive. HP's goal is to exceed compliance obligations by meeting the requirements of the RoHS Directive on a worldwide basis. By July 1, 2006, RoHS substances will be virtually eliminated (virtually = to levels below legal limits) for all HP electronic products subject to the RoHS Directive, except where it is widely recognized that there is no technically feasible alternative (as indicated by an exemption under the EU RoHS Directive).

Material Usage

This product does not contain any of the following substances in excess of regulatory limits (refer to the HP General Specification for the Environment at:

<http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/qse.pdf>)

:

- Asbestos
- Certain Azo Colorants
- Certain Brominated Flame Retardants - may not be used as flame retardants in plastics
- Cadmium
- Chlorinated Hydrocarbons
- Chlorinated Paraffins
- Formaldehyde
- Halogenated Diphenyl Methanes
- Lead carbonates and sulfates
- Lead and Lead compounds
- Mercuric Oxide Batteries
- Nickel - finishes must not be used on the external surface designed to be frequently handled or carried by the user.
- Ozone Depleting Substances
- Polybrominated Biphenyls (PBBs)
- Polybrominated Biphenyl Ethers (PBBEs)
- Polybrominated Biphenyl Oxides (PBBOs)
- Polychlorinated Biphenyl (PCB)
- Polychlorinated Terphenyls (PCT)
- Polyvinyl Chloride (PVC) - except for wires and cables, and certain retail packaging has been voluntarily removed from most applications.
- Radioactive Substances

Technical Specifications

- Tributyl Tin (TBT), Triphenyl Tin (TPT), Tributyl Tin Oxide (TBTO)

Packaging

HP follows these guidelines to decrease the environmental impact of product packaging:

- Eliminate the use of heavy metals such as lead, chromium, mercury and cadmium in packaging materials.
- Eliminate the use of ozone-depleting substances (ODS) in packaging materials.
- Design packaging materials for ease of disassembly.
- Maximize the use of post-consumer recycled content materials in packaging materials.
- Use readily recyclable packaging materials such as paper and corrugated materials.
- Reduce size and weight of packages to improve transportation fuel efficiency.
- Plastic packaging materials are marked according to ISO 11469 and DIN 6120 standards.

End-of-life Management and Recycling

Hewlett-Packard offers end-of-life HP product return and recycling programs in many geographic areas. To recycle your product, please go to: <http://www.hp.com/go/reuse-recycle> or contact your nearest HP sales office. Products returned to HP will be recycled, recovered or disposed of in a responsible manner.

The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard web site at: <http://www.hp.com/go/recyclers>. These instructions may be used by recyclers and other WEEE treatment facilities as well as HP OEM customers who integrate and re-sell HP equipment.

Hewlett-Packard Corporate Environmental Information

For more information about HP's commitment to the environment:

Global Citizenship Report

<http://www.hp.com/hpinfo/globalcitizenship/gcreport/index.html>

Eco-label certifications

<http://www.hp.com/hpinfo/globalcitizenship/environment/productdesign/ecolabels.html>

ISO 14001 certificates:

<http://www.hp.com/hpinfo/globalcitizenship/environment/operations/envmanagement.html>

Options (sold separately)

HP MP4 Digital Signage Player – Part number D3K58UA

Attract and inform your customers with the compact and affordable HP MP4 Digital Signage Player, designed to drive static screen layouts and full-screen video signage content. Mount the space-saving design—HP's thinnest digital signage device—behind an HP Digital Signage Display to maximize available space, simplify installation and deliver picture-perfect presentation of rich media content.⁵

Technical Specifications

	HP MP6 Digital Signage Player – Part number D3K64UA	Deliver dynamic and interactive signage content that attracts, engages, and astounds your customers with the powerful, flexible, and compact HP MP6 Digital Signage Player – designed to support dynamic and interactive signage content. Mount the compact design behind an HP Digital Signage Display to maximize available space, deliver picture-perfect presentation of dazzling content, and create a total HP digital signage solution. ⁵
What's in the box?	HP Digital Signage Installation Service Display and Accessories	A range of installation service Care Packs. See www.hp.com/go/digitalsignage . HP B321 31.5-inch LED Digital Signage Display AC power cord (1.8m) 5.9 ft VGA cable (1.8m) 5.9 ft HDMI cable (1.8m) 5.9 ft Wireless remote control CD (includes user guide, warranty, drivers)
Other	Documentation Featured Software User Guide Languages Warranty Languages Color VESA External Mounting Security Lock-Ready Certification and Compliance Compatibility	N/A English, T. Chinese, S. Chinese, French, Spanish English, T. Chinese, S. Chinese, French, Spanish Black Yes, 200 x 100mm No CB, FCC, BSMI, CCC, NOM, China Energy Label Grade 1, EPEAT® Silver ⁴ , ENERGY STAR®, SmartWay Transport Partnership (NA), Microsoft WHQL Certification. Compatible with platforms using the VESA standard video modes. Recommended for use with HP products.
Service and Warranty		Protected by HP, including a 3 year standard limited warranty. Optional Care Pack Services are extended service contracts which go beyond your standard warranties. ⁶

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1. HD content required for HD images.
2. All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.
3. External power supplies, power cords, cables and peripherals are not Low Halogen. Service parts obtained after purchase may not be Low Halogen.
4. EPEAT® Silver where HP registers commercial display products. See www.epeat.net for registration status in your country.
5. Mounting hardware sold separately.
6. HP Care Pack Services are sold separately. Service levels and response times for HP Care Pack Services may vary depending on your geographic location. Service starts from date of hardware purchase. Restrictions and limitations apply. See www.hp.com/go/cpc for details.

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All specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Summary of changes

Date	Version History	Action	Description of Change
June 12, 2015	V1 to V2	Changed	Change the value in Video for Lan