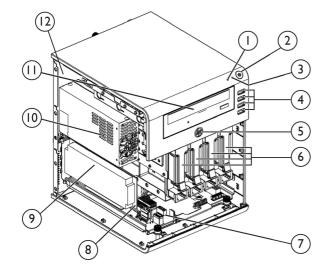
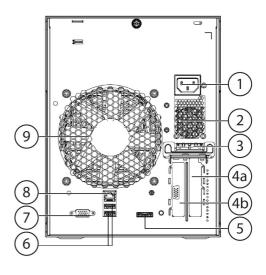
### **Overview**





#### Front View:

- 1. NIC LED
- 2. Power Button
- 3. HDD LED
- 4. USB Ports
- 5. Health LED
- 6. Hard Drive Bays
- 7. System Board
- 8. Remote Access Card slot
- 9. PCIe slot
- 10. Power Supply
- 11. Optical Drive Bay
- 12. Front view drawing is for reference only. The side panel is not removable.

#### **Rear View:**

- 1. Power Supply Outlet
- 2. PSU Fan
- 3. PCI Holder
- 4a. PCI Bracket 1
- 4b. PCI Bracket 2
- e-SATA Connector
- 6. USB 2.0 Ports
- 7. VGA Port
- 8. Embedded NIC Port
- 9. Rear System Fan

### **What's New**

• New pre-configured BTO model with 4GB UDIMM

#### Overview

### At A Glance

- Processor:
  - O AMD Turion™ II Neo N54L (2.2GHz)
  - AMD RS785E/SB820M chipset
- Memory:
  - O Two (2) DIMM slots
  - 4GB (1x4GB) Standard/8GB Maximum, using PC3-10600E DDR3 Unbuffered (UDIMM) ECC memory, operating at max.
     800MHz

#### • Storage Controller:

- O Embedded AMD SATA controller with RAID 0, 1
- O Embedded AMD eSATA controller for connecting external storage devices via the eSATA connector in the rear of the server

### • Internal Drive Support:

- O 4 Internal HDD Support
- O Maximum internal SATA storage capacity of up to 8.0TB (4 x 2TB 3.5" SATA drives)

#### • Network Controller:

O Embedded NC107i PCI Express Gigabit Ethernet Server Adapter

#### • Expansion Slots:

- O Slot 1: PCI-Express Gen 2 x16 connector with x16 link
- O Slot 2: PCI-Express Gen 2 x1 connector with x1 Link
- Slot 2-2: PCI-Express x4 slot for optional management card

### • USB 2.0 Ports:

O Seven (7) USB 2.0 ports: 4 front, 2 rear, 1 internal (for tape)

#### Power Supply:

O 150 Watts Non-Hot Plug, Non Redundant Power Supply

#### Management:

O Optional MicroServer Remote Access Card

#### Operating System:

O Supports Windows and Red Hat Linux

#### Form Factor:

Ultra Micro tower

### • Warranty:

O This product is covered by a global limited warranty and supported by HP Services and a worldwide network of HP Authorized Channel Partners. Hardware diagnostic support and repair is available for one year from date of purchase. Support for software and initial setup is available for 90 days from date of purchase. Enhancements to warranty services are available through HP Care Pack services or customized service agreements. Hard drives have either a one year or three year warranty; refer to the specific hard drive QuickSpecs for details.

**NOTE:** Server Warranty includes 1 year Next Day Parts replacement, 0-Years Labor, 0-Years Onsite support. Additional information regarding worldwide limited warranty and technical support is available at: http://h18004.www1.hp.com/products/servers/platforms/warranty/index.html.



## **Standard Features**

Processor	<b>Dual-Core Proces</b> AMD Turion II Pro	ssor cessor Model Neo	N54L (2.20 GHz,	15W, 2MB)		
Cache Memory	2x 1MB Level 2 ca	nche				
Chipset	AMD RS785E/SB8	320M				
Memory Protection	ECC					
Memory	Type Standard Maximum	PC3-10 1 GB (1 4GB (1) 8 GB	x1GB)	I DDR3 ECC operat	ing at 800MHz	
Network Controller	Embedded NC107	7i PCI Express Giga	bit Ethernet Serv	er Adapter		
Expansion Slots #	Technology	Bus Width**	Connector Width	Bus Number*	Form Factor	Notes
1	PCI-e	x16	x16	1h	Half height, half length slot	
2	PCI-e	x1	х1	2h	Half height, half length slot	
	number.	gnment (in decima			may alter the actual	bus assignment
Storage Controller	-	controller with em I RAID setup instru			er User Guide.	
Internal Storage Devices	Optical Drive Hard Drives	Optiona None in	=	ATA DVD-RW drive		
Maximum Internal Storage	Non-Hot Plug SA	TA 8TB (4:	x 2TB) 3.5" SATA			



### **Standard Features**

Interfaces Graphics On board VGA

USB 2.0 Ports 7 total (2 rear, 4 front panel, 1 internal)

Network RJ-45 (Ethernet) 1 (10/100/1000 bits/s)

eSATA Gen 2 1 rear

**Graphics** 128MB shared supporting 1920x1200 @ 60Hz

Form Factor Ultra Micro Tower

Industry Standard Compliance

ACPI V2.0 Compliant
PCI 2.3 Compliant
PXE Support
WOL Support
IPMI 2.0 compliant

USB 2.0 SATA Gen 2

**Security** Setup password

**Server Power Cords** 7 country specific, lowline NEMA power cord.

**Power Supply** 150 Watts Non-Hot Plug, Non redundant Power Supply

**System Fans** One (1) - Non-redundant system fan shipped standard

**Operating Systems** Microsoft Windows Server

Red Hat Enterprise Linux (RHEL)

**NOTE:** For more information on HP's Certified and Supported ProLiant Servers for OS and Virtualization Software and latest listing of software drivers available for your server, please visit our Support Matrix at:

http://www.hp.com/go/ossupport and our driver download page:

http://www.hp.com/support/MicroServer



## Service and Support

#### **Service and Support**

For increased uptime, productivity and ROI -HP Care Pack packaged services for Servers

These days, you need to get the most out of your server investment-you can't afford not to. When you buy HP server products and solutions, it's also a good time to think about what levels of service and support you may need. To help take the worry out of deploying, designing, maintaining, and managing your environment, we've designed a portfolio of service options that are as: flexible, reliable and scalable as your server. Unlike server-only vendors, we take a holistic approach to your entire environment, bridging storage, servers, blades, software and network infrastructures with our HP Care Pack packaged services for Servers.

HP Care Pack Services: Upgrading or extending standard server and storage warranties cost effectively

HP Care Pack Services offer a standard reactive hardware and software support services suite sold separately, or combined with our Support Plus and Support Plus 24 services. The portfolio also provides a combination of integrated proactive and reactive services, such as Proactive 24 Service and Critical Service. In addition with HP Proactive Select, you can acquire the specific proactive constancy and technical services. HP Proactive Select menu offers a broad set of service options that you can mix and match depending on your specific requirements. Proactive service options include offers for server, storage, network, SAN device, software, environment and education services.

HP server and storage lifecycle support services offer a full spectrum of customer care-from technology support to complex migrations to complete managed services. HP Factory Express provides customization, integration and deployment services for turnkey solutions. HP Education Services offer flexible, comprehensive training on to help your IT staff get the most out of your server and storage investments. HP Financial solutions extend innovative financing and cost-effective asset management programs-from purchase to equipment retirement. Learn more: www.hp.com/services/servers

**NOTE:** Care Pack Services availability may vary by product and country.

HP Care Pack Services are sold by HP and HP Authorized Service Partners:

- Services for customers purchasing from HP or an enterprise reseller are quoted using HP order configuration tools.
- Customers purchasing from a commercial reseller can find HP Care Pack Services at http://www.hp.com/go/lookuptool



## Service and Support

## Recommended HP Care Pack Services for optimal satisfaction with your HP product

### Recommended Services 3-Year HP Hardware Support Onsite Service, 4-hour response, 13x5

Delivers increased equipment availability and productivity with rapid remote support and onsite response for your HP server and storage hardware.

#### The benefits include:

- Help improve or maintain system uptime
- Convenient onsite support
- Committed response time

http://h20195.www2.hp.com/V2/GetPDF.aspx/5982-6547EEE.pdf

#### 3-Year HP Hardware Support Onsite Service, Next-day response (9x5)

Provides high-quality remote assistance and onsite support for your covered hardware, helping you to improve product uptime.

#### The benefits include:

- Help improve or maintain system uptime
- Convenient onsite support
- Reliable response time

http://h20195.www2.hp.com/V2/GetPDF.aspx/5982-6547EEE.pdf

#### **HP ProLiant Server Hardware Installation**

Provides for the basic hardware installation of HP branded servers, storage devices and networking options to assist you in bringing your new hardware into operation in a timely and professional manner.

- Expedited installation, with all service prerequisites met before the installation is performed
- Installation in accordance with manufacturer's specifications, enhancing the supportability of your HP-installed hardware and software
- Service delivery at a mutually scheduled time
- Allows your IT resources to stay focused on their core tasks and priorities
- Availability of an HP service specialist to answer questions during the onsite delivery of this service

http://h20195.www2.hp.com/V2/GetPDF.aspx/5981-9356EN.pdf



### Service and Support

## Optional HP Care Pack Services that will enhance your HP product experience

#### **Optional Services**

3-Year HP Hardware Support Onsite Service, 4-hour response, 24x7

As an alternative to our recommended support level, for customers who need same day response service level 24x7.

Provides you with an HP authorized representative who will arrive at the Customer's site any time and day of the year to begin hardware maintenance service within 4 hours of the service request being logged.

http://h20195.www2.hp.com/V2/GetPDF.aspx/5982-6547EEE.pdf

### 3-Year HP Hardware Support Onsite Call-to-Repair (CTR) Service, 6- or 24-hour

As an alternative to our recommended support level, for customers who need committed call-to-repair for server hardware.

Provides your IT manager with a team of support specialists who will quickly begin troubleshooting the system to help return the hardware to operating condition within 6 or 24 hours of the initial service request to the HP Global Solution Center.

http://h20195.www2.hp.com/V2/GetPDF.aspx/5982-6547EN.pdf

#### **HP Proactive Select Service**

Customer needs on demand access to consulting, technical proactive services and education courses. Provides a flexible way to purchase HP best-in-class consultancy and technical services. You can buy Proactive Select Service Credits when you purchase your hardware and then use the credits over the next 12 months.

http://h20195.www2.hp.com/V2/GetPDF.aspx/4AA2-3842ENN.pdf

#### eSupport

HP eSupport is a portfolio of technology-based services that assist you with managing your business environment - from the desktop to the data center.

#### Support Portal

The HP support portal provides one-stop access to the information, tools and services you need to manage the daily operations of your IT environment.

#### Features include:

- Access to self-solve tools (including search technical knowledge base)
- Efficient logging and tracking of support cases
- Collaboration with other business and IT professionals
- Download of patches and drivers
- Access to diagnostic tools
- Proactive notification of relevant information



### Service and Support

# Customer Technical Training

**HP Education Services** 

In today's cost-conscious business environment, IT professionals, developers, consultants and users face an interesting challenge: how to keep up with the latest technologies and expand important skills while delivering profitable results on current projects. To help address this challenge, HP offers innovative training solutions that help keep you up-to-date on virtualization, server, storage, Insight Control, Citrix, Microsoft® and open source/Linux-related topics-while spending less time away from business-critical activities.

#### **HP Services Awards**

HP Services continues to be recognized for service and support excellence by customers, partners, industry organizations and publications around the world. Recent honors and award reflect our services team's dedications, technical expertise, professionalism and uncompromising commitment to customer satisfaction.

# Additional Services Information

To learn more on HP ProLiant servers and HP BladeSystem, please contact your HP sales representative or HP Authorized Channel Partner, or visit: www.hp.com/services/proliant or www.hp.com/services/bladesystem



#### Models

### **SATA Models**

HP ProLiant MicroServer G7 N54L 1P 4GB-U Nonhot Plug SATA 150W PS Server

744900-001

**Processor** (1) AMD Turion™ II Neo N54L processor (2.2 GHz, 15W, 2MB)

Cache Memory 2x 1MB Level 2

Memory 4GB (1 x 4GB) PC3-10600E DDR3 UB ECC

**NOTE:** Total of 2 DIMM slots.

**Network Controller** Embedded NC107i PCI Express Gigabit Ethernet Server Adapter

Storage Controller Embedded SATA Controller with Embedded RAID (0, 1)

Hard Drive None

Internal Storage Non-Hot Plug SATA 8.0TB (4 x 2TB) Maximum

**Optical Drive** None ships standard

**Power Supply** 150W Non-Hot Plug, Non-Redundant Power Supply

**Operating System** None Warranty 1-0-0

Form Factor Ultra Micro Tower

HP ProLiant MicroServer G7 N54L 1P 2GB-U Nonhot Plug SATA 250GB 150W PS Server

704941-001

**Processor** (1) AMD Turion™ II Neo N54L processor (2.2 GHz, 15W, 2MB)

Cache Memory 2x 1MB Level 2

Memory 2GB (1 x 2GB) PC3-10600E DDR3 UB ECC

NOTE: Total of 2 DIMM slots.

**Network Controller** Embedded NC107i PCI Express Gigabit Ethernet Server Adapter

**Storage Controller** Embedded SATA Controller with Embedded RAID (0, 1)

Hard Drive 1x250GB Non-hot plug LFF SATA

Internal Storage Non-Hot Plug SATA 8.0TB (4 x 2TB) Maximum

**Optical Drive** None ships standard

**Power Supply** 150W Non-Hot Plug, Non-Redundant Power Supply

Operating System None Warranty 1-0-0

Form Factor Ultra Micro Tower



C = "=	Ontions	
core	<b>Options</b>	

HP Unique Options	HP Wireless 802.11 b/g/n PCIe Card	FH971AA
HP Memory	HP 4GB (1x4GB) Dual Rank x8 PC3-10600 (DDR3-1333) Unbuffered CAS-9 Memory Kit	593923-B21
	HP 1GB (1x1GB) Single Rank x8 PC3-10600 (DDR3-1333) Unbuffered CAS-9 Memory Kit	500668-B21
	<b>NOTE:</b> All DDR3 memory option kits consist of one DIMM per kit. For detailed memory configuration rules and guidelines, please use the Online DDR3 Memory Configuration Tool: www.hp.com/go/ddr3memory-configurator.	
HP Optical Drives	HP Half-Height SATA DVD RW JackBlack Optical Drive	624192-B21
	HP Half-Height SATA DVD ROM JackBlack Optical Drive	624189-B21
HP Hard Drives	<b>NOTE:</b> The components of a storage subsystem (e.g. the drive, the HBA/controller, and the server backplane) should operate at the same data transfer rate or the system bandwidth will be negotiated down to an acceptable level for all components. <b>NOTE:</b> Hard drives have either a one year or three year warranty; refer to the specific hard drive QuickSpecs for details.	
	SATA Non-Hot Plug LFF (3.5-inch) Midline (MDL) Drives	
	HP 2TB 3G SATA 7.2K rpm LFF (3.5-inch) Non-hot Plug Midline 1yr Warranty Hard Drive	507774-B21
	HP 1TB 3G SATA 7.2K rpm LFF (3.5-inch) Non-hot Plug Midline 1yr Warranty Hard Drive	507772-B21
	HP 500GB 3G SATA 7.2K rpm LFF (3.5-inch) Non-hot Plug Midline 1yr Warranty Hard Drive	458941-B21
	<b>NOTE:</b> Please see the QuickSpecs for Technical Specifications and additional information:	
	http://h18000.www1.hp.com/products/quickspecs/13021_na/13021_na.html	
HP Networking	HP NC112T PCI Express Gigabit Server Adapter	503746-B21
	<b>NOTE:</b> Please see the QuickSpecs for Technical Specifications and additional information: www.hp.com/go/ProLiantNICs	



## **Additional Options**

### HP Remote Management HP MicroServer Remote Access Card Kit

615095-B21

### **HP Security**

**HP Trusted Platform Module Option** 

488069-B21

**NOTE:** The TPM (Trusted Platform Module) is a microcontroller chip that can securely store artifacts used to authenticate the server platform. These artifacts can include passwords, certificates and encryption keys. Windows® BitLocker™ Drive Encryption (BitLocker) is a data protection feature available in Windows Server® 2008. BitLocker leverages the enhanced security capabilities of a Trusted Platform Module (TPM) version 1.2. The TPM works with BitLocker to help protect user data and to ensure that a server running Windows Server 2008 has not been tampered with while the system was offline. For more information about TPM, including a white paper, go to: www.hp.com/go/TPM.

**NOTE:** ProLiant OS pre-installed units will come with the partition required for TPM deployment.

**NOTE:** The TPM key is unique to every TPM deployed server and must be retained. Misplacing or losing the key could result in data loss.

### **HP Tape Backup**

**NOTE:** For the complete range of tape drives, autoloaders, libraries and media see: http://www.hp.com/go/tape. For hardware and software compatibility of HP tape backup products see: http://www.hp.com/storage/SPOCK.

#### **HP Disk Backup**

**NOTE:** For the complete range of RDX drives and media see:

http://www.hp.com/go/rdx. For hardware and software compatibility of HP disk backup products see: http://www.hp.com/storage/SPOCK.

## **USB Removable Media RDX Disk Backup Systems**

UD DDVGGGUGDG GL

HP RDX320 USB3.0 Internal Disk Backup System	B7B62A
HP RDX320 USB3.0 External Disk Backup System	B7B63A
HP RDX500 USB3.0 Internal Disk Backup System	B7B64A
HP RDX500 USB3.0 External Disk Backup System	B7B66A
HP RDX1000 USB3.0 Internal Disk Backup System	B7B67A
HP RDX1000 USB3.0 External Disk Backup System	B7B69A

#### **HP RDX USB 3.0 Internal Docking Station**

HP RDX USB 3.0 Internal Docking Station C8S06A

#### **HP RDX USB 3.0 External Docking Station**

HP RDX USB 3.0 External Docking Station C8S07A

**NOTE:** Please see the QuickSpecs for additional part numbers, Technical Specifications, and additional information:

http://h18000.www1.hp.com/products/quickspecs/13036\_na/13036\_na.html



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## **Additional Options**

### **HP Uninterruptible Power HP Tower - UPS**

**Systems** 

HP T750 G2 750VA NA Tower Uninterruptible Power System

AF446A

**NOTE:** For additional information please go to: http://www.hp.com/go/rackandpower **NOTE:** Please see QuickSpecs for Technical Specifications and additional information: http://h18004.www1.hp.com/products/quickspecs/13160\_na/13160\_na.html **NOTE:** For additional information on sizing your server, please reference:

http://www.upssizer.com

### HP Rack Options HP

#### **HP USB Keyboard and Mouse**

HP USB BFR with PVC Free US Keyboard/Mouse Kit

631341-B21

**NOTE:** Please see the QuickSpecs for Technical Specifications and additional

information:

http://h18000.www1.hp.com/products/quickspecs/13972\_na/13972\_na.html

### **HP USB and SD options**

### Other USB and SD Options

HP USB Standard Keyboard DT528A ABA

DT528A#ABA

#### **HP Care Pack Services**

IID 2 years North by singer day Dual inst Misus Comer Handy year Come out	UD402E
HP 3 year Next business day ProLiant MicroServer Hardware Support	UR482E
HP 3 year 4 hour 13x5 ProLiant MicroServer Hardware Support	UR483E
HP 3 year 4 hour 24x7 ProLiant MicroServer Hardware Support	UR484E
HP 3 year 24x7 24 hour Call to Repair ProLiant MicroServer Hardware Support	UR492E
HP 3 year 24x7 6 hour Call to Repair ProLiant MicroServer Hardware Support	UR494E
HP 4 year Next business day ProLiant MicroServer Hardware Support	UR496E
HP 4 year 4 hour 13x5 ProLiant MicroServer Hardware Support	UR498E
HP 4 year 4 hour 24x7 ProLiant MicroServer Hardware Support	UR500E
HP 5 year Next business day ProLiant MicroServer Hardware Support	UR502E
HP 5 year 4 hour 13x5 ProLiant MicroServer Hardware Support	UR504E
HP 5 year 4 hour 24x7 ProLiant MicroServer Hardware Support	UR506E
HP Install ProLiant MicroSever Service	UR508E

**NOTE:** For more information, customer/resellers can contact:

http://www.hp.com/services/carepack.



## Memory

#### **HP ProLiant Micro Server**

### **Standard Memory**

4GB (1x4GB) of PC3-10600E DDR3 UDIMM Memory kit installed

### **Standard Memory Replaced with Optional Memory**

Up to 8GB of memory is available with the optional installation of 1 x 4 GB PC3-10600E DDR3 UDIMM Memory kits.

**NOTE:** The below chart does not represent all possible memory configurations.

Men	nory	SI	ot
		1A	2B
Optional	1 GB	1 GB	Empty
Optional	2 GB	1 GB	1 GB
Standard	4 GB	4 GB	Empty
Maximum	8 GB	4 GB	4 GB

### Following are memory options available from HP:

**HP Memory** HP 4GB (1x4GB) Dual Rank x8 PC3-10600 (DDR3-1333) Unbuffered CAS-9 Memory Kit

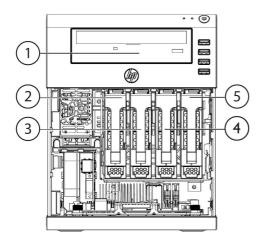
593923-B21

HP 1GB (1x1GB) Single Rank x8 PC3-10600 (DDR3-1333) Unbuffered CAS-9 Memory Kit

500668-B21



## Storage



1 Optical Drive Bay

2, 3, 4, 5 Four (4) Non-Hot Plug Drive Bays

## **Drive Support**

	Quantity Supported	Position Supported	Controller
Removable Media			
DVD-RW JackBlack Optical Drive	1	1	Integrated SATA
DVD ROM JackBlack Optical Drive	1	1	Integrated SATA

### Hard Drives (SATA Models only)

**NOTE:** The components of a storage subsystem (e.g. the drive, the HBA/controller, and the server backplane) should operate at the same data transfer rate or the system bandwidth will be negotiated down to an acceptable level for all components. **NOTE:** Hard drives have either a one year or three year warranty; refer to the specific hard drive QuickSpecs for details.

### SATA Non-Hot Plug LFF (3.5-inch) Midline (MDL) Drives

	Quantity Supported	Position Supported	Controller
2TB 3G SATA 7.2K	Up to 4	2-5	SATA controller with Embedded RAID on Motherboard (0,1)
1TB 3G SATA 7.2K			
500GB 3G SATA 7.2K			



Storage

**RDX320** 

**Maximum Storage Capacity** 

**Internal** SATA 8.0TB (4 x 2TB)

### **Tape Drives and Disk-Based Backup**

**NOTE:** For the complete range of tape drives, autoloaders, libraries and media, including the internal fitting models, see: http://www.hp.com/go/tape. For the complete range of D2D Backup Systems see: http://www.hp.com/go/d2d. For the complete range of RDX drives and media see: http://www.hp.com/go/rdx. For hardware and software compatibility of HP disk and tape backup products see: http://www.hp.com/storage/SPOCK.

	Position	Recommended Controller	Part Number
<b>HP USB RDX Removable</b>	Internal or	USB 2.0 port	N/A
Disk Backup System	External		
RDX160			



## **Power Specifications**

Part Number	630295-001					
Operational Input Voltage Range (Vrms)	100 to 127 and	d 200 to 240 V a	uto ranging			
Frequency Range (Nominal) (Hz)	50 to 60 Hz					
Nominal Input Voltage (Vrms)	100	115	208	220	230	240
Max Rated Output Wattage Rating	150	150	150	150	150	150
Nominal Input Current (A rms)	N/A	3.5	N/A	2	2	N/A
Max Rated Input Wattage Rating (Watts)	191.4	N/A	N/A	N/A	184.9	N/A
Max. Rated VA (Volt-Amp)	N/A	N/A	N/A	N/A	N/A	N/A
Efficiency (%)	70%	70%	N/A	N/A	70%	N/A
Power Factor	N/A	0.9	N/A	N/A	0.9	N/A
Leakage Current (mA)	N/A	3.5	N/A	N/A	3.5	N/A
Maximum Inrush Current (A peak)	N/A	No component was damaged and input fuse shall not blow		N/A	No component was damaged and input fuse shall not blow	N/A
Maximum Inrush Current duration (mS)	N/A	N/A	N/A	N/A	N/A	N/A

To review typical system power ratings use the Active Answers HP Power Advisor which is available via the online tool located at URL: <a href="http://www.hp.com/go/hppoweradvisor">http://www.hp.com/go/hppoweradvisor</a>

To drill down to calculators:

- Click on: "ProLiant Servers"
- Click on the Server of interest
- Click on: "Power Calculator" link. (You may need to scroll down to see it)



# **System Specifications**

	Power**
HP ProLiant MicroServer Fully Configured	(see**)
Fully Loaded System output Wattage (W)	72.3 W
Fully Loaded System Input Current (A rms)	0.63A@115V; 0.35A@230V
Fully Loaded System Thermal (BTU- Hr)	115v@247.055; 230v@274.505
Fully Loaded System VA (Volt-Amp)	115v@72.45; 230v@80.5
System Leakage with all power supplies loaded (mA)	0.91
System Inrush Current with all power supplies loaded (A)	No component damaged
Power cord requirements	Nema 5-15P to IEC320-C13
	IEC320-C13 to IEC320-C14
	**Power shown is for a fully configured system consisting of (1)
	CPU, (2) double-sided DIMMs, (4) HDDs, (1) DVD-ROM, (1) PCIe X16
	card & (1) PCIe X1 card and (1) power supply.

|--|



## **Technical Specifications**

System Unit	<b>Dimensions</b> (HxWxD) (with feet)	10.5 x 8.3 x 10.2 in (26.7x 21.0 x 26.0 cm)		
	Weight (approximate)	Maximum (all hard drives, power supplies, and processors installed)	21.16 lb (9.6 kg)	
		Minimum (one hard drive, power supply, and processor installed)	13.18 lb (5.98 kg)	
	Input Requirements (per power supply)	Rated Line Voltage	100 127 VAC, 200 - 240 VAC	
		Rated Input Current	3.5 A (at 110 VAC), 2 A (at 200 VAC)	
		Rated Input Frequency	47 to 63 Hz	
		Rated Input Power	191.4 W (at 100 VAC), 184.9 W (at 200 VAC)	
	BTU Rating	Maximum	247.055 BTU/hr (at 100 VAC), 274.505 BTU/hr (at 200 VAC)	
	Power Specifications	To review typical system power ratings use the Power Advisor which is available via the online tool located at URL: http://www.hp.com/go/hppoweradvisor		
	Power Supply Output (per power supply)	Rated Steady-State Power	150 W (at 100 VAC), 150 W (at 200 VAC)	
		Maximum Peak Power	200 W (at 100 VAC), 200 W (at 200 VAC	
	System Inlet Temperature	Operating	10° to 35°C (50° to 95°F) at sea level with an altitude derating of 1.0°C per every 305 m (1.8°F per every 1000 ft) above sea level to a maximum of 3050 m (10,000 ft), no direct sustained sunlight. Maximum rate of change is 10°C/hr (18°F/hr). The upper limit may be limited by the type and number of options installed.  System performance may be reduced if operating with a fan fault or above 35°C (95°F).	
		Non-operating	10 to 90% relative humidity (Rh), 28°C 5 to 95% relative humidity (Rh), 38.7°C	
	Altitude	Operating	3050 m (10,000 ft). This value may be limited by the type and number of options installed.	

L WAd

L pAm

Non-operating

Idle

**Acoustic Noise** 

(Fully Loaded)

Maximum allowable altitude change rate is 457

9144 m (30,000 ft). Maximum allowable altitude

change rate is 457 m/min (1500 ft/min).

m/min (1500 ft/min).

**3.9 BELS** 

22.3 dBA

## **Technical Specifications**

Embedded SATA controller

Embedded NC107i PCle Gigabit Server Adapter

uc	) IIS				
		Operatin	g		
			L WAd	4.1 BELS	
			L pAm	24.4 dBA	
	Acoustic Noise	Idle			
	(Lightly Loaded)		L WAd	3.7 BELS	
		L pAm		21.3 dBA	
		Operating			
			L WAd	3.8 BELS	
			L pAm	22.0 dBA	
	<b>Emissions Classification</b>	FCC Rating		Class B	
(EMC)		Normative Standards		CISPR 22; EN55022; EN55024; FCC CFR 47, Pt 15; ICES-003; CNS13438; GB9254; K22;K24; EN 61000-3-2; EN 61000-3-3; EN 60950-1; IEC 60950-1	
		<b>NOTE:</b> Product conformance to cited product specifications is based on sample (type) testing, evaluation, or assessment. This product or family of products is eligible to bear the appropriate compliance logos and statements			
	SATA Protocol	SATA 2, 3Gb/s			
	SATA Ports	5 internal 3Gb/s total			
	Port transfer rate				
	Maximum Capacity	up to 8.0TB (4 x 2TB non-hot plug SATA HDD)			
	RAID Levels Supported	RAID 1 (Mirroring) RAID 0 (Striping)			
	Logical RAID Volumes Supported	<b>NOTE:</b> On SATA models with embedded RAID, setup instructions are loc the MicroServer User Guide			
	Network Interface	10Base-	Γ/100Base-TX/10	00Base-TX	
	Compatibility	IEEE 802.3 10Base-T			
		IEEE 802.3ab 1000Base-T			
		IEEE 802.3u 100Base-TX			
	Data Transfer Method	Single lane (x1), 100MHz PCI Express Reference Clock			
	Controller	_	BCM5723		
	Network Transfer Rate				
			Γ (Full-Duplex)	20 Mb/s	
			-TX (Half-Duplex)		
			• •		



1000Base-TX (Half and

Full-Duplex)

**RJ-45** connector

Connector

100Base-TX (Full-Duplex) 200 Mb/s

2000Mb/s

## **Technical Specifications**

Cable Support 10Base-T Categories 3, 4 or 5 UTP; up to 328 ft (100 m)

10/100/1000Base-TX Category 5 UTP; up to 328 ft (100 m)

Environment-friendly Products and Approach

End-of-life Management and Recycling

Hewlett-Packard offers end-of-life HP product return, trade-in, and recycling programs in many geographic areas. For trade-in information, please go to: <a href="http://www.hp.com/go/green">http://www.hp.com/go/green</a>. To recycle your product, please go to: <a href="http://www.hp.com/go/green">http://www.hp.com/go/green</a> 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: <a href="http://www.hp.com/go/green">http://www.hp.com/go/green</a>. 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.

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For hard drives, 1GB = 1 billion bytes. Actual formatted capacity is less.

