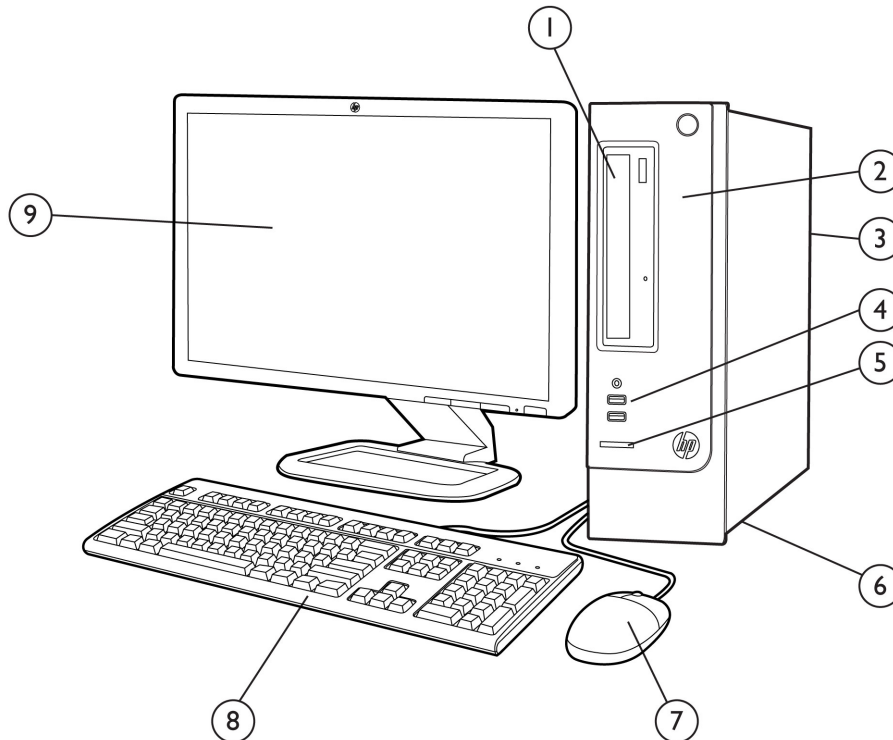


Overview (availability varies by configuration and by country)



1. External 5.25" drive bay for optical drive
2. Internal 3.5" hard drive bay
3. Rear I/O includes: (3) PCIe x1 slots, (1) PCIe x16 slot, (2) miniPCIe slots USB 2.0 ports; network, DVI-D and VGA video ports, and audio
4. Front I/O includes: (2) USB 2.0 ports, dedicated headphone output
5. HP 6-in-1 Media Card Reader
6. Power Supply
7. USB Scroll Mouse
8. HP USB Standard Value Keyboard
9. Monitor (sold separately)

At A Glance

- Windows 8 versions, Windows 7 versions or FreeDOS
- Choice of Intel® Core™ i3, Core i5, Core i7, or Pentium™ processors
- Choice of integrated graphics or ATI or NVIDIA graphics cards
- Up to 8 GB DDR3 SDRAM system memory available standard
- Up to 1 TB 3.0 Gb/s SATA hard drive
- SuperMulti DVD Drive
- Integrated Realtek RTL8171E Gigabit Ethernet Controller
- 6 USB 2.0 ports
- DVI-D and VGA video ports
- 5.1 audio channels
- Protected by HP Services. Terms and conditions vary by country. Certain restrictions and exclusions apply.

Standard Features (availability varies by configuration and by country)

Processors

(Availability depends on model; list is subject to change)

Intel Core i3 Processors:

Intel Core i3-2100 Processor (3.1 GHz, 3 MB cache, 2C/4T)

Intel Core i3-2105 Processor (3.1 GHz, 3 MB cache, 2C/4T, HD3000 graphics)

Intel Core i3-2120 Processor (3.3 GHz, 3 MB cache, 2C/4T)

Intel Core i5 Processors:

Intel Core i5-2400 Processor (3.1 GHz, 6 MB cache, 4C/4T, Turbo)

Up to 3.4 GHz with Intel Turbo Boost Technology

Intel Core i5-2400s Processor (2.5 GHz, 6 MB cache, 4C/4T, Turbo)

Up to 3.3 GHz with Intel Turbo Boost Technology

Intel Core i5-2405s Processor (2.5 GHz, 6 MB cache, 4C/4T, Turbo)

Up to 3.3 GHz with Intel Turbo Boost Technology

Intel Core i5-2500s Processor (2.7 GHz, 6 MB cache, 4C/4T, Turbo)

Up to 3.7 GHz with Intel Turbo Boost Technology

Intel Core i7 Processors:

Intel Core i7-2600s Processor (2.8 GHz, 8 cache, 4C/8T, Turbo)

Up to 3.8 GHz with Intel Turbo Boost Technology

Intel Pentium:

Intel Pentium G620 Processor (2.6 GHz, 3 MB L3 cache, 850 to 1100MHz FSB)

Intel Pentium G840 Processor (2.8 GHz, 3 MB L3 cache, 850 to 1100MHz FSB)

Intel Pentium G850 Processor (2.9 GHz, 3 MB L3 cache, 850 to 1100MHz FSB)

NOTE: Intel processor numbers are not a measure of performance. Processor numbers differentiate features within each processor family, not across different processor families.

Operating System

Preinstalled

Windows 8*

Windows 8 Pro*

Windows 7 Professional Edition (32-bit)**

Windows 7 Professional Edition (64-bit)**

Windows 7 Home Premium Edition (64-bit)**

Windows 7 Home Basic Edition (64-bit)**

Windows 7 Starter (32-bit) (limited regions support)**

FreeDOS

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

** System may require upgraded and/or separately purchased hardware and/or a DVD drive to install the Windows 7 software and take full advantage of Windows 7 functionality. See <http://www.microsoft.com/windows/windows-7/> for details.

Chipset

Intel H61 Express Chipset

Standard Features (availability varies by configuration and by country)

Graphics

Integrated

Intel HD Graphics
AMD Radeon HD 6450 1GB DDR3 LP PCIe x16 Card
AMD Radeon HD 6450 512MB DDR3 LP PCIe x16 Card
NVIDIA GeForce 405 1GB DDR3 LP PCIe x16 Card
NVIDIA GeForce GT 520 1GB DDR3 FH PCIe x16 Card

System Memory

Memory Type PC3-10600 DDR3 SDRAM (1066/1333MHz) non-ECC
Expansion Slots Two (2) DIMM slots
Maximum Memory* 8 GB
Standard Configurations 2 GB (1 x 2GB)
3 GB (1 x 1GB + 1 x 2GB)
4 GB (1 x 4GB)
4 GB (2 x 2GB)
5 GB (1 x 4GB + 1 x 1GB)
6 GB (1 x 4GB + 1 x 2GB)
8 GB (2 x 4GB)

* For systems configured with more than 3 GB of memory and a 32-bit operating system, all memory may not be available due to system resource requirements. Addressing memory above 4 GB requires a 64-bit operating system.

Storage

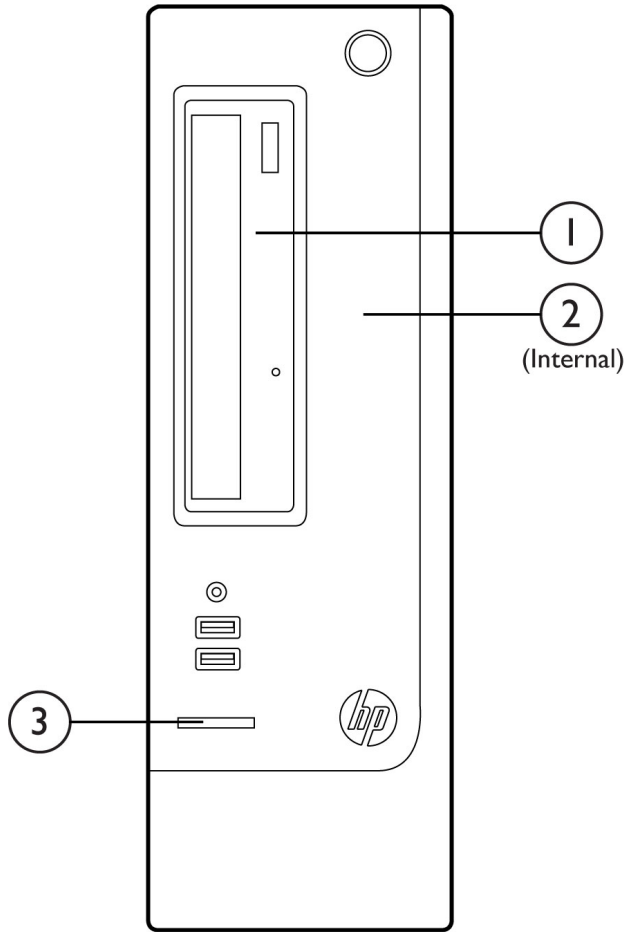
Hard Drive (SATA) 3.5-inch, 7200 rpm, 3.0 Gb/s SATA Hard Drive (NCQ, SMART):
320 GB 750 GB
500 GB 1 TB

Media Reader HP 6-in-1 Media Card Reader
Optical Drive (SATA) HP SATA 16X SuperMulti DVD Drive

Bays

Internal One (1) 3.5-inch
External One (1) 5.25-inch

Standard Features (availability varies by configuration and by country)



	Maximum Quantity Supported	Position Supported (as shown on image above)	Controller
Drive Support			
Media Reader	1	3	Internal USB 2.0 port
SuperMulti DVD Drive	1	1	SATA
3.5" Serial ATA Hard Drive	1	2	SATA
Slots			
# PCI 2.3 slots	0		
# PCI Express x1 slots	3		
# PCI Express x16 slots	1		
# MiniPCIe slots	1		

Standard Features (availability varies by configuration and by country)

Communication Integrated Realtek RTL8171E Gigabit Ethernet Controller

USB Support EHCI high-speed USB 2.0 controller

Ten (10) internal ports on system board:

- 2 for front ports
- 4 for media card reader and other internal devices
- 4 reserved for rear I/O

External USB 2.0 ports

Front	2
Rear	4

Interfaces One (1) DVI-D video output
One (1) VGA video port
One (1) audio in; 5.1 audio channel out

Displays HP S2231a 21.5-in Wide Monitor
HP S2031a 20-in Wide Monitor

Audio Realtek ALC656 Audio

Input Devices **Keyboard - One of the following**
HP USB Wired Keyboard w/ Vol Ctrl
HP USB Standard Value Keyboard
Mouse - One of the following
HP USB Optical BLK Mouse

Miscellaneous HP Chassis Security Kit
HP USB 3.0 Superspeed PCIe x1 card

Standard Features (availability varies by configuration and by country)

Software	Preinstalled software (varies by country)	Microsoft Office 2010 Starter Preloaded (purchase of a Product Key required to activate a full Office 2010 suite)* Microsoft Windows Virtual PC - XP Norton Internet Security 2011 (60-day trial) PDF Complete Special Edition Cyberlink PowerDVD Cyberlink Label Print Cyberlink Power 2 Go Cyberlink Power Director Cyberlink Power Starter HP Power Assistant Credential Manager for HP ProtectTools HP ProtectTools Suite SMB Quicken Financial Center (SBSO version) Xobni HP Recovery Manager HP Support Assistant (HPSA)
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* Microsoft Office Starter 2010 Preloaded includes reduced functionality versions of Word and Excel, unless a full version suite is added to the configuration at additional cost. Purchase of Product Key required to activate full Office 2010 suite available at participating resellers/retailers and <http://www.office.com>.

** Supporting software available with certain optical drive configurations.

Security	Padlock loop Kensington Lock Support Noble Universal Clamp Lock Cable Kit HP Chassis Security Kit
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Power Supply	220W aPFC power supply
Model	220W aPFC
Rated Voltage Range	100 - 240 VAC
115V/230V Line switch	N/A

Service and Support On-site Warranty^{Note 1}: 1-1-1, limited warranty delivers on-site, next business-day^{Note 2} service for parts and labor and includes free telephone support^{Note 3} 24 x 7. Global coverage^{Note 2} ensures that any product purchased in one country and transferred to another non-restricted country will remain fully covered under the original warranty and service offering. One-year onsite and labor are not available in all countries.

NOTE 1: Terms and conditions may vary by country. Certain restrictions and exclusions apply. Other warranty variations may be offered in your region.

NOTE 2: On-site service may be provided pursuant to a service contract between HP and an authorized HP third-party provider, and is not available in certain countries. Global service response times are based on commercially reasonable best effort and may vary by country.

NOTE 3: Technical telephone support applies only to HP-configured Compaq and third-party HP-qualified hardware and software. Toll-free calling and 24 x 7 support may not be available in some countries.

After-Market Options (availability varies by configuration and by country)

After-Market Options are TBD. The list of supported options will be finalized prior to product launch.

Technical Specifications

System Unit	Dimensions (LxHxW)	15.61 x 12.77 x 4.98 in 396.58 x 324.46 x 103.68 mm	
	Weight	13.9 lb (6.3 kg)	
	Packaging Dimensions (LxWxH)	19.41 x 15.67 x 9.57 in 493 x 398 x 243 mm	
	Shipping Weight	19.2 lb (8.7 kg)	
	Temperature	Operating	41° to 95° F (5° to 35° C)
		Non-operating	-22° to 149° F (-30° to 65° C)
	Relative Humidity	Operating	10% to 90% (non-condensing at ambient)
		Non-operating	5% to 95% (non-condensing at ambient)
	Shock	Operating	35 G, half-sine
		Non-operating	30 G, half-sine
Maximum Altitude (unpressurized)	Operating	10,000 ft (3048 m)	
	Non-operating	30,000 ft (9144 m)	

For accessibility information on HP products, please visit: <http://www.hp.com/accessibility>.

Unit Environment and Operating Conditions

General Unit Operating Guidelines

- Keep the computer away from excessive moisture, direct moisture and the extremes of heat and cold, to ensure that unit is operated within the specified operating range.
- Leave a 4 in (10.2 cm) clearance on all vented sides of the computer to permit the required airflow.
- Never restrict airflow into the computer by blocking any vents or air intakes.
- Do not stack computers on top of each other or place computers so near each other that they are subject to each other's re-circulated or preheated air.
- Occasionally clean the air vents on the front, back, and any other vented side of the computer. Lint, dust and other foreign matter can block the vents and limit the airflow.
- If the computer is to be operated within a separate enclosure, intake and exhaust ventilation must be provided on the enclosure, and the same operating guidelines listed above will still apply.

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

System Configuration

The configuration used for the Energy Consumption and Declared Noise Emissions data for the Ultra-slim Desktop model is based on a typically configured product

Energy Consumption	115 VAC	230 VAC	100 VAC
Normal Operation	44.68 W	45.20 W	44.25 W
Sleep (Energy Star low power mode)	1.42 W	1.42 W	1.41 W
Off	0.73 W	0.73 W	0.73 W

NOTE:

Energy efficiency data listed is for an ENERGY STAR® compliant product if offered within the model family. HP computers marked with the ENERGY STAR® Logo are compliant with the applicable U.S. Environmental Protection Agency (EPA) ENERGY STAR® specifications for computers. If a model family does not offer

Technical Specifications

ENERGY STAR® compliant configurations, then energy efficiency data listed is for a typically configured model.

Heat Dissipation*	115 VAC	230 VAC	100 VAC
Normal Operation	153 BTU/hr	155 BTU/hr	151 BTU/hr
Sleep	5 BTU/hr	5 BTU/hr	5 BTU/hr
Off	2 BTU/hr	2 BTU/hr	2 BTU/hr

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

Declared Noise Emissions (in accordance with ISO 7779 and ISO 9296)

(Typically Configured)	Sound Power (LWAd, bels)	Sound Pressure (LpAm, decibels)
Idle	3.73	28.4
Fixed Disk (random writes)	3.85	30.3

Batteries

This battery(s) in this product comply with EU Directive 2006/66/EC

Batteries used in the product do not contain:

- Mercury greater than 5ppm by weight
- Cadmium greater than 10ppm by weight

Battery size: CR2032 (coin cell)

Battery type: Lithium

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 0% post consumer recycled plastic (by wt.)
- This product is 92.2% recyclable when properly disposed of at end of life.

Packaging Materials

- External:
 - Corrugated 1.198 g
- Internal:
 - Polyethylene low density 0.016 g
 - Polyethylene low density foam 0.027 g
- The Corrugated packaging material is made from 58.5% recycled content.
- The Polyethylene low density packaging material is made from 0% recycled content.
- The Polyethylene low density foam packaging material is made from 0% recycled content.

Technical Specifications

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
- 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
- Tributyl Tin (TBT), Triphenyl Tin (TPT), Tributyl Tin Oxide (TBTO)
- Nickel - finishes must not be used on the external surface designed to be frequently handled or carried by the user.

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

Technical Specifications

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>

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