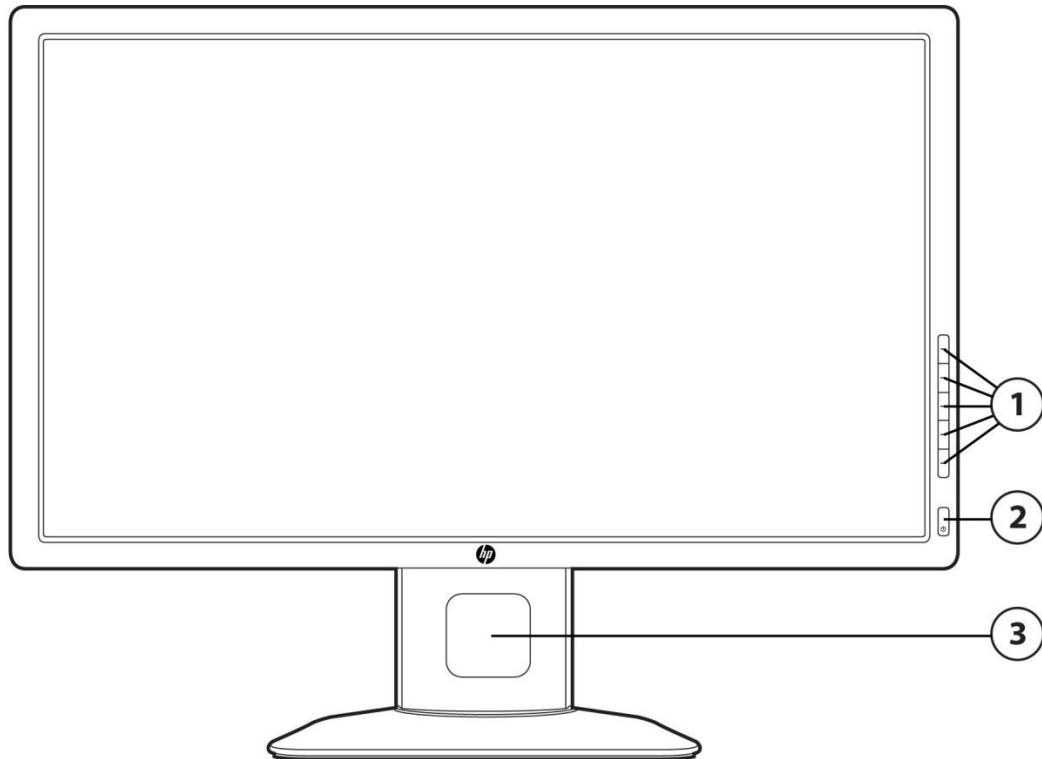# QuickSpecs

Overview

HP DreamColor Z27x Professional Display

1.	**Programmable Function buttons**	4 user-assignable function buttons
2.	**Power/LED**	Power On/Off
		LED: fully powered = white or red, user selectable; sleep mode = amber; sleep timer mode = flashing amber.
3.	**Cable Management**	Effortless routing of cables through the cable management tunnel at the base of the column.

QuickSpecs

Technical Specifications

Models: D7R00A4, D7R00A8, D7R00AS, D7R00AT

Panel	Type	27-inch IPS Gen 2, with HP Ultra Black technology and advanced wide gamut LED Backlight. (Gen 2 IPS technology, also called AH-IPS, enables lower power consumption).
	Viewable Image Area (diagonal)	**68,58 cm** (27 in) widescreen; diagonally measured
	Panel Active Area (W × H)	**59,67 × 33,56 cm** (23.49 × 13.21 in.)
	Resolution	2560×1440 @ 60, 50 or 48 Hz native sync
	Aspect Ratio	16:9
	Viewing Angle	Up to 178° horizontal/178° vertical typical (10:1 minimum contrast ratio)
	Brightness	48 to 250 cd/m² calibrated
	Contrast Ratio	800:1 minimum
	Response Time *	7ms w/overdrive (gray to gray, typical)
	Pixel Pitch	0.2331 mm
	Backlight Lamp Life (to half brightness)	50,000 hours minimum
	Color Production	True 10-bit (Up to 1.07 billion colors)
	Color Gamuts (Calibrated)	100% of sRGB, 100% of BT.709, 100% of AdobeRGB, 99% of DCI-P3, 68% of BT.2020 (CIE 1976)

* Performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.

TECHNICAL SPECIFICATIONS

User Controls	Buttons or Switches	Four user-definable function keys, Open/Close Menu, Power
	Languages	10 (English, Spanish, German, French, Italian, Netherlands, Portuguese, Japanese, T-Chinese and S-Chinese)
	On Screen Display (OSD) User Controls	Color Space, Video Input, Image Adjustment, PIP Control, Language, Management, Menu and Message Control, Information, Factory Reset, Display Mode Information
DreamColor Functions	Color Management Engine	1D LUT→ 3×3 matrix →1D LUT, 14-bit precision. Up to 12-bit per channel input, 10-bit output that produces 1,024 gray levels per channel and up to 1.07 billion on-screen colors.
	Factory Calibrated Presets	sRGB D65, sRGB D50, AdobeRGB, BT.709, BT.2020, DCI-P3 and Native
	User Calibration	Integrated calibration engine for hostless calibration with the HP DreamColor Calibration Solution[8], Klein Instruments K10-A, Photo Research spectroradiometers[9], Konica Minolta CA-310, calibration with on-screen menus or XML scripting, and upload and download LUTs
	Remote Display Control and Management	Linux , Microsoft Windows, and Apple OS X SDK/API, web control interface, and WS-Management support

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Technical Specifications

	4K input support	3840×2160 or 4096×2160, can be displayed scale to fit or pixel-for-pixel with dynamic scroll
	DreamColor Ports	Two HP DreamColor USB ports allow connection of measurement instruments for calibration and flash drive for customized calibration or firmware updates.
Signal Interface/ Performance	**Horizontal Frequency**	24–113 kHz
	Vertical Frequency	24–60 Hz
	Native Resolution	2560×1440 @ 60, 50 or 48 Hz
	Preset Graphic Modes (non-interlaced)	640×480 @ 59.94 or 60 Hz (progressive or interlaced)
		720×480 @ 59.94 or 60 Hz (progressive or interlaced, 4:3 or 16:9)
		720×576 @ 50 Hz (progressive or interlaced, 4:3 or 16:9)
		800×600 @ 60.317 Hz
		1024×768 @ 60.004 Hz
		1280×720 @ 23.976, 24, 29.97, 30, 50, 59.94 or 60 Hz
		1280×1024 @ 60.020 Hz
		1366×768 @ 60.000 Hz
		1600×1200 @ 60.000 Hz
		1920×1080 @ 23.976, 24, 29.97, 30, 50, 59.94 or 60 Hz (progressive)
		1920×1080 @ 29.97, 30, 50, 59.94 or 60 Hz (interlaced)
		1920×1200 @ 59.950 Hz
		1920×1200 @ 59.995 Hz
		2048×1080 @ 24, 25, 48, 50, or 60 Hz
		2560×1440 @ 48, 50 or 60 Hz
		2560×1600 @ 59.97 Hz
		3840×2160 @ 24, 25 or 30 Hz
		4096×2160 @ 24 Hz
	Maximum Pixel Clock Speed	297 MHz
	Color Space Support	RGB 4:4:4, YC_BC_R 4:2:2, YC_BC_R 4:4:4 (color managed)
	Anti-Glare	Yes
	Factory Calibrated Color Temperatures	D65, D50, and P3

VIDEO/OTHER INPUTS

Video/Other Inputs	**Plug and Play**	Yes
	Self-Powered USB 3.0 Hub	4 USB 3.0 (two side and two rear)
	DreamColor Ports	2 USB 2.0 DreamColor ports (for connecting color instruments and flash drives)
	Ethernet Connection	(1)RJ45 port, for display remote control and management via HTTP or WS-Management protocols
	Input Connectors	(2) DisplayPort 1.2, (1) HDMI 1.4; HDCP support on all inputs.
	Video Cables Included	(1) DisplayPort **1,8 m** (5.9 ft); (1) HDMI **1,8 m** (5.9 ft); (1) Mini-DisplayPort to DisplayPort **1,8 m** (5.9 ft);
	USB Cable Included	(1) USB 3.0 **1,8 m** (5.9 ft)
	Audio	(1) Analog stereo audio out, (1) Digital/SPDIF stereo audio out

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POWER

Power	Power Supply	Internal	
	Input Power	90–265 VAC at 45–63 Hz	
	ENERGY STAR® Power[1]	54.1 W	
	Default Power[2]	65 W	
	Maximum Power[3]	< 110 W	
	Sleep Power	≤ 1.2 W	
	Power Cable Length	**1,9 m** (6.2 ft)	
Mechanical	Dimensions (W × D × H)	**Unpacked w/stand** (lowest setting)	**64,1 × 24,24 × 42,04 cm** (25.24 × 9.55 × 15.55 in)
		Unpacked w/o stand (head only)	**64,1 × 6,55 × 37,92 cm** (25.24 × 2.58 × 14.93 in)
		Packaged	**73,1 × 30,5 × 49,7 cm** (28.8 × 12 × 19.6 in)
	Weight	**Head Only**	**6,4 kg** (14.1 lb)
		Unpacked	**8,8 kg** (19.4 lb)
		Packaged	**11,1 kg** (24.5 lb)

ERGONOMIC FEATURES

Ergonomic Features	4-Way Comfort Adjust	Easily adjust the display in height, tilt, swivel and pivot for maximum comfort.
	Integrated Quick Release[7]	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.
	Cable Management	Enhanced cable management for easy concealment of power, video and USB cables. Effortless routing of cables through the cable management tunnel at the base of the column.
	Detachable Stand	Yes, ships detached
	Tilt Range	-5° to + 20° vertical
	Swivel Range	45°L to 45°R
	Height Adjustable	Yes, 0 to 120 mm
	Pivot Rotation	Yes

ENVIRONMENTAL

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 5,000 m** (0 to 16,404 ft)
	Altitude – Non-operating	**0 to 12,192 m** (0 to 40,000 ft)
	White LED Backlights	Yes
	CCFL Panel	No

QuickSpecs

Technical Specifications

	Arsenic-Free Display Glass	Yes
	Low Halogen[4]	Yes (except cables)
	Mercury-Free Display Backlighting	Yes
Options	**HP DreamColor Calibration System —B1F63AA**	The HP DreamColor Calibration Solution (DCS) is an affordable direct-connect measurement instrument for the Z27x, allowing users to quickly and accurately recalibrate their monitor. DCS kit includes calibration software for host-based calibration of the HP Z24x and other HP DreamColor displays and notebooks.
	HP LCD Speaker Bar—NQ576AA	Powered directly by the monitor or the PC, the Speaker Bar seamlessly attaches to the monitor's lower bezel to bring full audio support to select HP LCD monitors. Features include dual speakers with full sound range and external jack for headphones. Sold separately.
	HP HD141 Hood Kit for Z27x —G0M47AA	The HP HD141 Hood Kit is designed to reduce the glare and color cast caused by environment lighting. Recommended for color-critical users who work in areas where the lighting cannot be controlled.
	HP DisplayPort Cable Kit —Part number VN567AA	Connects a DisplayPort connector on an HP Business Desktop computer to a DisplayPort connector on a monitor
	HP Business PC Security Lock Kit— PV606AA	Attaches to the rear of the PC with a six-foot steel cable that can be used to secure a PC or peripherals such as mice, keyboards, monitors or USB security devices to protect them against unauthorized removal by physically connecting the system to an anchor point.

WHAT'S IN THE BOX?

What's in the box?	**Monitor and Accessories**	HP DreamColor Z27x Professional Display, AC power cord, USB cable, DisplayPort cable, HDMI cable, DisplayPort mini cable,
	Documentation	DVD documentation kit, factory calibration report
Other	**User Guide Languages**	English, Arabic, Bahasa Indonesia, S. Chinese, T. Chinese, Czech, Danish, Dutch, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Kazakh, Korean, Norwegian, Polish, B. Portuguese, Russian, Slovenian, Spanish, Swedish and Turkish.
	Warranty Languages	English, Arabic, Bahasa Indonesia, S. Chinese, T. Chinese, Czech, Danish, Dutch, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Kazakh, Korean, Norwegian, Polish, B. Portuguese, Russian, Slovenian, Spanish, Swedish and Turkish.
	Color	Black
	VESA External Mounting	Yes (one set of standard 4-hole pattern, 100 mm). Use of the top VESA 4-hole pattern will allow the user to set monitor head lower to the desk surface.
	Security Lock-Ready	Yes
	Country of Origin	China

Technical Specifications

CERTIFICATION AND COMPLIANCE

Certification and Compliance	TCO Certified, CEL Grade 2, Microsoft WHQL Certification (Windows 8 and Windows 7), ENERGY STAR® Qualified, EPEAT® Gold[5]. CE, CB ,KC, KCC, NOM, PSB, ICE, TUV-S, CCC, CEL, SEPA, EPA, ISC, VCCI, FCC. Taiwan: BSMI
Compatibility	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 HP Care Pack Services are extended service contracts that extend your protection beyond the standard warranties.[6]

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1. ENERGY STAR® power is measured with factory defaults, brightness at ENERGY STAR® level of 200 cd/m^2 and with no USB loads.
2. Default Power is measured with factory defaults, including factory default brightness and USB ports loaded at 25% of maximum.
3. Maximum Power is measured with monitor at maximum brightness and with USB ports loaded at 100% of maximum.
4. External power supplies, power cords, cables and peripherals are not Low Halogen. Service parts obtained after purchase may not be Low Halogen.
5. EPEAT® Gold where HP registers commercial display products. See www.epeat.net for registration status in your country.
6. 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.
7. 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.
8. HP DreamColor Calibration Solution can be purchased as an option.
9. For supported Photo Research spectoradiometers, see the HP DreamColor Z27x User Guide.

Technical Specifications

Date of change:	Version History:		Description of change:	
April11, 2014	From v1.4 Feb. 24 to April 11	Changed		
		Added	Adding additional model numbers	
		Removed		
April 29, 2014	From v1.4 April. 11 to April 29	Changed		
		Added	Multiple edits	
		Removed		
May 02	From v1.4 April 29 to May 02	Changed	Response Time * 7ms w/overdrive (gray to gray, typical)	
		Added		
		Removed		
June 19, 2014	Fromv1.4 to v1.5, on june 19	Added	Added periods at the end of disclaimers 8 and 9	
July 03, 2014	From v1.5 to v1.6	Added	Added the Ethernet Connection under dream color port	
July 14,2014	From v1.5 to v2	Updated	Per Jeff's request added the headings	
July 16,2014	From v2 to v7	Upgrade	Change the version to match the PB one	