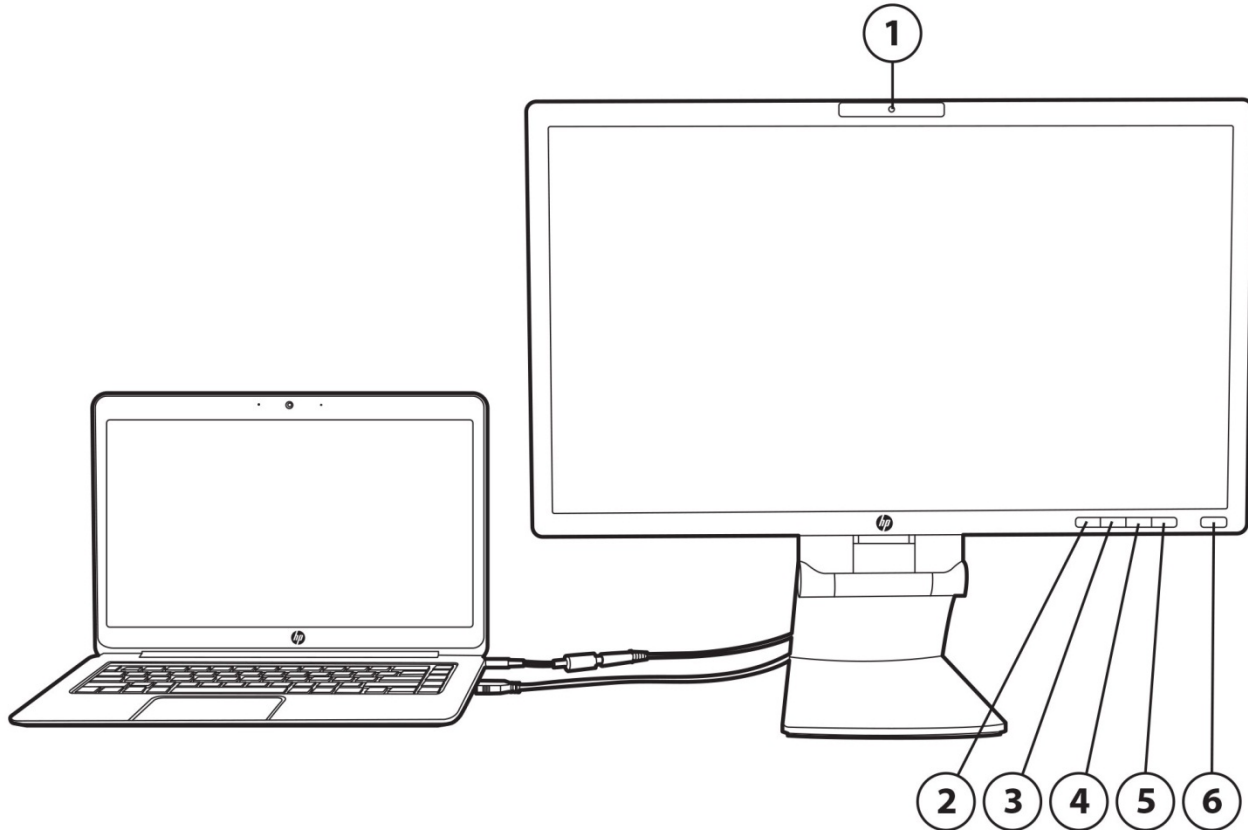


Overview

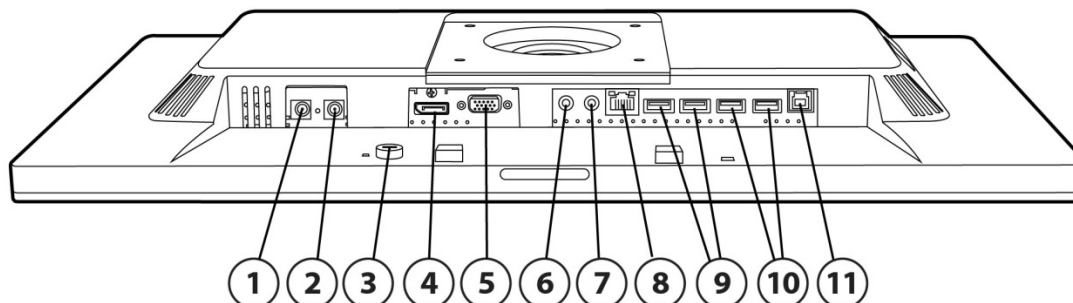
HP EliteDisplay S231d 23-in IPS LED BLU Notebook Docking Monitor



- | | | | |
|----------------------------------|--|-------------------------------|---|
| 1. Webcam and Microphones | 720p HD Webcam, LED lights up when webcam is in use and dual microphones | 5. OK/auto | If the OSD menu is on, press to select the highlighted menu item.
If the OSD menu is inactive, press to activate the auto adjustment feature to optimize the screen image. The auto adjustment feature only functions if the active adjustment feature is VGA. |
| 2. Menu | Opens, selects or exits the OSD menu. | 6. Power and Power LED | Turns the monitor on or off.
White = Fully powered.
Amber = Sleep mode.
Flashing Amber = Sleep Timer mode. |
| 3. Minus | If the OSD menu is on, press to navigate backward through the OSD menu and decrease adjustment levels. | | |
| 4. Plus/source | If the OSD menu is on, press to navigate forward through the OSD menu and increase adjustment levels.
If the OSD menu is inactive, press to activate the source button that chooses the video signal input (DisplayPort, USB or VGA). | | |

Overview

NOTE: Shown with HP Business Notebook (notebook sold separately).



- | | |
|-------------------|----------------------------|
| 1. DC Power in | 7. Audio in |
| 2. DC power out | 8. RJ-45 (network) jack |
| 3. Lock slot | 9. USB 2.0 downstream (2) |
| 4. DisplayPort | 10. USB 3.0 downstream (2) |
| 5. VGA connector | 11. USB 3.0 upstream |
| 6. Headphones out | |

Model

F3J72AA

Introduction

Create an instant workspace driven by a 23-inch diagonal IPS display with the HP EliteDisplay S231d 23-in IPS LED Backlit Notebook Docking Monitor. With one USB cable connection from your notebook to your display, you can immediately access the network, the display's integrated collaboration tools, and your peripherals, and get to work. Charge your HP Notebook battery and power your HP Notebook through the display's DC power cable.¹

Key Benefits

- Collapse a desk full of docking stations and power cables into one efficient hub with a display that delivers network connectivity, port replicator expansion for your peripherals, and HP Notebook charging.
- View all the stunning details on a 23-inch diagonal display with 1920 x 1080 full HD resolution, wide viewing angle IPS, 250 cd/m² brightness, 1000:1 contrast ratio, 5 M:1 dynamic contrast ratio, and 7 ms response time.
- Quickly connect and collaborate and optimize your virtual communication technologies with an integrated webcam, speakers, and dual microphones.
- Find your sweet spot with customizable tilt, height adjustment, swivel, and pivot settings—the most adjustability available on an HP business display
- Reduce power consumption and help lower your costs with an intelligent, energy-efficient design that is ENERGY STAR® and TCO qualified, meets TCO Certified Edge requirements, and EPEAT® Gold³ registered.

*Battery charging capability for HP Commercial Notebooks up to 90W, EliteBook Mobile Workstations will have pass through power capability only.

Technical Specifications

Panel	Type	IPS (In Plane Switching) LED Backlit LCD panel
	Viewable Image Area (diagonal)	58,42 cm (23.0 in.) widescreen; diagonally measured
	Panel Active Area (W x H)	50,9 x 28,64 cm (20.03 x 11.27 in.)
	Aspect Ratio	16:9
	Viewing Angle (typical)	Up to 178° horizontal/178° vertical (10:1 minimum contrast ratio)
	Brightness (typical)*	250 nits (cd/m ²)
	Contrast Ratio (typical)*	1000:1
	Dynamic Contrast Ratio (typical)*	5,000,000:1
	Response Time (typical)*	7 ms (gray to gray)
	Pixel Pitch	0.265 mm
	Backlight Lamp Life (to half brightness)	30,000 hours
	Color Gamut (typical)	72%
	Color Support**	Can display up to 16.7 million colors
	<p>*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.</p>	
On Screen Display (OSD) Controls	Buttons or Switches	Menu; Minus ("-"); Plus ("+") /Source; OK/Auto; Power
	Languages	English, French, Spanish, Italian, German, Netherlands, Japanese, Traditional Chinese, Simplified Chinese, Brazilian Portuguese
	User Controls	Brightness, Contrast, Color, Image Control, OSD Control, Management features, Language, Input Select, Information and Factory Reset.
Signal Interface/ Performance	Horizontal Frequency	24 to 80 kHz
	Vertical Frequency	50 to 60 Hz
	Native 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 @ 60 Hz
		1440 x 900 @ 60 Hz
		1280 x 1024 @ 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	
	Maximum Pixel Clock Speed	170MHz
	User Programmable	Yes (10)

Technical Specifications

	Modes		
	Anti-Glare	Yes	
	Default Color Temperature	Standard (6500K)	
Video/Other Inputs	Plug and Play	Yes	
	Input Connectors (Video)	(1) USB 3.0 upstream (interface to notebook); (1) VGA (analog); (1) DisplayPort 1.2	
	Sync Input	TTL separate synch	
	Video Cables*	(1) USB 3.0 included, (1) VGA cable, (1) DisplayPort cable *NOTE: Included cables may vary by region.	
	Video Cable Length	1,8 m (5.9 ft.)	
	Audio	(1) Audio in; (1) Headphone/line out	
	USB	4 total USB ports: (2) USB 3.0 ports; (2) USB 2.0 downstream ports	
	Network	(1) RJ-45 Network in	
	Webcam	Built-in 720p HD Webcam w/ dual mic and LED	
Power	Type	External	
	Input Power	100 – 240 VAC, 50 – 60 Hz	
	Typical Power Consumption	38W	
	Maximum	60W	
	Power Saving	2.2W standby	
	Power Cable Length	(1,8 m) 5.9 ft or (1,83 m) 6 ft*, included *NOTE: Included cables may vary by region.	
	Notebook charging	Built-in HP Business Notebook charger with HP Smart AC Technology to power and charge HP notebooks (up to 90W)* * Pass through power only for HP Commercial Notebooks above 90W	
	Charging Power cable length	1.8 m (5.9 ft.)	
Mechanical	Dimensions (W x D x H)	Unpacked w/stand	54,4 x 24,24 x 46,99 cm (21.41 x 9.54 x 18.5 in)
		Unpacked w/o stand (head only)	54,4 x 5,1 x 32,9 cm. (21.41 x 2 x 12.95 in.)
		Packaged	62 x 18,3 x 51,8 cm. (24.41 x 7.2 x 20.39 in.)
	Weight	Head Only	3,87 kg (8.54 lb.)
		Unpacked	6,12 kg (13.5 lb.)
		Packaged	8,66 kg (19.1 lb.)
	Tilt Range	-5° to +30°	
	Swivel Range	Yes (360°)	
	Height Adjustable	Yes, 150 mm	
	Pivot Rotation	Yes	
	Base	Attached	

Technical Specifications

Environmental	Temperature – Operating	5° to 35° C (41° to 95° 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 5000 m. (16,404 ft.)	
	Altitude – Non-operating	0 to 12192 m. (40,000 ft.)	
	White LED Backlights	Yes	
	CCFL Panel	No	
	Arsenic-Free Display Glass	Yes	
	Low Halogen³	Yes	
	Mercury-Free Display Backlighting	Yes	
	Options	HP USB Graphics Adapter—Part number NL571AA	Enables connection of up to six simultaneous displays to help you boost productivity and multi-task across several open applications. Use one Adapter to bridge between a notebook or desktop PC and second monitor or use multiple Adapters to connect several displays to each other.
		HP Dual Output USB Graphics Adapter—Part Number C5U89AA	You can boost your productivity by creating a dual-monitor setup with the HP Dual Output USB Graphics Adapter – featuring both DVI-I and DisplayPort inputs to drive displays at high resolutions through a single USB 3.0 connection to your PC.
HP LCD Monitor Quick Release—Part number EM870AA¹		An easy-to-use, VESA-compliant, LCD monitor mounting solution that allows you to quickly and securely attach an LCD monitor to a variety of stands, brackets, arms or wall mounts.	
HP LCD Speaker Bar—Part number NQ576AA		Powered directly by the connected PC, the Speaker Bar seamlessly attaches to the monitor's lower bezel to bring full audio support to select HP flat panel monitors. Features include dual speakers with full sound range and dual external headphone jacks. Sold separately. For more information, refer to the product's QuickSpecs.	
HP Integrated Work Center Stand - USDT / Thin Clients — Part numbers E8H16AA/AT (black and meteorite), LH526AA/AT (black and silver).⁶		HP Integrated Work Center Stand - USDT / Thin Clients - The HP Integrated Work Center Stand is designed to help maximize the use of limited desk space without compromising performance or productivity by accommodating an HP Ultra-slim Desktop PC or an HP Thin Client, and most HP 17 to 24-inch ¹ diagonal LCD monitors, with VESA standard mounting brackets.	
HP Single Monitor Arm—Part number BT861AA		The flexible design of the HP Single Monitor Arm provides a seemingly endless range of display adjustments with an amazing 13 inches of lift, 50 degrees of tilt, and 360 degrees of pan and rotation - all at your fingertips - helping you stay comfortable and productive throughout the day.	
HP Integrated Work Center Stand for Small	Maximize your available work space with the stylish and innovative HP Integrated Work Center for Small Form Factors v3 (HP IWC SFF v3),		

Technical Specifications

	Form Factors v3 — Part number F2P06AA⁵	designed to match the newest HP PC designs. Create a customized "all-in-one" solution by combining an HP Small Form Factor (SFF) Business Desktop PC or Workstation with an LED monitor up to 24 diagonal inches.
	HP Adjustable Dual Display Stand—Part Number AW664AA	Premium space-saving dual screen solution provides access to more monitor real estate and makes it possible to manage multiple applications simultaneously. Weight adjustable for dual monitors from 17-24". Rotate displays into portrait/landscape positions.
	HP Display and Notebook II Stand—Part number E8G00AA	Quickly and easily create a comfortable workspace for your notebook or notebook and docking station and an external display with the HP Display and Notebook II Stand, which brings your notebook PC, docking station, and display up off the desk.
	HP Adjustable Display Stand—Part number AW663AA	Turn your HP Business Notebook into a desktop solution supporting up to a 24 inch display. A dual-hinged, smooth-motion display stand allows for greater depth, height and tilt adjustment for maximum comfort.
What's in the box?	HP DisplayPort Cable Kit —Part number VN567AA	Connects a DisplayPort connector on an HP Business Desktop computer to a DisplayPort connector on a monitor
	Monitor and Accessories	HP EliteDisplay S231d 23-in IPS LED BLU Notebook Docking Monitor, External power supply (150W), USB cable, DC power cable, VGA cable, DisplayPort cable, DC jack dongle cable and rubber ring, webcam rubber cover
	Documentation	CD (includes user guide, warranty, drivers) Hard copy warranty booklet (Country specific)
	Featured Software	HP Display Assistant is a software utility that enables theft deterrence and allows monitor adjustment, color calibration, and security/asset management using the Display Data Channel Command Interface (DDC/CI) protocol of the connected PC or workstation.
Other	User Guide Languages	English, Danish, Dutch, Finnish, French, German, Italian, Norwegian, Spanish (International), Swedish, Czech, Greek, Hungarian, Polish, Russian, Slovenian, Turkish, Arabic, Portuguese (Brazilian), Bahasa Indonesia, T. Chinese, S. Chinese, Japanese
	Warranty Languages	English, German, French, Italian, Turkish, Greek, Arabic, Hungarian, Czech, Russian, Polish, Japanese, Dutch, Danish, Finnish, Portuguese, Norwegian, Swedish, T. Chinese, Korean, Slovenian, Bahasa, Spanish
	Color	Black
	VESA External Mounting	Yes (one set of standard 4-hole pattern, 100 mm).
	Security Lock-Ready	Yes
Certification and Compliance		CB, CE, TUV-S, EAC, CUL, FCC, CSA, NOM, S-Mark, VCCI, PSB, ISC, CCC, BSMI, C-Tick, E-Standby, KC, CECP, ENERGY STAR [®] , EPEAT Gold ^{®7} , CEL Grade 1, TCO Certified Edge, TCO Certified, SmartWay Transport Partnership (NA only), Microsoft WHQL.
Operating System Support		Windows 8.1 Pro (32-bit or 64-bit)* Windows 8.1 (32-bit or 64-bit)* Windows 8 Pro (32-bit or 64-bit)* Windows 8 (32-bit or 64-bit)* Windows 7 Ultimate (32-bit or 64-bit)** Windows 7 Professional (32-bit or 64-bit)** Windows Vista with Service Pack 1 or 2 (32-bit or 64-bit)

Technical Specifications

*Not all features are available in all editions of Windows 8 and 8.1. Systems may require upgraded and/or separately purchased hardware, drivers and/or software to take full advantage of Windows 8.1 functionality. See <http://www.microsoft.com>.

**Not all features are available in all editions of Windows 7. This system may require upgraded and/or separately purchased hardware to take full advantage of Windows 7 functionality. See <http://www.microsoft.com/windows/windows-7/> for details.

Compatibility – USB	Compatible with notebook platforms configured with either USB 2.0 or USB 3.0 ports
Compatibility – Power Charging	Compatible with any HP Commercial Notebook configured with Smart AC 3-Pin connector ⁴
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. ²

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1. The HP Quick Release has been designed to support a maximum of up to 24 lbs (10.9 kg) for all devices mounted. Because mounting surfaces vary widely and the final mounting method and configuration may vary, mounting fasteners are not supplied (other than the VESA-compliant screws). HP recommends that you consult with a qualified engineering, architectural or construction professional to determine the appropriate type and quantity of mounting fasteners required for your application and to ensure that your mounting solution is properly installed to support applied loads.
2. HP Care Pack Services extend service contracts beyond the standard warranties. Service levels and response times for HP Care Packs may vary depending on your geographic location. Service starts from date of hardware purchase. To choose the right level of service for your HP product, use the HP Care Pack Services Lookup Tool at <http://www.hp.com/go/lookuptool>. Additional HP Care Pack Services information by product is available at <http://www.hp.com/hps/carepack>.
3. External power supplies, power cords, cables and peripherals are not Low Halogen. Service parts obtained after purchase may not be Low Halogen.
4. HP Smart AC Technology will charge HP notebooks up to 90W and only allow power pass through for HP Notebooks above 90W.
5. 17 to 24-inch diagonal monitors need to meet supported weight limits of 6 to 12.1 lbs. (2.7 to 5.5 kg).
6. The Integrated Work Center Stand has been designed to support 17 to 24-inch diagonal HP LCD monitors from 2.3 kg to 5.2 kg (5.07 lbs to 11.24 lbs).
7. EPEAT® Gold where HP registers commercial display products. See www.epeat.net for registration status in your country.

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.