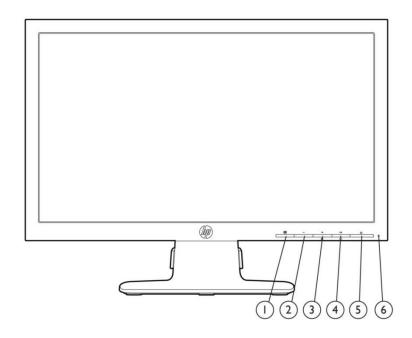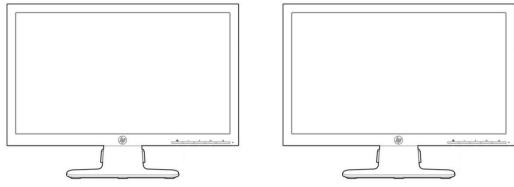*Technical Specifications*

HP ProDisplay P191 18.5-inch LED Backlit Monitor

1.	**Menu**	Opens, selects or exits the OSD menu.	4.	**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.
2.	**Minus**	If the OSD menu is on, press to navigate backward through the OSD menu and decrease adjustment levels.	5.	**Power**	Turns the monitor on or off.
3.	**Plus**	If the OSD menu is on, press to navigate forward through the OSD menu and increase adjustment levels.	6.	**Power LED**	White = Fully powered. Amber = Sleep mode. Flashing Amber = Sleep Timer mode.

Boost Productivity with Dual Monitor Work Solution

(Multi-monitor support depends on your PC capability. Monitors are sold separately.)

Technical Specifications

Model:		C9E54AA
		Head only K0l14AA*
		Note: Head only models may not be available in all regions. Head only models are not TCO certified.
Panel	Type	TN (Twisted Nematic) LED Backlit LCD
	Viewable Image Area (diagonal)	**46,99 cm** (18.5 in.) widescreen; diagonally measured
	Screen Opening (W x H)	**40,98 x 23,04 cm**, (16.13 x 9.07 in.)
	Aspect Ratio	16:9
	Viewing Angle (typical)	Up to 170° horizontal/160° vertical (10:1 minimum contrast ratio)
	Brightness (typical)*	250 nits (cd/m^2)
	Contrast Ratio (typical)*	1000:1
	Dynamic Contrast Ratio (typical)*	3,000,000:1
	Response Time (typical)*	5 ms (on/off)
	Pixel Pitch	0.3 mm
	Backlight Lamp Life (to half brightness)	30,000 hours
	Color Gamut (typical)	72%
	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	Menu, Minus ("-"), Plus ("+"), OK/Auto and Power
	Languages	English, French, German, Italian, Dutch, Spanish, Japanese, Portuguese, Traditional Chinese, and Simplified Chinese
	User Controls	Brightness, contrast, positioning, color temperature (6500k, 9300k, custom), individual color control, serial number, display, clock, clock phase, monitor management, factory reset.
Signal Interface/ Performance	Horizontal Frequency	24 to 83 kHz
	Vertical Frequency	50 to 76 Hz
	Native Resolution	1366 x 768 @ 60 Hz
	Preset VESA Graphic Modes (non-interlaced)	640x 480 @ 60 Hz
		720 x 400 @ 70 Hz
		800 x 600 @ 60 Hz
		1024 x 768 @ 60 Hz
		1280 x 720 @ 60 Hz
		1280 x1024 @ 60 Hz
		1366 x 768 @ 60 Hz
	Text Mode	720 x 400 @ 70 Hz
	Maximum Pixel Clock Speed	140 MHz
	User Programmable Modes	Yes (10)
	Anti-Glare	Yes
	Default Color Temperature	6500 K
Video/Other Inputs	Plug and Play	Yes
	Input Connectors	VGA (analog)
	Input Impedance	75 Ohms
	Sync Input	TTL separate synch
	Video Cable	One 15-pin D-sub (VGA)
	Video Cable Lengths	**1,8 m** (5.9 ft.)

Technical Specifications

Power	Audio	No
	Audio Cable Length	N/A
	Power Supply	Internal
	Input Power	100 – 240 VAC, 50 or 60 Hz
	Typical Power Consumption	18 W
	Maximum	20 W
	Power Saving	< 0.5 W
	Power Cable Length	**1,9 m** (6.2 ft.)

Mechanical	Dimensions (W x D x H)	**Unpacked w/stand**	**44,93 x 14,3 x 34,1 cm**, (17.69 x 5.62 x 13.43 in.)
		Unpacked w/o stand (head only)	**44,93 x 4,75 x 27,5 cm**, (17.69 x 1.87 x 10.86 in.)
		Packaged	**51,5 x 12,8 x 40,2 cm**, (20.28 x 5.04 x 15.83 in.)
		Base area (footprint)	**21,49 x 14,3 cm**, (8.46 x 5.62 in.)
	Weight	**Head Only**	**2,76 kg** (6.08 lb.)
		Unpacked	**3.2 kg** (7.1 lb.)
		Packaged	**4,2 kg** (9.3 lb.)
	Tilt Range	-5˚ to +25˚	
	Swivel Range	No	
	Height Adjustable	No	
	Pivot Rotation	No	
	Base	ships detached	

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%, 60° C max wet-bulb
	Altitude - Operating	**+0 to 5,000 m** (16,404 ft)
	Altitude – Non-operating	**0 to 12,192 m** (0 to 40,000 ft)
	White LED Backlights	Yes
	CCFL Panel	No
	Arsenic-Free Display Glass[4]	Yes
	Low Halogen[5]	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® Gold where HP registers commercial desktop products. See http://www.epeat.net for registration status in your country US Federal Energy Management Program (FEMP)

Energy Consumption (in accordance with US ENERGY STAR® test method)	115VAC, 60Hz	230VAC, 50Hz	100VAC, 60Hz
Normal Operation	9 W	9.6W	NA
Sleep	0.29 W	0.38 W	NA
Off	0.21 W	0.27 W	NA

Heat Dissipation*	115VAC, 60Hz	230VAC, 50Hz	100VAC, 60Hz
Normal Operation	30.78 BTU/hr	32.832 BTU/hr	NA
Sleep	0.9918 BTU/hr	1.2996 BTU/hr	NA

Technical Specifications

Off	0.7182 BTU/hr	0.9234 BTU/hr	NA

*NOTE: 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).
- Plastics parts weighing over 25 grams used in the product are marked per ISO 11469 and ISO1043.
- This product contains 15 % post-consumer recycled plastic (by wt.)
- This product is 98.6% recycle-able when properly disposed of at end of life.

Packaging Materials

Internal:	PLASTIC/EPE-Expanded Polyethylene	269.2 g
External:	PAPER/Corrugated	515 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/supplychain/gen_specifications.html):

- 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)

Technical Specifications

- Polyvinyl Chloride (PVC) – except for wires and cables, and certain retail packaging has been voluntarily removed from most applications.
- Radioactive Substances
- 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 LCD Monitor Quick Release—Part number EM870AA**[i]	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. For more information, refer to this product's QuickSpecs document.

Technical Specifications

	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 Business PC Security Lock Kit—Part number 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.
	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.
What's in the box?	**Monitor and Accessories**	HP ProDisplay P191 18.5-inch LED Backlit Monitor, VGA cable and AC Power cable.
	Documentation	Printed documentation and CD
Other	**Featured Software**	Yes – HP Display Assistant
	User Guide Languages	Arabic, Bahasa Idonesia, Chinese-S, Chinese-T, Czech, Danish, Dutch, English, Finnish, French (European), German, Greek, Hungarian, Italian, Japanese, Kazakh, Korean, Norwegian, Polish, Portuguese (Brazilian), Russian, Slovenian, Spanish (International), Swedish, Turkish.
	Warranty Languages	Arabic, Bahasa Idonesia, Chinese-S, Chinese-T, Czech, Danish, Dutch, English, Finnish, French (European), German, Greek, Hungarian, Italian, Japanese, Kazakh, Korean, Norwegian, Polish, Portuguese (Brazilian), Russian, Slovenian, Spanish (International), Swedish, Turkish.
	Color	Black
	VESA External Mounting	Yes (one set of standard 4-hole pattern, 100 mm).
	Security Lock-Ready	Yes
Certification and Compliance		TCO Displays, ISO 9241-307, CISPR Requirements, VCCI Approvals, KC and KCC (Korean) Requirements, CSA 60950-1, UL 60950-1, EN55022 Class B, CNS 13438 Class B, IEC 60950-1, China Energy Label (CEL), China MEPS, Korea MEPS (pending, Energy Boy), SmartWay – NA only - Energy logistics, EUP Lot 6 Tier 1 AS/NZS 3548 Class B Approval, "GS" Mark, TUV Approvals, GEEA, CE Marking, FCC Part 15 class B Approval, ENERGY STAR® qualified, EN55024 Class B, EN60950 -1, CUL, CCIB, CCEE, IT ECO (EDS), EPEAT® Gold (select regions)[3]
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. Select HP Care Pack Services[2] to extend service contracts beyond the standard warranties.

ENERGY STAR® is a US registered mark of the United States Environmental Protection Agency.

[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] 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. HP Care Pack Services extend service contracts beyond the standard warranties. To choose the right level of service for your HP product, use the HP Care Pack Services Lookup Tool at www.hp.com/go/lookuptool. Additional HP Care Pack Services information by product is available at www.hp.com/hps/carepack.

[3] EPEAT® Gold where HP registers commercial display products. See www.epeat.net for registration status in your country.

[4] Arsenic and its compounds were not detected using US EPA Test Methods 3052 & 3052/6010b by ICP or ICP-AES.

[5] External power supplies, power cords, cables and peripherals are not Low Halogen. Service parts obtained after purchase may not be Low Halogen.

Technical Specifications

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 of change:	Version History:		Description of change:
July 31, 2014	From v1.5 to v6	Added	Added a new model and a disclaimer note
		Added	Added change log
		Upgrade	Change the version, so it would match the PB