

# HPE Line Interactive Rack/Tower Uninterruptible Power System QuickSpecs

## Looking for cost-effective power protection for your small office environments?

HPE line interactive, single-phase Rack/Tower and Rackmount Uninterruptible Power System (UPS) solutions can protect up to 10 servers and other devices in both rackmount and desktop IT environments. Standard features include intuitive front panel displays for local management, and HPE Enhanced Battery Management (EBM) that helps to extend the service-life of your batteries. HPE Power Protector, a power management software application, combined with a UPS Network Management Module, a support option on all models, enables you to remotely monitor and manage your UPS through HPE Systems Insight Manager or via a standard web browser.

## Overview

When you need it, use outstanding HPE support services for your whole data center environment. With HPE Services operational services, have the security of knowing that your HPE Rack/Tower and Rackmount UPS will be covered at the same service level and coverage period as your HPE server. HPE UPSs are backed by a 3-year limited warranty, with the first year including parts and labor. Also, standard on all HPE UPS units is our exclusive 30-day Battery Pre-Failure Warranty, which ensures that when customers receive notification from HPE Power Manager Software that the battery may fail, the battery is replaced free of charge under the warranty. This warranty is offered worldwide.

- Remote access through an optional 1-GbE-based network management card ensures widespread connectivity with most user networks.
  - Web-based management applications, HPE Power Protector, allows you to monitor, manage, and control a single Uninterrupted Power Supply both locally and remotely.
  - Outlet switching and metering at the load segment allows you to monitor, control and prioritize access to the Uninterrupted Power Supply's power
  - Protects more devices by providing up to 14% more wattage compared to traditional Uninterrupted Power Supplies.
  - HPE Enhanced Battery Management (EBM) technology delivers up to 50% longer battery life.
  - Industry leading efficiency of up to 99% helps to ensure minimal power loss and lower power costs.
  - Up to 4 extended runtime modules can be simply added to the Uninterrupted Power Supply configuration that extends your Uninterrupted Power Supply by a factor of 15x or more
  - Batteries can be hot-swapped safely without every shutting down IT equipment.
-

## Overview

## Flexible Rackmount and Rack/Tower Models Deliver Cost-Effective Power Protection

### Key features

#### Ease of Use

- Next-generation LCD offers a graphical interface which provides all critical UPS information in a single screen view.
- Up to 4 extended runtime modules can be simply added to the UPS configuration that extend your UPS runtime by a factor of 15x or more.
- Batteries can be hot-swapped safely without ever shutting down IT equipment.

#### Management

- Remote access through an optional 1GbE-based network management card ensures widespread connectivity with most user networks.
- Web-based management application, HPE Power Protector, allows you to monitor, manage, and control a single UPS, locally and remotely.
- Outlet switching and metering at the load segment level allows you to monitor, control and prioritize access to UPS power.

#### Efficiency

- Protects more devices by providing up to 28% more wattage compared to traditional UPSs.
- Enhanced Battery Management (EBM) technology delivers up to 50% longer battery life.
- Industry leading efficiency of up to 99% helps to ensure minimal power loss and lower power costs.

---

## HPE Rack/Tower UPS models

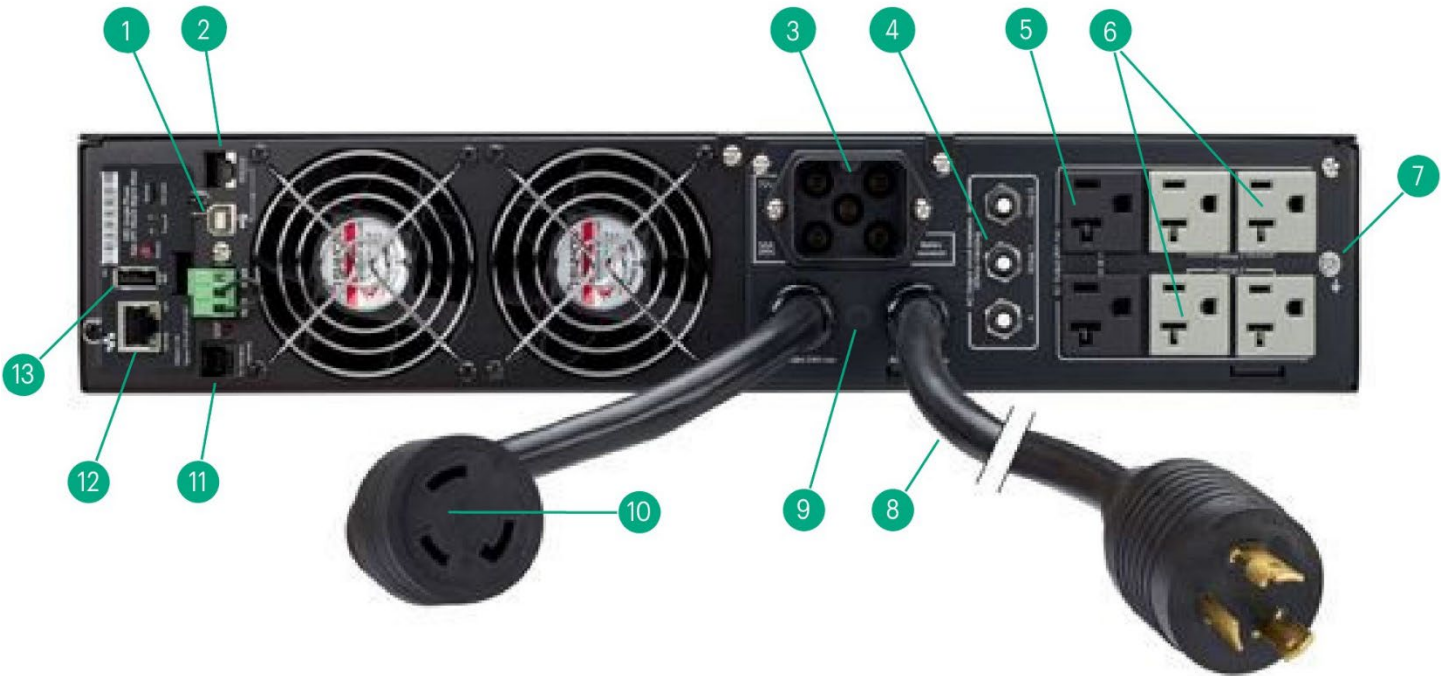


**Rack configuration**



**Tower configuration**

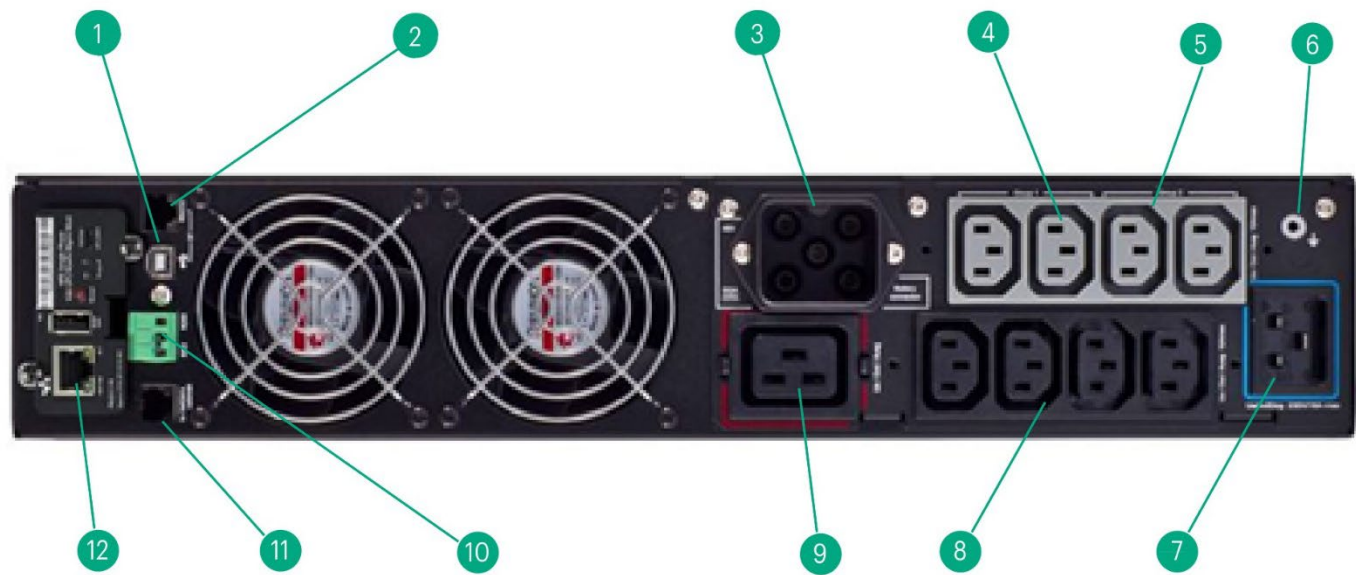
HPE R/T3000 Uninterruptible Power System (UPS)



LV NA/JPN rear panel

| Item | Description                                                 | Item | Description                                                                                                                                |
|------|-------------------------------------------------------------|------|--------------------------------------------------------------------------------------------------------------------------------------------|
| 1.   | USB communication port                                      | 8.   | Attached input power cord for AC power source                                                                                              |
| 2.   | RS-232 communication port                                   | 9.   | LED indicating SWF (site wiring fault) alarm (Although the LED remains on the rear panel, this feature is disabled for low voltage models) |
| 3.   | Connector for additional battery module                     | 10.  | 30A outlet (L5-30R) for connection of equipment                                                                                            |
| 4.   | Circuit breakers                                            | 11.  | Connector for automatic recognition of an additional battery module                                                                        |
| 5.   | Primary Group: outlets for connection of critical equipment | 12.  | Connector for ROO (Remote On/Off) or RPO (Remote Power Off) control                                                                        |
| 6.   | Four programmable outlets for connection of equipment       | 13.  | Slot for optional communication card, shown with optional Management Card (installed)                                                      |
| 7.   | Ground connection                                           |      |                                                                                                                                            |

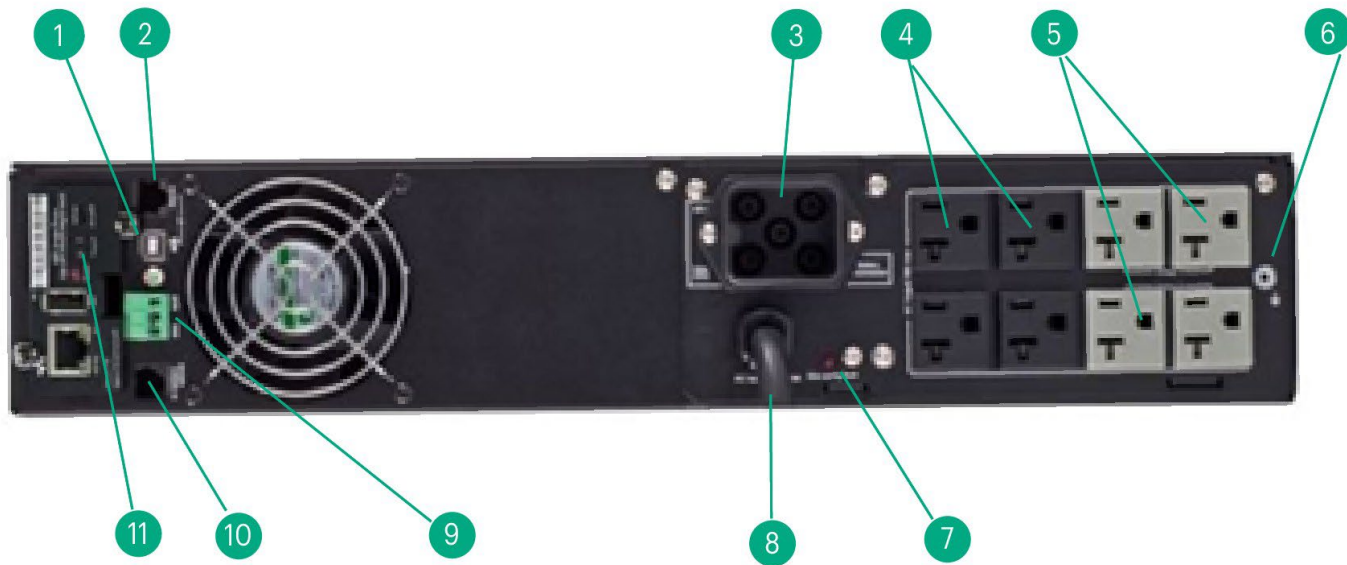
HPE R/T3000 Uninterruptible Power System (UPS)



HV NA/JP and INTL rear panel

| Item | Description                                                   | Item | Description                                                                             |
|------|---------------------------------------------------------------|------|-----------------------------------------------------------------------------------------|
| 1.   | USB communication port                                        | 7.   | Inlet for connection to AC power source                                                 |
| 2.   | RS-232 communication port                                     | 8.   | Primary Group: 4 outlets for connection of critical equipment                           |
| 3.   | Connector for additional battery module                       | 9.   | 16A outlet for connection of equipment                                                  |
| 4.   | Group 1: Two programmable outlets for connection of equipment | 10.  | Connector for ROO (Remote On/Off) or RPO (Remote Power Off) control                     |
| 5.   | Group 2: Two programmable outlets for connection of equipment | 11.  | Connector for automatic recognition of an additional battery module                     |
| 6.   | Ground connection                                             | 12.  | Slot for optional communication card, shown with optional HPE Management Card installed |

HPE R/T2200 Uninterruptible Power System (UPS)



NA/JPN rear panel

| Item | Description                                                 | Item | Description                                                                                                                                |
|------|-------------------------------------------------------------|------|--------------------------------------------------------------------------------------------------------------------------------------------|
| 1.   | USB communication port                                      | 7.   | LED indicating SWF (site wiring fault) alarm (Although the LED remains on the rear panel, this feature is disabled for low voltage models) |
| 2.   | RS-232 communication port                                   | 8.   | Attached input power cord for AC power source                                                                                              |
| 3.   | Connector for additional battery module                     | 9.   | Connector for ROO (Remote On/Off) or RPO (Remote Power Off) control                                                                        |
| 4.   | Primary Group: outlets for connection of critical equipment | 10.  | Connector for automatic recognition of an additional battery module                                                                        |
| 5.   | Four programmable outlets for connection of equipment       | 11.  | Slot for optional communication card, shown with optional Management Card installed                                                        |
| 6.   | Ground connection                                           |      |                                                                                                                                            |

What's in the box:

- HPE R/T2200 UPS or R/T3000 UPS
- Rail kit and mounting hardware
- Bezel components
- Output power jump cables (2) for HV North America and International models
- RS-232 communication cable (1)
- USB cable (1)
- Cable locking device for HV North America and International models
- Tower stands
- Documentation

## Overview

## HPE R1500 G5 UPS Models



---

### What's in the box

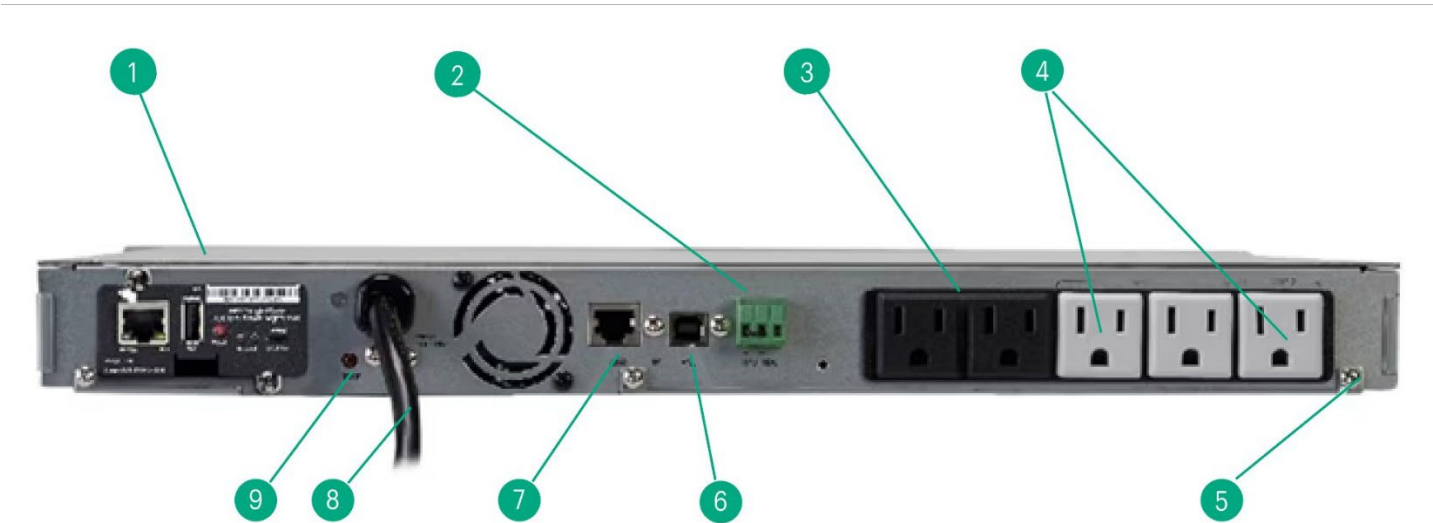
- HPE R1500 UPS
- Rail kit and mounting hardware
- Bezel components
- (2) Output power jump cables (International model only)
- (1) RS-232 communication cable
- (1) USB cable
- Cable locking device (International model only)
- Documentation

The R1500 G5 UPS regulates the output voltage at -10% / +6% of the selected nominal voltage. The regulation is accomplished by bucking or boosting the input voltage. The voltage regulation operation is governed by the unit's input voltage spec of +/-20%. The unit will regulate at -10% / +6% while within the limits set by the input spec. The unit will go to battery operation upon exceeding the limits set by the input spec. The buck and boost voltage regulation operation, or AVR (Automatic Voltage Regulation), is accomplished by adjusting output transformer tap selections via electromechanical relays. The transformer tap selection is controlled via digital transition voltage set point values programmed in the unit's firmware. These programmed values are without tolerance.

The unit will monitor the input voltage and accept a range of +/-3% of the selected nominal voltage as the target voltage to regulate at -10% / +6%. For example, a unit configured to 120V nominal voltage will regulate at -10% / +6% for any voltage measured between 116.4V and 123.6V. The digital transition voltage set point values will adjust accordingly to regulate to -10% / +6% of the measured input voltage.

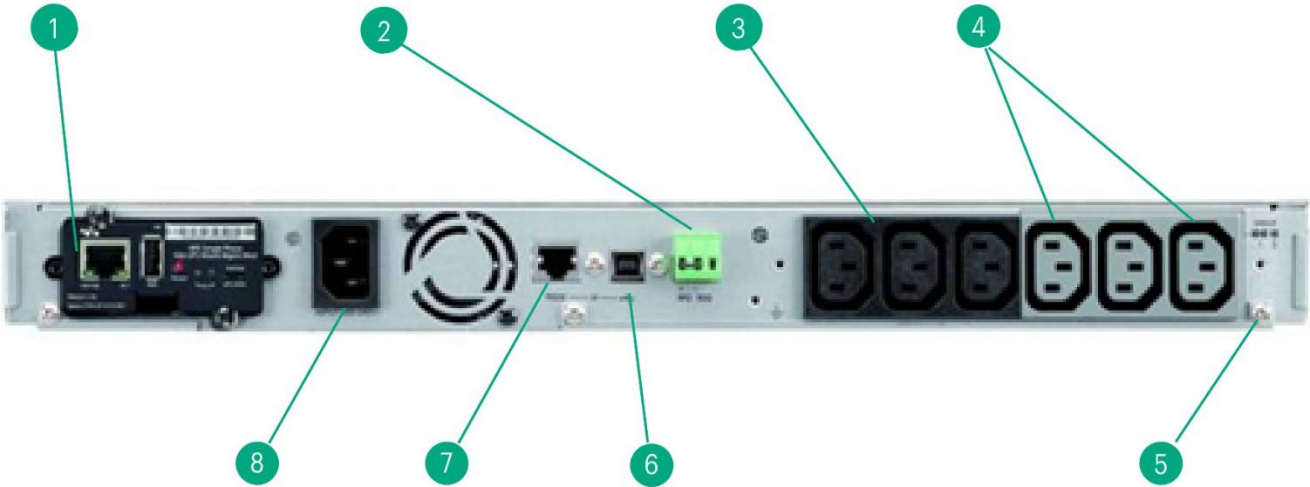
Transition set point voltages are subject to a hardware tolerance of +/-3% of the set point value.

---



HPE R1500 G5 NA and JP/TWN UPS

| Item | Description                                                                        | Item | Description                                                  |
|------|------------------------------------------------------------------------------------|------|--------------------------------------------------------------|
| 1.   | Slot for optional communication card; shown with Network Management Card installed | 6.   | RS-232 Communication Port                                    |
| 2.   | Connector for ROO (Remote On/Off) or RPO (Remote Power Off) Control                | 7.   | USB Communication Port                                       |
| 3.   | Primary Group: Outlets for connection of critical equipment                        | 8.   | Attached 6ft input power cord NEMA 5-15P for AC power source |
| 4.   | Programmable outlets for equipment connection                                      | 9.   | LED indicating site wiring fault alarm                       |
| 5.   | Ground screw                                                                       |      |                                                              |



HPE R1500 G5 International UPS

| Item | Description                                                                        | Item | Description                                                                |
|------|------------------------------------------------------------------------------------|------|----------------------------------------------------------------------------|
| 1.   | Slot for optional communication card; shown with Network Management Card installed | 5.   | Ground screw                                                               |
| 2.   | Connector for ROO (Remote On/Off) or RPO (Remote Power Off) control                | 6.   | RS-232 communication port                                                  |
| 3.   | Primary Group: Outlets for connection of equipment                                 | 7.   | USB communication port                                                     |
| 4.   | Programmable outlets for equipment connection                                      | 8.   | Input power connection (IEC -320-C14) for powering unit to AC power source |

## Overview

XXXXXX-**X21** is SKU designation formed by a common six digit part number and a -**X21** suffix that identifies a SKU that is available across multiple server family lines. Refer to the table below to find the SKU suffix that applies to the specific server product line this option can be ordered with.

| -B21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | -H21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | -K21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| COMPUTE Server Line                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | SPECIALIZED COMPUTE Server Line                                                                                                                                                                                                                                                                                                                                                                                                                                                          | STORAGE Line                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <p>HPE Cloudline CL2100/CL2200/CL2800/CL3100/CL4100/CL5200/CL5800 Servers</p> <p>HPE Composable Cloud for ProLiant DL</p> <p>HPE ProLiant BL460c/BL660c Servers</p> <p>HPE ProLiant DL20/DL160/DL180 Servers</p> <p>HPE ProLiant DL325/DL360/DL380/DL385/DL560/DL580 Servers</p> <p>HPE ProLiant DX360/DX380 Servers</p> <p>HPE ProLiant MicroServer</p> <p>HPE ProLiant for Microsoft Azure Stack</p> <p>HPE ProLiant ML30/ML110/ML350 Servers</p> <p>HPE Synergy 480/660 Systems</p> <p>HPE ProLiant DX170r/DX190r, DX2000 Servers</p> <p>HPE ProLiant DX560 Gen10 server</p> <p>HPE ProLiant DX4200 Gen10 server</p> | <p>HPE Apollo 35/40/70 Systems</p> <p>HPE Apollo 2000/6000 Servers</p> <p>HPE XL170r/XL190r/XL270d (Apollo 6500) Gen10 Server for BlueData Software</p> <p>HPE Converged System 300/500/700/750</p> <p>HPE Edgeline Systems and Servers</p> <p>HPE Integrity BL860c i6/BL870c i6/BL890c i6 Server Blades</p> <p>HPE Integrity MC990 X Server</p> <p>HPE Integrity rx2800 i6 Server</p> <p>HPE Integrity Superdome</p> <p>HPE SGI 8600 System</p> <p>HPE Solutions for SAP HANA (TDI)</p> | <p>HPE Apollo 4200 Gen9/Gen10 Servers</p> <p>HPE Apollo 4200 Gen10 LFF Server for BlueData Software</p> <p>HPE Apollo 4510 Gen10 System</p> <p>HPE D2220sb/D2500sb Storage Blade</p> <p>HPE D3000/D6020/D8000 Disk Enclosures</p> <p>HPE Scalable Object Storage with Scality RING</p> <p>HPE SimpliVity 2600</p> <p>HPE SimpliVity 325/380 Gen10</p> <p>HPE Storage File Controllers</p> <p>HPE StoreEasy 1460/1560/1650/1660/1860</p> <p>Disclaimer: This may not be a complete listing of applicable servers</p> |

## Standard Features

### HPE Power Management

#### HPE Power Protector Software

HPE Power Protector is a web-based application that enables administrators to manage an HPE UPS from a browser-based management console. Administrators can monitor, manage, and control a single UPS locally and remotely. A familiar browser interface provides secure access to the UPS Administrator Software and UPS Client Software from anywhere on the network. Administrators may configure power failure settings and define UPS load segments for maximum uptime of critical servers. The UPS can also be configured to extend runtimes for critical devices during utility power failures. For most UPSs, the receptacles on the rear panel are divided into one or more groups, called load segments, which can be controlled independently. By shutting down a load segment that is connected to less critical equipment, the runtime for more critical equipment is extended, providing additional protection.

- UPS power management via HPE Power Protector available via free download from HPE.com.
- Allows for local or network-based UPS monitoring, status updates, and control over shutdown communications
- Download to other servers or IT devices to create “clients” that can be configured for graceful shut down
- Access the HPE Power Protector user interface via a USB or serial connected server (proxy server) or through the optional 1GbE Network Management Card

---

### Increase stability and security in your data center

HPE Power Protector gives you the ability to establish power failure policies and automatically respond 24×7 to power faults or security risks without IT administrators present. Prioritize shutdowns in the event of a power failure to ensure that your data and hardware are fully protected. Delay restart based on defined load segments after a shutdown to sequence the start-up of system components and perform UPS diagnostics to ensure the availability of adequate battery backup times.

---

### Simplify management of UPS functions

Simple, effective management of environments, one UPS at a time. For users wanting ease of use, this is the tool to use. From load segmentation to power down prioritization and alert management, this tool offers everything needed from a single console. It even offers remote access via a web browser with secure SSL authentication. Simple, easy to read status “gauges” offer monitoring at a glance.

See HPE Power Protector [QuickSpecs](#) for more information.

---

### Supported Operating Systems

Similar to hardware support, HPE Power Protector is designed to support a wide array of operating systems, spanning Microsoft Windows, Linux, UNIX, and virtual platforms.

---

## Standard Features

### UPS Network Management Module

The HPE UPS Network Module enables you to monitor and manage power environments through comprehensive control of HPE UPSs. The HPE UPS Management Module can support either a single UPS configuration or provide additional power protection with support for dual redundant UPS configuration for no-single-point-of-failure. The additional serial ports will provide greater power management control and flexible monitoring.

The management module can be configured to send alert traps to HPE Systems Insight Manager and other SNMP management programs or used as a standalone management system. This flexibility enables you to monitor and manage UPSs through the network. To facilitate day-to-day maintenance tasks, the embedded management software provides detailed system logs.

The HPE UPS Network Module provides remote management of a UPS by connecting the UPS directly to the network. Configuration & Management of the UPS from anywhere and at any time via a standard web browser.

**Notes:** For more information on the UPS Network Module please see:

<http://www.hpe.com/info/rackandpower>.

---

### Warranty

When you need it, use outstanding HPE support services for your whole data center environment. With HPE Services operational services, have the security of knowing that your HPE UPS will be covered at the same service level and coverage period as your HPE server. HPE UPSs are backed by a 3-year limited warranty, with the first year including parts and labor. Also, standard on all HPE UPS units is our exclusive 30-day Battery Pre-Failure Warranty, which ensures that when customers receive notification from HPE Power Manager Software that the battery may fail, the battery is replaced free of charge under the warranty. This warranty is offered worldwide.

**Notes:** \$250,000 Computer/Load Protection Guarantee is also provided (applicable in North America only).

The HPE UPS is covered by a three year warranty, with the first year including parts and labor. Also, standard on all HPE UPS units, is our exclusive Battery Pre-Failure Warning, which extends the advantage of a HPE three-year, limited warranty by applying it to the battery before it actually fails. This warranty is offered worldwide. Specifically, the Battery Pre-Failure Warning ensures that when customers receive notification from HPE Power Management Software that the battery may fail, the battery is replaced free of charge under the warranty.

**Notes:** \$250,000 Computer/Load Protection Guarantee is also provided in North America, in addition to the HPE three year, limited warranty.

#### Warranty Upgrade Options:

- Response - Upgrade on-site response from next business day to same day 4-hours
- Coverage - Extend hours of coverage from 5 days x 9 hours to 7 days x 24 hours

Duration - Select duration of coverage for a minimum period of 1 year or multiple years

---

## Service and Support

### HPE Services - Service and Support

**Get the most from your HPE Products.** Get the expertise you need at every step of your IT journey with [HPE Services](#). We help you lower your risks and overall costs using automation and methodologies that have been tested and refined by HPE experts through thousands of deployments globally. HPE Services [Advisory Services](#), focus on your business outcomes and goals, partnering with you to design your transformation and build a roadmap tuned to your unique challenges. Our [Professional](#) and [Operational Services](#) can be leveraged to speed up time-to-production, boost performance and accelerate your business. HPE Services specializes in flawless and on-time implementation, on-budget execution, and creative configurations that get the most out of software and hardware alike.

#### Consume IT on your terms

[GreenLake](#) brings the cloud experience directly to your apps and data wherever they are—the edge, colocations, or your data center. It delivers cloud services for on-premises IT infrastructure specifically tailored to your most demanding workloads. With a pay-per-use, scalable, point-and-click self-service experience that is managed for you, GreenLake accelerates digital transformation in a distributed, edge-to-cloud world.

- Get faster time to market
- Save on TCO, align costs to business
- Scale quickly, meet unpredictable demand
- Simplify IT operations across your data centers and clouds

#### Managed services to run your IT operations

[GreenLake Management Services](#) provides services that monitor, operate, and optimize your infrastructure and applications, delivered consistently and globally to give you unified control and let you focus on innovation.

---

## Recommended Services

### HPE Tech Care Service

HPE Tech Care Service is the new operational service experience for HPE products. Tech Care goes beyond traditional support by providing access to product specific experts, an AI-driven digital experience, and general technical guidance to not only reduce risk but constantly search for ways to do things better. HPE Tech Care Service has been reimagined from the ground up to support a customer-centric, AI-driven, and digitally enabled customer experience to move your business forward. HPE Tech Care Service is available in three response levels. Basic, which provides 9x5 business hour availability and a 2 hour response time. Essential which provides a 15 minute response time 24x7 for most enterprise level customers, and Critical which includes a 6 hour repair commitment where available and outage management response for severity 1 incidents.

<https://www.hpe.com/services/techcare>

## Service and Support

### HPE Complete Care Service

HPE Complete Care Service is a modular, edge-to-cloud IT environment service that provides a holistic approach to optimizing your entire IT environment and achieving agreed upon IT outcomes and business goals through a personalized and customer-centric experience. All delivered by an assigned team of HPE Services experts. HPE Complete Care Service provides:

- A complete coverage approach -- edge to cloud
- An assigned HPE team
- Modular and fully personalized engagement
- Enhanced Incident Management experience with priority access
- Digitally enabled and AI-driven customer experience

<https://www.hpe.com/services/completecure>

---

### For more information

To learn more on services for HPE ESSN Options, please contact your Hewlett Packard Enterprise sales representative or Hewlett Packard Enterprise Authorized Channel Partner. Or visit: <https://www.hpe.com/us/en/support.html> or <https://www.hpe.com/us/en/services/operational.html>

---

## Environment-friendly Products and Approach-End-of-life Management and Recycling

Hewlett Packard Enterprise offers end-of-life [product return, trade-in, and recycling programs](#), in many geographic areas, for our products. Products returned to Hewlett Packard Enterprise will be recycled, recovered or disposed of in a responsible manner.

The EU WEEE Directive (2012/19/EU) 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 Enterprise website](#). These instructions may be used by recyclers and other WEEE treatment facilities as well as Hewlett Packard Enterprise OEM customers who integrate and re-sell Hewlett Packard Enterprise equipment.

---

Configuration Information

Rack/Tower UPS Models

|                                        |        |
|----------------------------------------|--------|
| HPE R/T3000 Gen5 Low Voltage NA/JP UPS | Q1L85A |
| HPE R/T3000 Gen5 High Voltage INTL UPS | Q1L87A |

---

UPS Network Management Module

|                                                    |        |
|----------------------------------------------------|--------|
| HPE Single Phase 1Gb UPS Network Management Module | Q1C17A |
|----------------------------------------------------|--------|

---

Extended Runtime Module (ERM)

HPE Extended Runtime Modules increase the available runtime for the larger rack mounted UPS units to allow customers to ensure all of their applications can be gracefully shutdown in the event of a power failure.

|                                        |        |
|----------------------------------------|--------|
| HPE R/T3000 G4 Extended Runtime Module | J2R10A |
|----------------------------------------|--------|

---

2U R/T UPS ERM Shipping Kit

|                                    |        |
|------------------------------------|--------|
| HPE 2U Rack/Tower UPS Shipping Kit | L4Q11A |
|------------------------------------|--------|

**Notes:** The optional 2U shipping kit consists of heavy duty rails, front and back CTO brackets and required mounting hardware for attaching the UPS or ERM to the rack. This kit is an option that is required if the UPS and or ERM are going to be mounted into a rack that will be shipped via transport. One of these kits is required per unit, whether UPS or ERM.

---

HPE Services operational services

|                                                               |        |
|---------------------------------------------------------------|--------|
| HPE Install Universal Power Supply 3KVA to Below 6KVA Service | U4693E |
| HPE Install Universal Power Supply Less Than 3KVA Service     | U4690E |

---

## Technical Specifications

| Operating system HPPP (Client & Admin) |                                   |              |                |               |               |               |
|----------------------------------------|-----------------------------------|--------------|----------------|---------------|---------------|---------------|
|                                        |                                   | Service Pack | Platform       | HPPP          |               | HPNMC         |
|                                        |                                   |              |                | Admin         | Client        | NMC           |
| Microsoft Windows                      |                                   |              |                |               |               |               |
| Windows Server 2016                    | Standard, Data Center, Core       |              |                | Tested        | Tested        | Tested        |
| Windows Server 2012                    | Standard, Data Center, Core       |              | x64            | Supported     | Supported     | Supported     |
| Windows Server 2012 R2                 | Standard, Data Center, Core       |              | x86, x64       | Tested        | Tested        | Tested        |
| Windows Server 2008 R2                 | Standard, Data Center, Core       | SP1          | x64, IA64      | Tested        | Tested        | Tested        |
| Windows Server 2008                    | Standard, Data Center, Core       | SP2          | x86, x64, IA64 | Supported     | Supported     | Supported     |
| Windows Server 2003 R2                 | Standard, Data Center, Core       |              |                | Not supported | Not supported | Not supported |
| Windows 10                             | Enterprise, Pro                   |              | x64            | Tested        | Tested        | Tested        |
| Windows 8.1                            | Enterprise, Pro                   |              | x64            | Tested        | Tested        | Tested        |
| Windows 8                              | Enterprise, Pro                   |              | x86, x64       | Supported     | Supported     | Supported     |
| Windows 7                              | Professional , Ultimate, Standard | SP1          | x86, x64       | Tested        | Tested        | Tested        |
| Windows XP                             | Professional                      | SP3          |                | Not supported | Not supported | Not supported |
| Linux                                  |                                   |              |                |               |               |               |
| Red Hat Enterprise Linux               | 7.3                               |              | x86, x64       | Tested        | Tested        | Tested        |
|                                        | 7.2                               |              | x86, x64       | Tested        | Tested        | Tested        |

## Technical Specifications

|  |      |  |          |               |               |               |
|--|------|--|----------|---------------|---------------|---------------|
|  | 6.7  |  | x86, x64 | Tested        | Tested        | Tested        |
|  | 6.6  |  | x86, x64 | Supported     | Supported     | Supported     |
|  | 5.11 |  | x86, x64 | Tested        | Tested        | Tested        |
|  | 5.10 |  | x86, x64 | Supported     | Supported     | Supported     |
|  | 5.7  |  | x86, x64 | Not supported | Not supported | Not supported |

## Technical Specifications

| Operating system HPPP (Client & Admin) |                             |              |                |               |               |               |
|----------------------------------------|-----------------------------|--------------|----------------|---------------|---------------|---------------|
|                                        |                             | Service Pack | Platform       | HPPP          |               | HPNMC         |
|                                        |                             |              |                | Admin         | Client        | NMC           |
| SUSE Linux Enterprise Server/Novel     | Fedora core 15              |              | x86, x64       | Not supported | Not supported | Not supported |
|                                        | Fedora core 14              |              | x86, x64       | Not supported | Not supported | Not supported |
| SUSE Linux Enterprise Server/Novel     | 12                          | SP2          | x86, x64, IA64 | Tested        | Tested        | Tested        |
|                                        | 11                          | SP3          | x86, x64, IA64 | Tested        | Tested        | Tested        |
|                                        | OpenSuse 13.0               |              | x86, x64       | Not supported | Not supported | Not supported |
|                                        | OpenSuse 12.3               |              | x86, x64       | Not supported | Not supported | Not supported |
| Virtual environments                   |                             |              |                |               |               |               |
| VMware                                 | ESXi 6.5                    |              | X86, IA64      |               | Tested        | Tested        |
|                                        | ESXi 6.0                    | U1           | X86, IA64      |               | Tested        | Tested        |
|                                        | ESXi 5.5                    | U3           | X86, IA64      |               | Tested        | Tested        |
|                                        | ESXi 5.1 (pay version only) | U1           |                |               | Supported     | Supported     |
|                                        | ESXi 5.0 (pay version only) | U1           |                |               | Supported     | Supported     |
|                                        | ESX 4.1 (pay version only)  | U1           |                |               | Not supported | Not supported |
|                                        | ESXi 4.1 (pay version only) | U1           |                |               | Not supported | Not supported |
|                                        | ESX 4.0 (pay version only)  | U1           |                |               | Not supported | Not supported |
|                                        | ESXi 4.0 (pay version only) | U1           |                |               | Not supported | Not supported |

## Technical Specifications

## Rack/Tower models

| HPE R/T2200 G5 UPS |                   |                         |                      |                         |                                                                                          |
|--------------------|-------------------|-------------------------|----------------------|-------------------------|------------------------------------------------------------------------------------------|
| Part Number        | Operating Voltage | Default Voltage Setting | Power Out (VA/Watts) | Input Connection        | Output Connection                                                                        |
| Q1L84A NA/JP       | 120V to 125V      | 120V                    | 1920/1920            | NEMA 5-20P 20A, 3m cord | (8) –NEMA 5-20 Receptacles,<br>(4) Primary Group<br>(2) Load Group 1<br>(2) Load Group 2 |
|                    | 100V              |                         | 1500/1400            |                         |                                                                                          |

| HPE R/T3000 G5 UPS Models |                            |      |                      |                                                                          |                                                                                                                                                   |
|---------------------------|----------------------------|------|----------------------|--------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Part Number               | Operating Voltage Settings |      | Power Out (VA/Watts) | Input Connection                                                         | Output Connection                                                                                                                                 |
| Q1L85A LV NA/JP           | 120V <sup>1</sup> to 125V  | 120V | 2880/2700            | L5-30P, 2.4m cord                                                        | (6) NEMA 5-20R<br>(1) NEMA L5-30 which includes<br>(2) Primary Group 5-20R and (1) L5-30,<br>(2) Load Group 1 5-20R and (2) Load Group 2 5-20R    |
|                           | 100V                       |      | 2490/2250            |                                                                          |                                                                                                                                                   |
| Q1L86A HV NA/JP           | 208V <sup>1</sup>          | 200V | 3000/2700            | L6-20P, 2.4m cord                                                        | (8) IEC C13<br>(1) IEC C-19 which includes<br>(4) Primary Group IEC C13 and (1) IEC C19,<br>(2) Load Group 1 IEC C13 and (2) Load Group 2 IEC C13 |
|                           | 200V                       |      | 2490/2241            |                                                                          |                                                                                                                                                   |
| Q1L87A HV INTL            | 208V to 240V               | 230V | 3000/2700            | Detachable IEC C-20 inlet plug for attaching country specific power cord | (8) IEC C13<br>(1) IEC C-19 which includes<br>(4) Primary Group IEC C13 and (1) IEC C19,<br>(2) Load Group 1 IEC C13 and (2) Load Group 2 IEC C13 |
|                           | 200V                       |      | 2490/2241            |                                                                          |                                                                                                                                                   |

## Technical Specifications

| Operating system HPPP (Client & Admin)                                                                                                                                                                                                                                                                                                                        |                                |              |           |               |               |               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|--------------|-----------|---------------|---------------|---------------|
|                                                                                                                                                                                                                                                                                                                                                               |                                | Service Pack | Platform  | HPPP          |               | HPNMC         |
|                                                                                                                                                                                                                                                                                                                                                               |                                |              |           | Admin         | Client        | NMC           |
| <b>Microsoft</b>                                                                                                                                                                                                                                                                                                                                              | Windows Hyper-V Server 2012    | R2           |           | N/A           | Supported     | Supported     |
|                                                                                                                                                                                                                                                                                                                                                               | Windows Hyper-V Server 2008    | R2           | X86, IA64 |               | Supported     | Supported     |
| <b>Xen</b>                                                                                                                                                                                                                                                                                                                                                    | Citrix XenServer 6.0           |              |           |               | Supported     | Supported     |
|                                                                                                                                                                                                                                                                                                                                                               | Citrix XenServer 5.6           |              | IA64      |               | Supported     | Supported     |
|                                                                                                                                                                                                                                                                                                                                                               | OpenSource Xen 2.6 on RHEL 5   |              |           | Not supported | Not supported | Not supported |
|                                                                                                                                                                                                                                                                                                                                                               | OpenSource Xen 3.2 on Debian 5 |              |           | Not supported | Not supported | Not supported |
| <b>KVM</b>                                                                                                                                                                                                                                                                                                                                                    | KVM 17 Linux 2.6.21 kernel     |              |           | Not supported | Not supported | Not supported |
| <b>Notes:</b> For x86-64 and IA-64 architectures and on Microsoft Windows systems and HP-UX for IA-64, HPE Power Protector will work in 32-bit compatibility mode. This implies that no native ports for these architectures will be made for these systems; the only exception is for components that strictly require native ports, such as device drivers. |                                |              |           |               |               |               |

## Technical Specifications

| R/T2200 and R/T3000 UPS Specifications |                              |                                                                                                                                                                                          |
|----------------------------------------|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Electrical Input                       | <b>Voltage Range</b>         | 100V nominal = 80V – 128V<br>120V nominal = 89V – 159V<br>208V nominal = 160V – 163V<br>230V nominal = 160V – 294V<br>See Model Matrix for nominal and user selectable voltage settings. |
|                                        | <b>Frequency</b>             | 50/60 Hz                                                                                                                                                                                 |
|                                        | <b>Online Efficiency</b>     | 94%                                                                                                                                                                                      |
|                                        | <b>Online Regulation</b>     | -10% to +6% of nominal voltage                                                                                                                                                           |
| Electrical Output                      | <b>On battery Regulation</b> | ±5% of nominal voltage                                                                                                                                                                   |
|                                        | <b>Online Regulation</b>     | -10% to +6% of nominal voltage                                                                                                                                                           |
|                                        | <b>Voltage Wave Form</b>     | Sine wave                                                                                                                                                                                |
|                                        | <b>Connections</b>           | See Model Selection Matrix; divided into 2 Load Segments                                                                                                                                 |
|                                        | <b>Output protection</b>     | Firmware overload sensing and control                                                                                                                                                    |
| Battery                                | <b>Type</b>                  | Maintenance-free, sealed, valve-regulated lead acid (VRLA)                                                                                                                               |
|                                        | <b>Extended Batteries</b>    | Up to four ERMs can be supported; recommendation is up to 2                                                                                                                              |
|                                        | <b>Backup Time</b>           | See Backup Times Chart                                                                                                                                                                   |
|                                        | <b>Recharge Time</b>         | <3 hours to 90% usable capacity; <24 hours for complete recharge                                                                                                                         |
|                                        | <b>Voltage</b>               | R/T2200 = 48V<br>R/T3000 = 72V                                                                                                                                                           |
| Communications                         | <b>Serial Ports</b>          | Standard DB-9 and USB ports (ships with communication cables)                                                                                                                            |
|                                        | <b>Option Slot</b>           | (1) (For optional Communication Card)                                                                                                                                                    |
|                                        | <b>Option Cards</b>          | HPE UPS Network Management Module (sold separately)                                                                                                                                      |
|                                        | <b>LCD Interface</b>         | LED Display integrated into front panel                                                                                                                                                  |
|                                        | <b>Management Software</b>   | Power Management including HPE Power Protector software. See HPE Power Protector <a href="#">QuickSpecs</a> for more information.                                                        |

## Technical Specifications

**R/T2200 and R/T3000 UPS Specifications**

|                                          |                                    |                                                                                                                                                                                                                                                                                                                                           |
|------------------------------------------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Environmental and Safety</b>          | <b>Operating Temperature</b>       | 0°C to 40°C (32°F to 104°F); Long term use at higher temperature will reduce battery life 25°C (77°F)                                                                                                                                                                                                                                     |
|                                          | <b>Non-operating Temperature</b>   | -15°C to 50°C (5°F to 122°F)                                                                                                                                                                                                                                                                                                              |
|                                          | <b>Operating Humidity</b>          | 0% to 90% (non-condensing)                                                                                                                                                                                                                                                                                                                |
|                                          | <b>Storage Humidity</b>            | 0% to 90%                                                                                                                                                                                                                                                                                                                                 |
|                                          | <b>Operating Altitude</b>          | Up to 6,562 ft (2000 m) above sea level                                                                                                                                                                                                                                                                                                   |
|                                          | <b>Audible Noise</b>               | <40dB in normal operation. <45dBA on battery operation                                                                                                                                                                                                                                                                                    |
|                                          | <b>Safety Markings</b>             | UL/cUL CE, TUV, C-tick, CES, EAC, VCCI, GS, KC, EK, BSMI, TIS, BIS                                                                                                                                                                                                                                                                        |
|                                          | <b>Safety Certifications</b>       | UL1778; UL60950, CSA22.2 No.107.1, No.107.3,; CB Bulletin IEC62040-1; IEC 60950-1; EN60950-1; EN 62040-1; EN 61000-3-2+A1+A2; EN 61000-3-3                                                                                                                                                                                                |
|                                          | <b>EMC Markings</b>                | FCC-A; CISPR 22; VCCI A; CE, BSMI, C-TICK                                                                                                                                                                                                                                                                                                 |
|                                          | <b>Emissions</b>                   | FCC CFR 47, Part 15 Class A, EN50091-2                                                                                                                                                                                                                                                                                                    |
|                                          | <b>Immunity</b>                    | EN 55024; EN 50091-2 consisting of IEC 61000-4-2 thru IEC 61000-4-6; IEC 61000-4-11                                                                                                                                                                                                                                                       |
|                                          | <b>Surge Suppression</b>           | Conforms to IEEE 587B and ANSI C62.41                                                                                                                                                                                                                                                                                                     |
|                                          | <b>RPO/ROO Port</b>                | The Normally Closed (NC) RPO shuts off power to all UPS outlets when opened. The UPS must be manually restarted once the terminals are closed again. There is a preinstalled jumper in the RPO terminals.<br>The Normally Open (NO) ROO initiates a UPS Power On function when closed. Opening the terminals again will shut off the UPS. |
| <b>R/T2200 G5 Weights and Dimensions</b> | <b>Unit Dimensions (LxWxH)</b>     | 20.55 x 17.36 x 3.39 inches / 522 x 441 x 86.2 mm                                                                                                                                                                                                                                                                                         |
|                                          | <b>Shipping Dimensions (LxWxH)</b> | 36.26 x 23.23 x 11.02 inches / 921 x 590 x 280 mm                                                                                                                                                                                                                                                                                         |
|                                          | <b>Unit Weight</b>                 | 65.28 lbs/29.61 kg                                                                                                                                                                                                                                                                                                                        |
|                                          | <b>Shipping Weight</b>             | 83.62 lbs / 37.93 kg                                                                                                                                                                                                                                                                                                                      |
| <b>R/T3000 G5 Weights and Dimensions</b> | <b>Unit Dimensions (LxWxH)</b>     | 25.47 x 17.4 x 3.4 in / 647 x 441x 86.2 mm                                                                                                                                                                                                                                                                                                |
|                                          | <b>Shipping Dimensions (LxWxH)</b> | 36.26 x 23.23 x 11.02 inches / 921 x 590 x 280 mm                                                                                                                                                                                                                                                                                         |
|                                          | <b>Unit Weight</b>                 | 87.17 lbs / 39.54 kg                                                                                                                                                                                                                                                                                                                      |
|                                          | <b>Shipping Weight</b>             | 107.48 lbs / 48.75 kg                                                                                                                                                                                                                                                                                                                     |

## Technical Specifications

| PE R1500 G5 UPS          |                           |                                                                                                                                                                                                           |
|--------------------------|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Electrical Input         | Voltage Range             | ± 15% of nominal 100 and 120V models and ± 20% of nominal on 230V models. See Model Matrix for nominal and user selectable voltage settings via LCD Front Display Panel                                   |
|                          | Frequency                 | 50/60 Hz ± 5Hz (auto sensing at default voltage )                                                                                                                                                         |
|                          | Online Efficiency         | 92%                                                                                                                                                                                                       |
| Electrical Output        | Online Regulation         | -10% to +6% of nominal voltage*                                                                                                                                                                           |
|                          | On battery Regulation     | -10% / + 6% of nominal voltage                                                                                                                                                                            |
|                          | Voltage Wave Form         | Sine wave                                                                                                                                                                                                 |
|                          | Connections               | See Model Matrix; divided into 3 Groups                                                                                                                                                                   |
|                          | Output Protection         | Firmware overload sensing and control                                                                                                                                                                     |
| Battery                  | Type                      | Maintenance-free, sealed, valve-regulated lead acid (VRLA)                                                                                                                                                |
|                          | Backup Time               | See Backup Times Chart                                                                                                                                                                                    |
|                          | Recharge Time             | <3 hours to 90% usable capacity; <24 hours for complete recharge                                                                                                                                          |
|                          | Voltage                   | 36V Battery String                                                                                                                                                                                        |
| Communications           | Ports                     | Standard DB-9 port (Kit ships with cable for communication )<br>USB port (Kit ships with cable for communication)                                                                                         |
|                          | Option Slot               | (1) ( reserved for Optional Network Management Module)                                                                                                                                                    |
|                          | Option Cards              | HPE UPS Network Management Module (sold separately)                                                                                                                                                       |
|                          | LCD Indicators            | LED display integrated into the front panel                                                                                                                                                               |
|                          | Management Software       | Power Management including HPE Power Protector software. See HPE Power Protector <a href="#">QuickSpecs</a> for more information.                                                                         |
| Environmental and Safety | Operating Temperature     | 32° to 104°F (0° to 40°C) (with battery)                                                                                                                                                                  |
|                          | Non-operating Temperature | -15° to 112°F (-26° to 50°C)                                                                                                                                                                              |
|                          | Operating Humidity        | 0% to 90% (non-condensing)                                                                                                                                                                                |
|                          | Storage Humidity          | 0% to 90% (non-condensing)                                                                                                                                                                                |
|                          | Operating Altitude        | up to 2000 meters above sea level                                                                                                                                                                         |
|                          | Audible Noise             | <40db (at 1m from surface of unit) <45dBA on battery operation                                                                                                                                            |
|                          | Safety Markings           | UL/cUL CE, TUV, C-tick, CES, EAC, VCCI, GS, KC, EK, BSMI, TIS, BIS                                                                                                                                        |
|                          | Safety Certifications     | UL1778; UL60950, CSA22.2 No.107.1,No.107.3.; CB Bulletin IEC62040-1; IEC 60950-1; EN60950-1;EN 62040-1; EN 61000-3-2+A1 +A2; EN 61000-3-3                                                                 |
|                          | EMC Markings              | FCC-BCISPR 22; VCCI B; CE, BSMI, C-TICK                                                                                                                                                                   |
|                          | Emissions                 | FCC CFR 47, Part 15 Class A, EN50091-2                                                                                                                                                                    |
|                          | Immunity                  | EN 55024; EN 50091-2 consisting of IEC 61000-4-2 thru IEC 61000-4-6; IEC 61000-4-11                                                                                                                       |
|                          | Surge Suppression         | Conforms to IEEE 587B and ANSI C62.41                                                                                                                                                                     |
|                          | RPO/ROO Port              | The Normally Closed (NC) RPO shuts off power to all UPS outlets when opened. The UPS must be manually restarted once the terminals are closed again. There is a preinstalled jumper in the RPO terminals. |

## Technical Specifications

|                                |                                          |                                                                                                                              |
|--------------------------------|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
|                                |                                          | The Normally Open (NO) ROO initiates a UPS Power On function when closed. Opening the terminals again will shut off the UPS. |
| <b>Unit Dimensions (LxWxH)</b> | 21.8x 17.2x 1.69 in (554 x 438 x 43 mm)  |                                                                                                                              |
| <b>Shipping Dimensions</b>     | 30.71x 22.8 x6.1 in (780 x 580 x 155 mm) |                                                                                                                              |
| <b>Unit Weight</b>             | 39.06 lbs (19.72 kg)                     |                                                                                                                              |
| <b>Shipping Weight</b>         | 54.45 lbs (24.7 kg)                      |                                                                                                                              |

## Rack model

## HPE R1500 G5 UPS

| Part Number   | Operating Voltage Settings | Default Voltage Setting | Power Out (VA/Watts) | Input Connection                                    | Output Connection                                                                                                          |
|---------------|----------------------------|-------------------------|----------------------|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Q1L88A NA     | 120V to 125V               | 120V                    | 1440/1100            | NEMA 5-15P                                          | (5) 5-15P which includes:<br>(1) Primary Group 2x 5-15P;<br>(2) Load Groups: Group 1 2x 5-15P and Group 2 1x 5-15P         |
|               | 100V                       |                         | 1200/900             |                                                     |                                                                                                                            |
| Q1L89A JP/TWN | 100V                       | 100V                    | 1200/900             | NEMA 5-15P<br>With Taiwan approval                  | (5) IEC C13 which includes:<br>(1) Primary Group 2x IEC C13;<br>(2) Load Groups: Group 1 2x IEC C13 and Group 2 1x IEC C13 |
|               | 120V <sup>1</sup> to 125V  |                         | 1440/1100            |                                                     |                                                                                                                            |
| Q1L90A INTL   | 220V/230V/240V             | 230V                    | 1550/1100            | C14 inlet for attaching country specific power cord | (6) IEC C13 which includes:<br>(1) Primary Group 3x IEC C13;<br>(2) Load Groups: Group 1 2x IEC C13 and Group 2 1x IEC C13 |
|               | 200V to 208V               |                         | 1395/990             |                                                     |                                                                                                                            |

**Notes:** Voltage is user selectable via LCD Front Display Panel.

## Technical Specifications

**Estimated Runtime with Extended Runtime Module (ERM)**

Battery runtimes are approximate and may vary with equipment, configuration, battery age, temperature, etc.

| <b>R/T2200 G5 UPS</b> |              |                                |              |               |               |               |
|-----------------------|--------------|--------------------------------|--------------|---------------|---------------|---------------|
| <b>Power</b>          |              | <b>Estimated Runtime (min)</b> |              |               |               |               |
| <b>Load %</b>         | <b>Watts</b> | <b>Internal Batteries</b>      | <b>1 ERM</b> | <b>2 ERMs</b> | <b>3 ERMs</b> | <b>4 ERMs</b> |
| 10                    | 191.1        | 80.1                           | 286.9        | 491.0         | 725.3         | 898.3         |
| 20                    | 382.2        | 30.5                           | 122.9        | 217.7         | 311.0         | 406.2         |
| 30                    | 573.3        | 17.3                           | 74.9         | 135.3         | 189.5         | 255.4         |
| 40                    | 764.4        | 11.6                           | 52.7         | 96.5          | 133.3         | 183.7         |
| 50                    | 955.5        | 8.5                            | 40.1         | 74.3          | 101.5         | 142.3         |
| 60                    | 1146.6       | 6.6                            | 32.1         | 60.0          | 81.2          | 115.5         |
| 70                    | 1337.7       | 5.3                            | 26.6         | 50.1          | 67.3          | 96.8          |
| 80                    | 1528.8       | 4.4                            | 22.6         | 42.8          | 57.2          | 83.1          |
| 90                    | 1719.9       | 3.7                            | 19.5         | 37.3          | 49.5          | 72.6          |
| 100                   | 1911         | 3.2                            | 17.2         | 32.9          | 43.5          | 64.3          |

| <b>R/T3000 G5 UPS</b> |              |                                |              |               |               |               |
|-----------------------|--------------|--------------------------------|--------------|---------------|---------------|---------------|
| <b>Power</b>          |              | <b>Estimated Runtime (min)</b> |              |               |               |               |
| <b>Load %</b>         | <b>Watts</b> | <b>Internal Batteries</b>      | <b>1 ERM</b> | <b>2 ERMs</b> | <b>3 ERMs</b> | <b>4 ERMs</b> |
| 10                    | 270          | 61.4                           | 281.0        | 474.6         | 665.5         | 859.7         |
| 20                    | 540          | 27.7                           | 126.5        | 219.4         | 311.4         | 404.5         |
| 30                    | 810          | 17.4                           | 79.3         | 139.7         | 199.8         | 260.2         |
| 40                    | 1080         | 12.5                           | 57.0         | 101.4         | 145.8         | 190.3         |
| 50                    | 1350         | 9.6                            | 44.1         | 79.1          | 114.1         | 149.3         |
| 60                    | 1620         | 7.8                            | 35.7         | 64.6          | 93.5          | 122.4         |
| 70                    | 1890         | 6.5                            | 29.9         | 54.4          | 79.0          | 103.5         |
| 80                    | 2160         | 5.6                            | 25.7         | 46.9          | 68.2          | 89.5          |
| 90                    | 2430         | 4.9                            | 22.4         | 41.1          | 60.0          | 78.8          |
| 100                   | 2700         | 4.3                            | 19.8         | 36.6          | 53.4          | 70.3          |

## Technical Specifications

| R/T3000 G5 UPS High Voltage |       |                         |       |        |        |        |
|-----------------------------|-------|-------------------------|-------|--------|--------|--------|
| Power                       |       | Estimated Runtime (min) |       |        |        |        |
| Load %                      | Watts | Internal Batteries      | 1 ERM | 2 ERMS | 3 ERMs | 4 ERMs |
| 10                          | 270   | 83.3                    | 259.1 | 456.9  | 655.5  | 853.5  |
| 20                          | 540   | 31.4                    | 121.8 | 219.2  | 316.8  | 414.0  |
| 30                          | 810   | 17.7                    | 78.3  | 142.7  | 207.1  | 271.1  |
| 40                          | 1080  | 11.8                    | 57.2  | 105.2  | 153.2  | 200.8  |
| 50                          | 1350  | 8.6                     | 44.9  | 83.0   | 121.2  | 159.1  |
| 60                          | 1620  | 6.7                     | 36.8  | 68.4   | 100.1  | 131.5  |
| 70                          | 1890  | 5.4                     | 31.1  | 58.1   | 85.2   | 112.0  |
| 80                          | 2160  | 4.4                     | 26.9  | 50.5   | 74.0   | 97.4   |
| 90                          | 2430  | 3.8                     | 23.6  | 44.5   | 65.4   | 86.1   |
| 100                         | 2700  | 3.2                     | 21.1  | 39.8   | 58.6   | 77.2   |

| R1500 G5 UPS Estimated Runtime |       |                         |
|--------------------------------|-------|-------------------------|
| Load %                         | Watts | Estimated Runtime (min) |
| 10                             | 109   | 97                      |
| 20                             | 219   | 39                      |
| 30                             | 328   | 23                      |
| 40                             | 438   | 16                      |
| 50                             | 547   | 12                      |
| 60                             | 656   | 10                      |
| 70                             | 766   | 8                       |
| 80                             | 875   | 7                       |
| 90                             | 985   | 6                       |
| 100                            | 1094  | 5                       |

## Summary of Changes

| Date        | Version History           | Action  | Description of Change                              |
|-------------|---------------------------|---------|----------------------------------------------------|
| 16-Feb-2026 | <a href="#">Version 8</a> | Changed | New branding applied to document.                  |
| 07-Mar-2022 | <a href="#">Version 7</a> | Changed | Technical Specifications Section was updated       |
| 15-Nov-2021 | <a href="#">Version 6</a> | Changed | Service and Support Section was updated            |
| 15-Jun-2020 | <a href="#">Version 5</a> | Changed | Battery Information was updated                    |
| 06-May-2019 | <a href="#">Version 4</a> | Changed | Models Section was updated                         |
| 01-Oct-2018 | <a href="#">Version 3</a> | Changed | Overview, Models and Related Options were updated. |
| 02-Jul-2018 | <a href="#">Version 2</a> | Changed | Models Section was updated                         |
| 02-Apr-2018 | <a href="#">Version 1</a> | New     | New QuickSpecs                                     |

[Have feedback on QuickSpecs? We're listening](#)

[Chat now](#)

© Copyright 2026 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise 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. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

a00041730enw - 16158 - Worldwide - V8 - 16-February-2026  
HEWLETT PACKARD ENTERPRISE  
HPE.com

