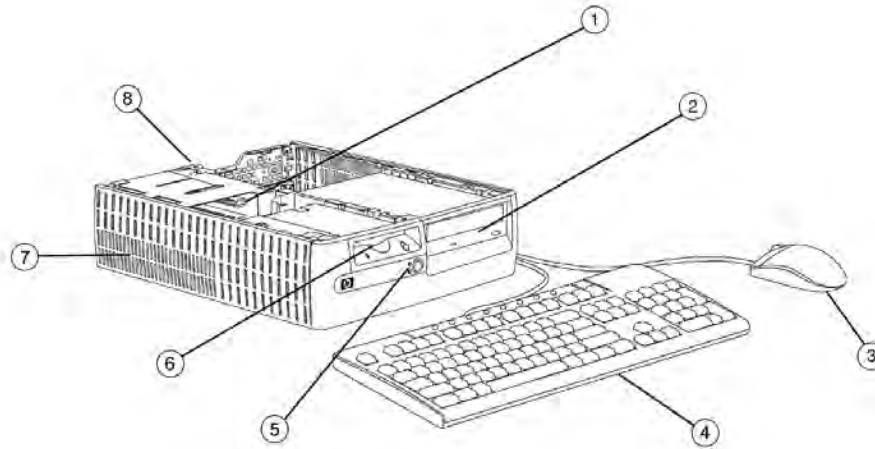


Overview



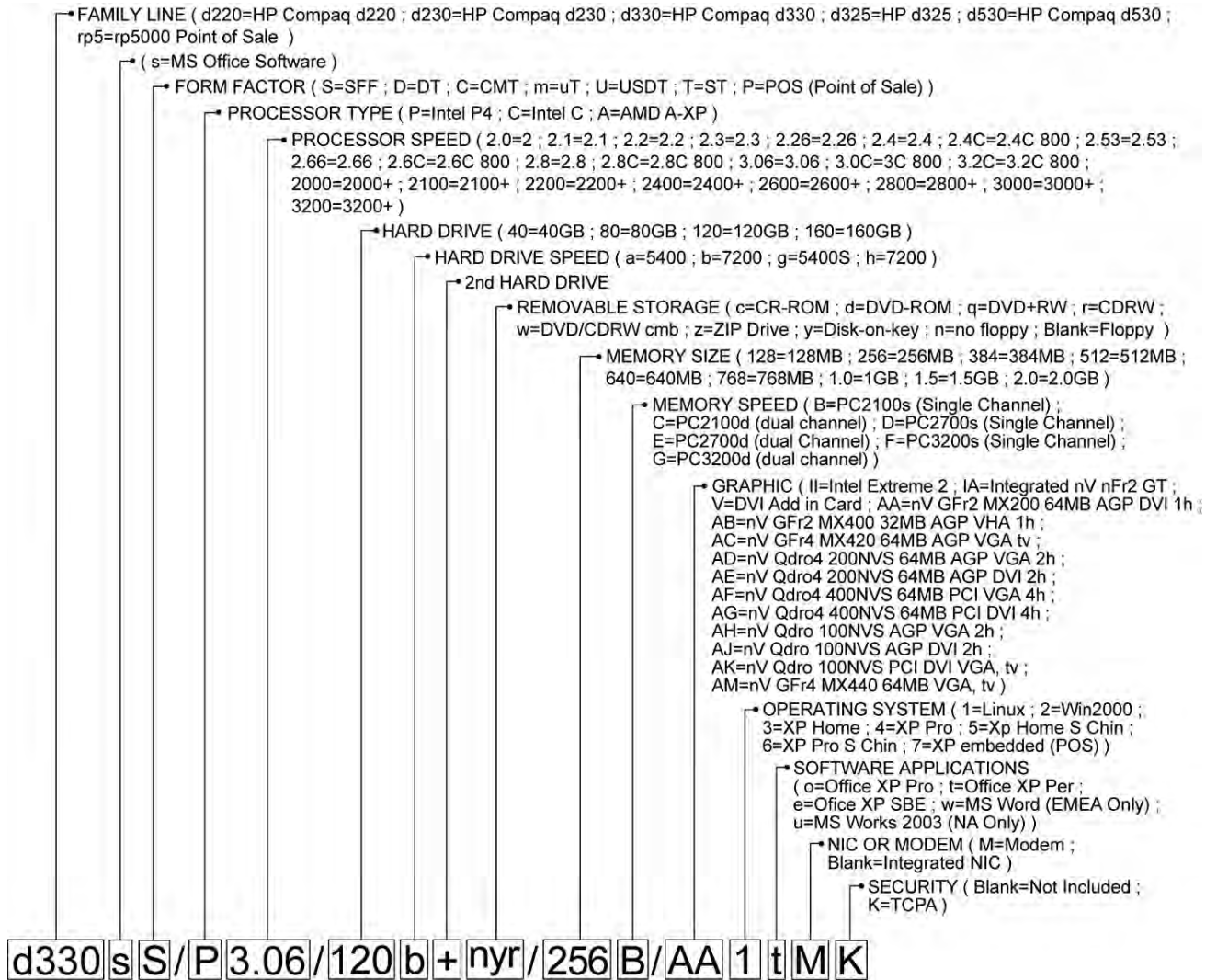
1. Expansion: 2 full-height PCI slots 1 low-profile AGP 8X slot
2. 1 3.5" internal bay and 1 5.25" external bay for CD-ROM, DVD-ROM, CD-RW or Combo Drives
3. 2-Button Scroll Mouse
4. Easy Access Keyboard
5. 2 USB 2.0, headphone and microphone
6. Optional diskette drive or 3.5" external bay
7. 185W Power Supply
8. Rear I/O: 4 USB 2.0, 1 standard serial port, 1 optional serial port, 1 parallel port, 2 PS/2, 1 RJ-45, 1 VGA, audio in/out

At A Glance

- Intel® Pentium® 4 and Celeron™ processors
- Intel 845GV chipset with Intel Extreme integrated graphics
- Integrated Intel Pro 100/VM ethernet
- 400-MHz processor front side bus support
- SMART III Ultra ATA/100 Hard Drives
- SoundMax Digital AC97 integrated audio with internal speaker
- Pre-loaded Manageability tools
- Energy Star compliance with energy-saving features
- Protected by HP Services, including a 3-3-3, standard warranty. Terms and conditions vary by country. Certain restrictions and exclusions apply.

Standard Features - Select Models (localized by Regions)

HP Point of Sale System rp5000



Standard Features - Custom Components

		rp5000
Processor and Speed - One of the following	Intel Celeron Processors with 400-MHz Front Side Bus, 128KB L2 cache 2.0-GHz	X
	Intel Pentium 4 Processors with 400-MHz Front Side Bus, 512KB L2 cache 2.0-GHz	X
Hard Disk Drive - One of the following	40-GB 5400 rpm SMART III Ultra ATA/100	X
	2nd hard drive, 40-GB 5400 rpm SMART III Ultra ATA/100 (optional in lieu of floppy)	X
Memory - One of the following	128-MB DDR Synch Dram PC2700 (333-MHz) Non ECC (1 x 128)	X
	256-MB DDR Synch Dram PC2700 (333-MHz) Non ECC (1 x 256)	X
	256-MB DDR Synch Dram PC2700 (333-MHz) Non ECC (2 x 128)	X
	384-MB DDR Synch Dram PC2700 (333-MHz) Non ECC (1 x 128, 1 x 256)	X
	512-MB DDR Synch Dram PC2700 (333-MHz) Non ECC (1 x 512)	X
	512-MB DDR Synch Dram PC2700 (333-MHz) Non ECC (2 x 256)	X
	1-GB DDR Synch Dram PC2700 (333-MHz) Non ECC (1 x 1GB)	X
	1-GB DDR Synch Dram PC2700 (333-MHz) Non ECC (2 x 512)	X
Removable Storage	1.44-MB Diskette Drive (optional)	X
	16MB USB Disk-on-Key	X
	64MB USB Disk-on-Key	X
	128MB USB Disk-on-Key	X
	48X CD-ROM Drive	X
	16X/40X DVD-ROM with +R Read	X
Keyboard	PS/2 Standard Keyboard (no hotkeys)	X
	No keyboard optional	X
Mouse	PS/2 2-Button Scroll Mouse	X
	No mouse optional	X
Audio	SoundMax Digital AC97 integrated audio with internal speaker	X
NIC	Intel Pro 100/VM NIC	X
Miscellaneous	Wall/under desk mounting bracket	X
	Tower stand	X
Graphics	Intel Extreme Graphics (integrated with Intel 845GV chipset)	X
	NVIDIA Quadro4 100NVS PCI (64MB, dual VGA, TV out)	X

Standard Features - Custom Components

Security	Solenoid/Hood Sensor	X	X	X
	Rear Port Control Bracket	X	X	X
	Chassis clamp locks with cable	X	X	X
	Chassis clamp lock without cable	X	X	X

Operating System – One of the following	Microsoft Windows XP Professional with service pack 1a	X
	Microsoft Windows XP Embedded with service pack 1	X
	Microsoft Windows 2000 with service pack 4	X

Standard Features

Processor	Intel Pentium 4, Intel Celeron
CPU Bus Speed Supported	400-MHz FSB
Standard L2 Cache - Pentium 4, Celeron	512-KB ECC, 128-KB ECC depending on processor speed
Chipset	Intel 845GV
Memory Expansion Slots	2 DIMMs
Memory Type Supported	DDR (ECC not supported by Chipset)
Memory Speed Supported	PC2700 (333-MHz) Non-ECC - ships standard
	DDR Synch DRAM PC2100 (operates at 266MHz) Non-ECC
	DDR Synch DRAM PC3200 (operates at 333MHz) Non-ECC
Maximum Memory	2-GB
Network controller	Integrated Intel PRO/100VM
Graphics	Integrated Intel Extreme Graphics
Audio	SoundMax Digital AC97 integrated audio with internal speaker
PCI	2 full-height half -length PCI card (6.87 in/17.45 cm)
AGP	None
Bays	Total Bays = 3
Internal Bays	(1) 3.5 inch ATA Hard Drive
External Bays	((2) 1- 3.5-inch floppy drive bay or 2nd HD and 1- 5.25-inch optical drive bay
Parallel Port	1
Serial Port	4 standard RS232 - individually configurable to powered (5V, 12V)
USB Port	6 USB 2.0 - 4 powered (3 - 12V, 1 - 24V), 2 standard
Front I/O	None
Rear I/O	6 USB 2.0, 4 Serial, 1 Parallel, 1 VGA, Line Out, 1 RJ-45, 2PS/2
PS/2 Keyboard	1
PS/2 Mouse	1
VGA Adapter	1
Chassis Dimensions (H x W x D) Centimeters	10 x 33.8 x 38.3
Chassis Dimensions (H x W x D) Inches	3.95 x 13.3 x 15.1
System Weight	22.2 lbs (10.07 kg)
System Volume	13 liters
Shipping Weight	29 lbs (13.15 kg)
Power Supply	185W Power Supply - PFC (115v / 230v line switch)
Hard Drive Interfaces Supported	2 ULTRA ATA/100 interfaces
Serial-ATA	0
Preinstalled Software	
Microsoft Windows XP Professional with service pack 1a	X
Microsoft Windows XP Embedded with service pack 1	X
Microsoft Windows 2000 with service pack 4	X
Computer Setup Utility	X
Diagnostics for Windows	X
Microsoft Internet Explorer	X

After-Market Options

Graphics	2D Multi-Display Graphics NVIDIA Quadro4 100NVS 64-MB PCI VGA, DVI-I, S-video	DC664A
Memory (DIMMs)	266-MHz (PC2100) DDR DIMMs Non-ECC 1-GB DDR Synch Dram PC2100 (266-MHz) Non-ECC 512-MB DDR Synch Dram PC2100 (266-MHz) Non-ECC 256-MB DDR Synch Dram PC2100 (266-MHz) Non-ECC 128-MB DDR Synch Dram PC2100 (266-MHz) Non-ECC	DC166A DC165A DC164A DC163A
	333-MHz (PC2700) DDR DIMMs Non-ECC 1-GB DDR Synch Dram PC2700 (333-MHz) Non-ECC 512-MB DDR Synch Dram PC2700 (333-MHz) Non-ECC 256-MB DDR Synch Dram PC2700 (333-MHz) Non-ECC 128-MB DDR Synch Dram PC2700 (333-MHz) Non-ECC	DC341A DC340A DC339A DC338A
	400-MHz (PC3200) DDR DIMMs Non-ECC 1-GB DDR Synch Dram PC3200 (400-MHz) Non-ECC 512-MB DDR Synch Dram PC3200 (400-MHz) Non-ECC 256-MB DDR Synch Dram PC3200 (400-MHz) Non-ECC 128-MB DDR Synch Dram PC3200 (400-MHz) Non-ECC	DE468A DE467A DE466A DE465A
Monitors	TFTs HP TFT L2025 Monitor (20.1-inch) HP TFT L1825 Monitor (18.1-inch) Compaq TFT1720 Monitor (17-inch)	P4831D P9021A D5064D
	CRTs Compaq P1130 CRT Monitor (21-inch) Compaq P930 CRT Monitor (19-inch) Compaq S9500 CRT Monitor (19-inch) Compaq S7500 CRT Monitor (17-inch) Compaq S5500 CRT Monitor (15-inch)	 261615-003 P9008A 261602-001
Optical Drives	DVD-ROM Drive 16X/40X DVD-ROM w/ +R read	DC151B
	CD-ROM Drive 48X Max CD-ROM Drive	DC143B
Removable Storage	16-MB USB Disk-on-Key 64-MB USB Disk-on-Key 128-MB USB Disk-on-Key	DC192B DC191B DC190B
Security	Kensington Security Lock	DC368A

After-Market Options

Brackets/Stand s	Wall Mounting Bracket	
	Chassis clamp lock (no cable)	DE817A
	Chassis clamp lock (with 6 foot cable)	DE818A
<hr/>		
Other	Assorted insert kit (floppy, HDD, ZIP)	DF783B
	Bezel kit (floppy replacement)	DF785B
	5.25" bay bezel with 3.5" access slot	DG064B

Memory

845GV chipset

DDR SYNCH DRAM Non-ECC Memory

It is not necessary to add memory in pairs. Memory upgrades are accomplished by adding single or multiple DIMMs of the same or varied sizes. This chart does not represent all possible memory configurations. The Intel 845GV chipset supports non-ECC 266MHz (PC2100), 333MHz (PC2700) and 400MHz (PC3200) DDR memory.

System will support PC3200 memory but will default to PC2700 performance.

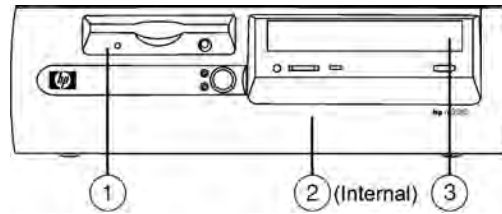
Maximum Memory (RP5000 Point of Sale System)

Supports up to 2-GB of DDR SYNCH DRAM.

Possible Memory Configurations

DIMM Size	Slot	
	1	2
128-MB	128-MB	
256-MB	128-MB	128-MB
384-MB	256-MB	128-MB
512-MB	512-MB	
512-MB	256-MB	256-MB
768-MB	512-MB	256-MB
1-GB	1-GB	
1-GB	512-MB	512-MB
1.5-GB	1-GB	512-MB
2-GB maximum	1-GB	1-GB

Storage



Front View

Diskette Drives
 Optional second internal 3.5" SMART III Ultra ATA Hard Drive
 Optical Drive Bay
 Internal 3.5" SMART III Ultra ATA Hard Drive

Quantity Supported

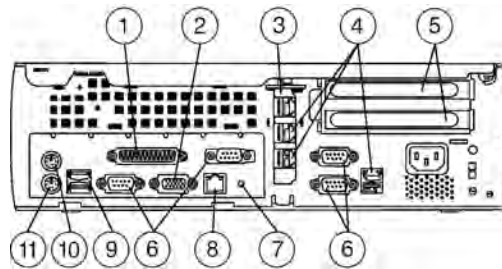
1
 1 in lieu of floppy
 1
 1

Position Supported

1
 1
 3
 2

Controller

Diskette
 IDE
 IDE
 IDE



Rear View

Parallel
 VGA
 1 USB 2.0 - 24V powered port
 3 USB 2.0 - 12V powered ports
 2 full-height PCI slots
 4 standard RS232 serial ports configurable via system board jumpers to powered 5V & 12V
 Line out
 RJ45
 2 standard USB 2.0 ports
 Mouse - PS/2
 Keyboard - PS/2

Position

1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11

TechSpecs

Base Unit Contents	
Processor	Intel Pentium 4 & Celeron Socket N - 478
CPU Bus Speed Supported	400 and 533 -MHz FSB
Coprocessor	Integrated
CPU Package	FC-PGA2
Standard L2 Cache - Pentium 4, Celeron	512-KB ECC, 128 - KB ECC depending on processor speed
L2 Cache Architecture / Speed - Pentium 4 and Celeron	Full core clock speed
Cache Upgradeable - Pentium 4 and Celeron	Not upgradeable - Integrated into Processor
System board with Intel 845Gv Chipset with Integrated 4X AGP	X
Cables	ATA Cable
Quick Setup Poster	X
Product Documentation on CD	X
Operating System CD	X
Restore CD	X
Power Cord	X
Keyboard	X (PS/2)
Mouse	X (PS/2)
Memory Expansion Slots	2 DIMMs
Memory Type Supported	DDR (ECC not supported by Chipset)
Memory Speed Supported	PC2700 (333-MHz) Non-ECC - ships standard
	DDR Synch DRAM PC2100 (operates at 266MHz) Non-ECC
	DDR Synch DRAM PC3200 (operates at 333MHz) Non-ECC
Maximum Memory	2-GB
Memory Parity	Not Needed for non-ECC
ECC Memory	Not Supported by chipset
Serial Presence Detect Support	Supported
PCI	2 full-height half- length PCI card (6.87 in / 17.45 cm)
AGP	None
Bays	Total Bays = 3
Internal	(1) 3.5 inch ATA Hard Drive
External	(2) 1- 3.5 floppy drive bay or 2nd HD and 1- 5.25 inch optical drive bay
Wireless Support	PCI card or external USB
Parallel Port	1
Serial Port	4 standard RS232 - individually configurable to powered (5V, 12V)
USB Port	6 USB 2.0 - 4 powered (3 - 12V, 1 - 24V), 2 standard
PS/2 Keyboard	1
PS/2 Mouse	1
VGA Adapter	1
Chassis Dimensions (H x W x D) Centimeters	10 x 33.8 x 38.3
Chassis Dimensions (H x W x D) Inches	3.95 x 13.3 x 15.1
System Weight	22.2 lbs (10.07 kg)
System Volume	13 liters
Shipping Weight	29 lbs (13.15 kg)
Monitor weight supported (maximum)	77 lbs (35 kg)
Hard Drive Interfaces Supported	2 ULTRA ATA/100 interfaces
Hard Drive Controller (PCI) Supported	ULTRA ATA 100/66/33
Serial-ATA	2 port

TechSpecs

System Board	
Architecture	P4 / PCI / AGP 4X
Chipset	Intel 845GV Chipset
I/O Controller	SMSC LPC47B387 & LPC47M107 (for 3rd and 4th serial ports)
System Board Form Factor	custom
Processor Socket - 478 Pin ZIF	X
DIMM Connectors (2.5V)	2
AGP Connector (1.5V)	—
Integrated AGP Graphics	Intel
PCI Connectors (5.0V)	1
Flash ROM	X
AC97 integrated audio	X
CD ROM IN (Audio)	X
AUX IN (Audio)	X
Clear CMOS Jumper	X
CPU Fan Header	X
Chassis Fan Header	X
Chassis Speaker Header	X
CMOS Battery Holder - Lithium	X
Integrated Intel PRO/100VM NIC	X
Wake-On-Lan®	X
ASF 1.0 (Alert Standard Format)	X
Power Supply Header	X
Power Switch, Power LED & Hard Drive LED Header	X
Password Clear Header	X
Riser Connector	X
SCSI LED Header	X
PCI extender that connects to System Board	—

Chassis	
Color	Carbonite
System Board Form Factors Supported	Custom point of sale
Cooling Solutions Supported	X
Power Supply Fan (Variable Speed)	X
Processor Fan-Heatsink (Variable Speed)	X
Chassis Fan	X
Slots Supported	2 full-height half-length PCI card (6.87 in / 17.45 cm)
AGP Slot	—
Front I/O	none
Rear I/O	4 USB, 1 VGA, Audio In, Audio Out, 1 RJ-45, Audio In, Audio Out / Headphone
Internal Speaker	X
Power Supply	185W Power Supply - PFC (115v / 230v line switch)
Security Locks Supported	Kensington Cable Lock Provision (Lock not included) Hood Cover Security Loop (Lock not included)
Security Loop Hole Diameter	0.212 in (0.538 cm)

TechSpecs

Interfaces	
I/O Chip	SMSC LPC47B387 & LPC47M107 (for 3rd and 4th serial ports)
Serial Port	4 powered (5V, 12V) and individually configurable to standard RS232
Parallel Port	1
PS/2	2
USB (2.0)	6 USB 2.0 - 4 powered (3 - 12V, 1 - 24V), 2 standard
RJ-45 10/100/1000 Network	X
Keyboard	X (PS/2 standard)
Mouse	X (PS/2 standard)
Multibay	—
Video (VGA)	X
Audio	X (line out only)

Power Supply	
Power Supply	Custom Power Supply - PFC With in 230V (115v/230V line switch)
Full Ranging Input (No Line Select Switch)	—
Active Power Factor Correction (APFC) (Input Current is nearly 1/2 a non-APFC PS)	—
Passive Power Factor Correction (PFC)	X
Operating Voltage Range	90 – 132 / 180 – 264 VAC
Rated Voltage Range	100 – 127 / 200-240 VAC
Rated Line Frequency	50/60 Hz
Operating Line Frequency Range	47 – 63 Hz
Rated Input Current	5A / 2.5A
Heat Dissipation	Typical 256 btu/hr (65 kg-cal/hr) Maximum 971 btu/hr (245 kg-cal/hr)
Power Supply Fan	60 mm variable speed
Energy Star Compliant	X
Blue Angel Compliant (<5w in S5-- Power Off)	X
FEMP Standby Power Compliant (<2W in S5 – Power Off)	X
Power Consumption in ES Mode - Suspend to RAM (S3) (Instantly Available PC)	2.5W to 3W
Processor/Cache Memory Power -Down (S3)	< 3W
CD-Rom Spins Down when not in use	
Environmental and Mechanical Engineering Support Center	http://env-webserver.ccm.cpqcorp.net/EMESC/default.htm

TechSpecs

ROM Features	Description	
Instantly Available PC (Suspend to RAM - S3)	Allows for very low power consumption with quick resume time	X
ROM Based F10 Setup	Review and customize BIOS settings	X
Remote System Installation via F12 (PXE) (Remote Boot from Server)	Allows a new or existing system to boot over the network and download software, including the operating system	X
System/Emergency ROM Flash Recovery with Video	Recovers corrupted system BIOS	X
CMOS Archive and CMOS Restore	Holding down the power button restores the last known good BIOS settings (from previous restart) if the system gets into a locked state after configuration changes are made	X
Auto Setup when New Hardware Installed	System automatically detects addition of new hardware	X
Serial, Parallel, USB, Audio, Network, Enable/Disable Port Control	Enable or disables serial, parallel, USB, audio, and network ports	X
Removable Media Write / Boot Control	Prevents ability to boot from removable media on supported devices (and can disable writes to media)	X
Network Server Mode	Allows for secured keyboard-less operation	X
Power-On Password	Prevents an unauthorized person from booting up the computer	X
Setup Password	Prevents an unauthorized person from changing the system configuration	X
Replicated Setup	Saves BIOS settings to diskette or USB disk-on-key in human readable file. Repset.exe utility can then replicate these settings on machines being deployed without entering ROM-based F10 setup	X
Memory Change Alert (Requires Insight Management Agent)	Alerts management console if memory is removed or changed	X
Thermal Alert (Requires Insight Management Agent)	Monitors the temperature state within the chassis. Three modes: <ul style="list-style-type: none"> ● NORMAL - normal temperature ranges ● ALERTED - excessive temperatures are detected. Raises a flag so action can be taken to avoid shutdown or provide for a smoother system shutdown ● oHUTDOWN - excessive temperatures are encountered. Automatically shuts down the computer without warning before hardware component damage occurs 	X
Cover Removal Alert (Requires Insight Management Agent for network alerts)	Notifies the Network Administrator and end user when the cover has been removed without authorization through an electronic switch residing inside the computer. Can be set to one-of-three modes: <ul style="list-style-type: none"> ● DISABLED - user/network administrator does not want to be made aware of the computer hood removal ● NOTIFY USER - notifies user/network administrator that the hood has been removed, but no action required before re-booting the computer ● UP PASSWORD - notifies user/network administrator that the hood has been removed and administrator password is required before the computer will continue to boot 	—
Master Boot Record Security	Detects changes to MBR and optional restoration, useful in protecting from viruses	X
Remote ROM Flash	Provides secure, fail-safe ROM image management from a central network console	X
Remote Wakeup	<ul style="list-style-type: none"> ● System administrators can power on, restart, and power off a client computer from a remote location. ● Enables cost-effective power consumption when the administrator needs to distribute software, perform security management, or update the ROM. 	X
ACPI (Advanced Configuration and Power Management Interface)	<ul style="list-style-type: none"> ● Allows the system to wake from a low power mode ● Controls system power consumption, making it possible to place individual cards and peripherals in a low-power or powered-off state without affecting other elements of the system 	X
Keyboard-less Operation	The system can be operated without a keyboard	X
SMBIOS	System Management BIOS, previously known as DMI BIOS, for system management information	X
Environmental and Mechanical Engineering Support Center (EMESC) - Intranet Web Site only	http://env-websvr.ccm.cpqcorp.net/EMESC/default.htm	

TechSpecs

Software	Description	
Preinstalled Software		
Windows 3.1		—
Windows 95		—
Windows 98		—
Windows NT 4.X (drivers available on web - Softpaqs only)		—
Microsoft Windows XP Professional with service pack 1a		X
Microsoft Windows XP Embedded with service pack 1		X
Microsoft Windows 2000 with service pack 4		X
Windows XP Home SP1		—
Computer Setup Utility		X
Diagnostics for Windows		X
Microsoft Internet Explorer		X
Pre-loaded Software		
Altiris Agents (Aclient, Nsclient)		X
Insight Management Agent		X
Local Diskette Boot		X
Network Boot		X
Disk-on-Key Boot		X

TechSpecs

Initial Configuration and Deployment	Description	
HP Client Manager Software (free)	A FREE solution that provides asset tracking, alerting, diagnostics, and SoftPaq distribution for Compaq business desktops, notebooks, and workstations. Compaq Client Manager "plugs" into the Altiris eXpress infrastructure to provide value-add Compaq specific information that can be leveraged by all Altiris eXpress solutions	X
Altiris eXpress Solutions (30-day trial version)	A suite of solutions that focus on business needs in four areas, saving time and freeing resources to address other crucial issues: <ul style="list-style-type: none"> ● Deployment & Migration ● Software & Operations Management ● Inventory & Asset Management ● Help Desk & Problem Resolution 	X
System Software Manager (free)	Detects and updates BIOS, device drivers, and management agent versions on your networked PCs	X
Replicated Setup	Saves BIOS settings to diskette or USB disk-on-key in human readable file. Repset.exe utility can then replicate these settings on machines being deployed without entering ROM-based F10 setup	X
Insight Manager	-----	X
Support Software CD	-----	X
Software Restore CD	Restores computer to its original factory shipping image	X
Asset Tag	<ul style="list-style-type: none"> ● Repository for storing company-specific property asset numbers for easy tracking ● Initially set equal to the system serial number ● Stored in a protected section of non-volatile memory that can be accessed and modified with the F10 Setup program 	X
DIMM Serial Presence Detect	Detects whether or not memory DIMMs are present and their type	X
Hard drive serial number, model, and manufacturer	Hard drive manufacturer, model, and serial number is stored in the hard drive firmware and reported in ROM-based F10 setup	X
Monitor serial number, model & manufacturer	-----	X
System serial number, model, & manufacturer	System serial number, model, & manufacturer stored in a non-volatile memory and can be retrieved with management SW or viewed in ROM-based F10 setup	X
ROM revision levels	<ul style="list-style-type: none"> ● Identifies system ROM revision levels and reports in ROM-based F10 setup ● Version is stored in an industry standard memory location (SMBIOS) so that management SW applications can use and report this information 	X
System board revision level	<ul style="list-style-type: none"> ● Allows management SW to read the revision level of the system board ● Revision level is digitally encoded into the hardware and cannot be modified 	X
Memory Change Alert	Alerts management console if memory is removed or changed	X
Ownership Tag	A user-defined string stored in non-volatile memory that is displayed in the BIOS splash screen	X

TechSpecs

Security Features	Description	
Smart Cover Lock	Remote operated system lock	—
Smart Cover Sensor (Requires Insight Management Agent for network alerts)	<p>Notifies the Network Administrator and end user when the cover has been removed without authorization through an electronic switch residing inside the computer. Can be set to one-of-three modes:</p> <ul style="list-style-type: none"> ● DISABLED -user/network administrator does not want to be made aware of the computer hood removal ● NOTIFY USER - notifies user/network administrator that the hood has been removed, but no action required before re-booting the computer ● UP PASSWORD – notifies user/network administrator that the hood has been removed and administrator password is required before the computer will continue to boot 	—
Mechanical Hood Security Provision	Security Loop	X
Kensington Lock Support	Kensington lock slot on the chassis	X
Cable Lock Provision	Physically secure computer hardware from theft	X
Serial, Parallel, USB Enable/Disable	Enable or disable serial, parallel or USB ports and hide them from the operating system	X
Port Control	Attaches to back of chassis covering external ports and thereby preventing unauthorized access; also aids in cable management	X
Removable Media Write / Boot Control	Prevents the computer from being booted from removable media on supported devices (and can disable writes to media)	X
Power-On Password	Prevents an unauthorized person from booting up the computer	X
Setup Password	Prevents an unauthorized person from changing the system configuration	X
Smartcard Reader	Prevents system access to the operating system unless the user has the appropriate Smartcard	X
Fingerprint Reader	Restricts system access to the operating system based on fingerprint	X

Fault Notification and Recovery	Description	
SMART Hard Drives, Fault Notification, & Prefailure Warranty	<ul style="list-style-type: none"> ● Allows hard drives to monitor their own health and to raise flags if imminent failures were predicted ● Predicts failures before they occur. Tracks fault prediction and failure indication parameters such as re-allocated sector count, spin retry count, calibration retry count ● By avoiding actual hard drive failures, SMART hard drives act as "insurance" against unplanned user downtime and potential data loss from hard drive failure 	X
Proactive Backup	<ul style="list-style-type: none"> ● Initiates an automatic backup of the computers SMART hard drives (to a local tape device for example) when an imminent failure is predicted ● Prevents data loss and end-user down time due to a failing hard drive 	X
Surge Tolerant Full Ranging Power Supply	Withstands power surges up to 2000V	X
Thermal Alert	<p>Monitors the temperature within the chassis</p> <ul style="list-style-type: none"> ● NORMAL –normal temperature ranges ● ALERTED - excessive temperatures are detected. Raises a flag so that appropriate action can be taken to avoid shutdown or provide for a smoother system shutdown ● SHUTDOWN – excessive temperatures are encountered. Automatically shuts down the computer without warning before hardware component damage occurs 	X
Ultra ATA Integrity Monitoring (CRC Checking)	<p>Provides data transfer verification and proactive notification of hard drive data transmission problems with recommendations for enhancing system performance. It detects all the following errors types:</p> <ul style="list-style-type: none"> ● single bit errors ● double bit errors ● an odd number of errors ● error bursts up to 32-bits long 	X

TechSpecs

System Software Updating	Description	
Product Change Notification	<ul style="list-style-type: none"> ● Program to proactively communicate Product Change Notifications (PCNs) and Customer Advisories by email to customers, based on a user-defined profile. ● PCNs provide advance notification of hardware and software changes to be implemented in the factory providing time to plan for transition. ● Customer Advisories provide concise, effective problem resolution, greatly reducing the need to call technical support 	X
Active Update	<ul style="list-style-type: none"> ● Advanced web-based application that provides proactive notification and automatic download of software updates for most Compaq commercial products ● Updates may be deployed using Compaq or third-party deployment tools ● Software subscription filters automatically identify and download only relevant content based on the user-defined subscription information 	X
Remote ROM Flash	Provides secure, fail-safe ROM image management from a central network console	X
Remote Wakeup / Remote Shutdown	<ul style="list-style-type: none"> ● System administrators can power on, restart, and power off a client computer from a remote location. ● Enables cost-effective power consumption when the administrator needs to distribute software, perform security management, or update the ROM. 	X
ROM Based Setup (F10) and Start-up Diagnostics	-----	X
Support Software CD & WWW	-----	X

Other Features	Description	
ACPI-Ready Hardware	Advanced Configuration and Power Management Interface (ACPI). <ul style="list-style-type: none"> ● Allows the system to wake from a low power mode. ● Controls system power consumption, making it possible to place individual cards and peripherals in a low-power or powered-off state without affecting other elements of the system 	X
SMBIOS	System Management BIOS, previously known as DMI BIOS, for system management information	X
Wired for Management Support	Intel-driven, industry-wide initiative to make Intel architecture-based PCs, servers and mobile computers more inherently manageable right out of the box and over the network	X
Dual-State Power Button	Power button acts as either an on/off button and suspend-to-sleep button	X

TechSpecs

Serviceability Features of System	Description	
Dual Color Power LED on Front of Computer (Indicates Normal Operations and Fault Conditions)	-----	X
Diagnostic LED Explanation Table	Number of 1-second red LED blinks followed by 2-second pause, then repeats: 2-processor thermal protection activated 3-processor not installed 4-power supply failure 5-memory error 6-video error 7-PCA failure (ROM detected failure prior to video) 8-invalid ROM, bootblock recover mode	X
System/Emergency ROM Flash Recovery with Video	Recovers corrupted system BIOS.	X
Compaq Diagnostic for Windows Software	-----	X
Compaq Configuration Record SW	-----	X
Over-Temp Warning on Screen (Requires IM Agents)	-----	X
Compaq OS CD (Restore OS CD)	Restores computer to its original factory shipping image	X
Compaq Restore CD	Restores the computer to its original factory shipping image	X
Flash ROM	-----	X
3.3V Aux Power LED on System PCA	-----	X
Dual Function 5V Aux Power LED (ON) / PS_ON LED (OFF) on System PCA	-----	X
Diagnostic Power Switch LED on board	-----	X
Clear Password Jumper	-----	X
Clear CMOS Button	-----	X
CMOS Battery Holder for easy Replacement	-----	X
Processor ZIP Socket for easy Upgrade	-----	X
DIMM Connectors for easy Upgrade	-----	X
NIC LEDs (integrated) (Green & Amber)	Used to determine NIC status	X

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Serviceability Features of Chassis	Description	
Dual Color Power and HD LED - To Indicate Normal Operations and Fault Conditions	-----	X
ASF 1.0 support (Alert Standard Format)	Industry-standard specification for network alerting in operating system-absent environments	X
Smart Cover Sensor (Requires Insight Management Agent for network alerts)	Notifies the Network Administrator and end user when the cover has been removed without authorization through an electronic switch residing inside the compute. Can be set to one-of-three modes: <ul style="list-style-type: none"> ● DISABLED - user/network administrator does not want to be made aware of the computer hood removal ● NOTIFY USER - notifies user/network administrator that the hood has been removed, but no action required before re-booting the computer ● UP PASSWORD – notifies user/network administrator that the hood has been removed and administrator password is required before the computer will continue to boot 	—
Smart Cover Lock	Remote operated system lock	— cover can be locked with security loop or kensington
Front power switch	-----	X
Green Pull Tabs, and Quick Release Latches for easy Identification	-----	X
Color coordinated cables and connectors		X
System memory can be upgraded without removing the system board or any internal components	Eases memory upgrading	X
Tool-less Hood Removal	Eases entry to the chassis without use of special tools	— (with captive thumbscrews)
Tool-less Hard Drive, CD & Diskette Removal	-----	Hard Drive is tool-less. Multibay Drives are hot-swappable and ejectable.
Tool-less System Board Removal	No special tools required for system board removal or maintenance	—
Towerable	Product can be oriented as a tower (in addition to desktop orientation)	X
Universal Tower Stand	Necessary to safely orient as a tower	X (Standard)
Drive Self Tests (DPS)	<ul style="list-style-type: none"> ● Drive Protection System 	X
DPS Access through F10 Setup during Boot	<ul style="list-style-type: none"> ● A diagnostic hard drive self test. It scans critical physical components and every sector of the hard drive for physical faults and then reports any faults to the user. ● Running independently of the operating system, it can be accessed through a Windows-based diagnostics utility or through the computer's setup procedure. It produces an evaluation on whether the hard drive is the source of the problem and needs to be replaced. 	X
DPS Access through Diagnostics for Windows	<ul style="list-style-type: none"> ● The system expands on the Self-Monitoring, Analysis, and Reporting Technology (SMART), a continuously running systems diagnostic that alerts the user to certain types of failures 	X
SMART Technology (Self-Monitoring, Analysis and Reporting Technology)	<ul style="list-style-type: none"> ● Allows hard drives to monitor their own health and to raise flags if imminent failures were predicted ● Predicts failures before they occur. Tracks fault prediction and failure indication parameters such as re-allocated sector count, spin retry count, calibration retry count ● By avoiding actual hard drive failures, SMART hard drives act as "insurance" against unplanned user downtime and potential data loss from hard drive failure 	X
SMART I - Drive Failure Prediction		X
SMART II - Off-Line Data Collection		X
SMART III - Off-Line Read Scanning with Defect Reallocation		X

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Service and Support	<p>On-site Warranty and Service NOTE 1 This three-year, limited warranty and service offering delivers three years of 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.</p> <p>NOTE 1: Terms and conditions may vary by country. Certain restrictions and exclusions apply</p> <p>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</p> <p>NOTE 3: Technical telephone support applies only to HP-configured, HP and HP-qualified, third-party hardware and software. Toll-free calling and 24 x 7 support may not be available in some countries</p>
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