

Overview

HPE Adaptive Rack Cooling System

The HPE Adaptive Rack Cooling System is a closed loop cooling system that removes the high levels of heat generated by today's servers, mass storage, and core networking hardware. The HPE Adaptive Rack Cooling System allows for simultaneous cooling of up to four racks and 150kW of IT capacity when used in conjunction with the HPE Adaptive Rack Cooling System 42U or 48U racks.

HPE Adaptive Rack Cooling System is designed to complement any new or existing datacenter by enabling computing power growth without adding to the heat load in the datacenter. In addition, by allowing equivalent cooling capacity as commodity DLC, the HPE Adaptive Rack Cooling System will extend, considerably, the life of your datacenter. The horizontal air flow of the HPE Adaptive Rack Cooling System fully supports industry-standard front-to-back cooling designs and standard server dimensions. Additionally, the implementation of variable speed fans within the system enables improved energy efficiencies while providing all devices the right volume of airflow, regardless of the mounting position or workload.



HPE Adaptive Rack Cooling System with 42u Rack Options

Standard Features

Key Features

General Solution

- Self-contained, (closed-coupled) solution that supports up to 4 full racks of IT
- Closed-coupled cooling ensures uniform horizontal airflow

Cooling Capacity

- Up to 150kW cooling capacity or 110kW in an N+1 fan configuration

Water

- Supports 7C to 32C Facility inlet water temp

Efficiency

- Warm water cooling ready: support IT loads up to 75 kW at 30°C inlet water with 70 gallons per minute (GPM) and a server supply air temperature of 35°C.
- Includes four front, swappable fans, per high efficiency heat exchanger resulting in a pPUE as low as 1.05

Power

- Input power support for 380V-480VAC(3-phase)
- Automatic Transfer Switch providing redundant power input

Availability and Reliability

- Advanced condensate management
- Integrated automatic door opening system (optional) and remote environmental monitor
- Supports HPCM

Flexibility

- Extend cooling up to four racks with optional HPE Apollo 42U or 48U ARCS racks for IT equipment (optional)
- HPE Apollo 42U or 48U racks for IT equipment are supporting shipping of fully integrated rack solutions (HPE Factory Express or Partner rack integration) as these are delivered on shock pallet
- Underfloor and overhead plumbing capabilities
- Full services offering available, including planning, deployment and maintenance

For Site Prep Guide Please Visit Link: https://www.hpe.com/psnow/doc/a00046603en_us

Agency Certifications

- UL certification for Canada, Americas and Japan
- CE certification for European countries.

Models

HPE ARCS v2 Cooling Unit Rack

R8N93A

Notes:

- V2 Cooling Unit Rack is introduced to accommodate new agency requirements; functionally the same as P9E36A; only difference is new fan and transfer switch inside the Cooling Unit Rack for agency requirements
- Will become orderable in November 2021, and shippable in January, 2022 timeframe.

HPE ARC v2 Unit (R8N93A) includes

- Adaptive Rack Cooling Unit with up to 150kW Capacity or 110kW (N+1), 127mm front extension and 254mm rear extension, 4 fans, 7 inch LCD Touchscreen, Transfer Switch, and Condensate Pump
-



Service and Support

HPE Services

No matter where you are in your digital transformation journey, you can count on HPE Services to deliver the expertise you need when, where and how you need it. From planning to deployment, ongoing operations and beyond, our experts can help you realize your digital ambitions.

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

Consulting Services

No matter where you are in your journey to hybrid cloud, experts can help you map out your next steps. From determining what workloads should live where, to handling governance and compliance, to managing costs, our experts can help you optimize your operations.

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

HPE Managed Services

HPE runs your IT operations, providing 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.

[HPE Managed Services | HPE](#)

Operational services

Optimize your entire IT environment and drive innovation. Manage day-to-day IT operational tasks while freeing up valuable time and resources. Meet service-level targets and business objectives with features designed to drive better business outcomes.

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

HPE Complete Care Service

HPE Complete Care Service is a modular, edge-to-cloud IT environment service designed to help optimize your entire IT environment and achieve agreed upon IT outcomes and business goals through a personalized 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>

HPE Tech Care Service

HPE Tech Care Service is the operational support service experience for HPE products. The service 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 delivers 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 Lifecycle Services

HPE Lifecycle Services provide a variety of options to help maintain your HPE systems and solutions at all stages of the product lifecycle. A few popular examples include:

- Lifecycle Install and Startup Services: Various levels for physical installation and power on, remote access setup, installation and startup, and enhanced installation services with the operating system.
- HPE Firmware Update Analysis Service: Recommendations for firmware revision levels for selected HPE products, taking into account the relevant revision dependencies within your IT environment.
- HPE Firmware Update Implementation Service: Implementation of firmware updates for selected HPE server, storage, and solution products, taking into account the relevant revision dependencies within your IT environment.
- Implementation assistance services: Highly trained technical service specialists to assist you with a variety of activities, ranging from design, implementation, and platform deployment to consolidation, migration, project management, and onsite technical forums.
- HPE Service Credits: Access to prepaid services for flexibility to choose from a variety of specialized service activities, including assessments, performance maintenance reviews, firmware management, professional services, and operational best practices.

Notes: To review the list of Lifecycle Services available for your product go to:

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

For a list of the most frequently purchased services using service credits, see the [HPE Service Credits Menu](#)

Other Related Services from HPE Services:

HPE Education Services

Training and certification designed for IT and business professionals across all industries. Broad catalogue of course offerings to expand skills and proficiencies in topics ranging from cloud and cybersecurity to AI and DevOps. Create learning paths to expand proficiency in a specific subject. Schedule training in a way that works best for your business with flexible continuous learning options.

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

Defective Media Retention

An option available with HPE Complete Care Service and HPE Tech Care Service and applies only to Disk or eligible SSD/Flash Drives replaced by HPE due to malfunction.

Consult your HPE Sales Representative or Authorized Channel Partner of choice for any additional questions and services options.

Parts and Materials

HPE will provide HPE-supported replacement parts and materials necessary to maintain the covered hardware product in operating condition, including parts and materials for available and recommended engineering improvements.

Parts and components that have reached their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual, product quick-specs, or the technical product data sheet will not be provided, repaired, or replaced as part of these services.

How to Purchase Services

Services are sold by Hewlett Packard Enterprise and Hewlett Packard Enterprise Authorized Service Partners:

- Services for customers purchasing from HPE or an enterprise reseller are quoted using HPE order configuration tools.
- Customers purchasing from a commercial reseller can find services at <https://ssc.hpe.com/portal/site/ssc/>



Service and Support

AI Powered and Digitally Enabled Support Experience

Achieve faster time to resolution with access to product-specific resources and expertise through a digital and data driven customer experience

Sign into the HPE Support Center experience, featuring streamlined self-serve case creation and management capabilities with inline knowledge recommendations. You will also find personalized task alerts and powerful troubleshooting support through an intelligent virtual agent with seamless transition when needed to a live support agent.

<https://support.hpe.com/hpesc/public/home/signin>

Consume IT On Your Terms

HPE GreenLake edge-to-cloud platform 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, HPE GreenLake edge-to-cloud platform 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

To learn more about HPE Services, please contact your Hewlett Packard Enterprise sales representative or Hewlett Packard Enterprise Authorized Channel Partner. Contact information for a representative in your area can be found at "Contact HPE"

<https://www.hpe.com/us/en/contact-hpe.html>

For more information

<http://www.hpe.com/services>



Configuration Information

HPE ARCS 42U 600x1660mm Rack

HPE ARCS 42U 600x1600mm Rack

Q8L41A

Notes:

- Optional IT Rack (42U) for the HPE ARC System – ships on shock pallet – ships separately from the Cooling unit
- 1 vertical PDU bracket included

HPE ARCS 48U 600x1660mm Rack

HPE ARCS 48U 600x1600mm Rack

Q7G92A

Notes:

- Optional IT Rack (48U) for the HPE ARC System – ships on shock pallet – ships separately from the Cooling unit
- 1 vertical PDU bracket included.

HPE ARCS 48U 800x1660mm Rack

HPE ARCS 48U 800x1600mm Rack

R8N95A

Notes:

- Optional IT Rack (48U) for the HPE ARC System – ships on shock pallet – ships separately from the Cooling unit
- 1 vertical PDU bracket included.

HPE ARCS 42U 800x1660mm Rack (available August 2025)

HPE ARCS 42U 800x1600mm Rack

S4J53A

Notes:

- Optional IT Rack (42U) for the HPE ARC System – ships on shock pallet – ships separately from the Cooling unit
- 1 vertical PDU bracket included.

HPE ARCS Auto Door Controller Kit

HPE ARCS Auto Door Controller Kit

P06116-B21

Notes:

- Requires 1 kit per cooling unit (P9E36A) which supports up to 4 racks.
- Requires 1 HPE ARCS Auto Door Release Kit (P00674-B21) per rack.
- In redundant cooling unit configs, only 1 cooling unit controls the Auto Door Release.
- Controller will be installed in the IT rack closest to the cooling unit.

HPE ARCS Auto Door Release Kit

HPE ARCS Auto Door Release Kit

P00674-B21

Notes:

- Requires 1 Kit per ARCS rack and 1 Auto Door Controller Kit per cooling unit (P06116-B21).
- In redundant cooling unit configs, only 1 cooling unit controls the Auto Door Release.

HPE ARCS 42U Air Rack Installation Kit

HPE ARCS 42U Air Rack Installation Kit

P04444-B21

Notes: 1 Rack installation Kit per continuous ARCS system row. The same kit is used for both 42u and 48u racks

HPE ARCS 48U Air Rack Installation Kit

HPE ARCS 48U Air Rack Installation Kit

P05408-B21

Notes: 1 Kit needed per ARCS cooling rack if 48U IT racks are joined to the 42U cooling unit. Includes façade above the 42U cooling unit to match the 48U racks on either side. A P04444-B21 Kit is also needed per continuous ARCS row in addition to this kit



Configuration Information

HPE ARCS Water Hookup Kit

HPE ARCS Water Hookup Kit

P00675-B21

Notes:

- Requires 1 kit per cooling unit (P9E36A).
- Kit includes (qty. 2) 6 foot hoses for facility water connection which terminate to 2 inch sanitary fitting for facility connection. Optional stainless steel adapters include SOB11A, (qty. 2) 2 inch sanitary fitting to 2 inch female BSPT and R9K45A, (qty. 2) 2 inch sanitary fitting to 2 inch female NPT. Customer required to provide 2 inch male BSPT or NPT fitting.

HPE ARCS INTL Power Cords

HPE ARCS IEC 60309 IP67 415V 5m INTL Power Cord

R7H41A

Notes: Select 1 kit per cooling unit. Each kit comes with 2 power cords

HPE ARCS NA Power Cords

HPE ARCS NEMA L22-20 4P/5W 277-480V 4.5m NA Power Cord

872174-B21

HPE ARCS IEC 60309 IP67 480V 5m Power Cord

R7H40A

Notes: Select 1 kit per cooling unit. Each kit comes with 2 power cords

HPE Universal 1U Filler Panels

Blanking panels are made from high grade molded plastic, and designed to be installed without tools. Using blanking panels is recommended to ensure proper airflow in unused rack U space.

HPE 1U 10-pack Black Universal Filler Panel

BW928A

Notes: Pack of 10

HPE 1U 100-pack Black Universal Filler Panel

BW929A

Notes: Pack of 100

HPE ARCS Side Panel Kits

HPE ARCS IT Rack 48U Single Side Panel Kit

R8F94A

HPE ARCS IT Rack 42U Side Panel Kit

R8F95A

HPE ARCS Cooling Unit Side Panel Kit

R8F96A

HPE Install ARCS SVC Flexible Support

HPE Install ARCS SVC

HA113A1#5CW

HPE Install ARCS SVC Fixed Support

HPE Installation Adaptive Rack Cooling System Service

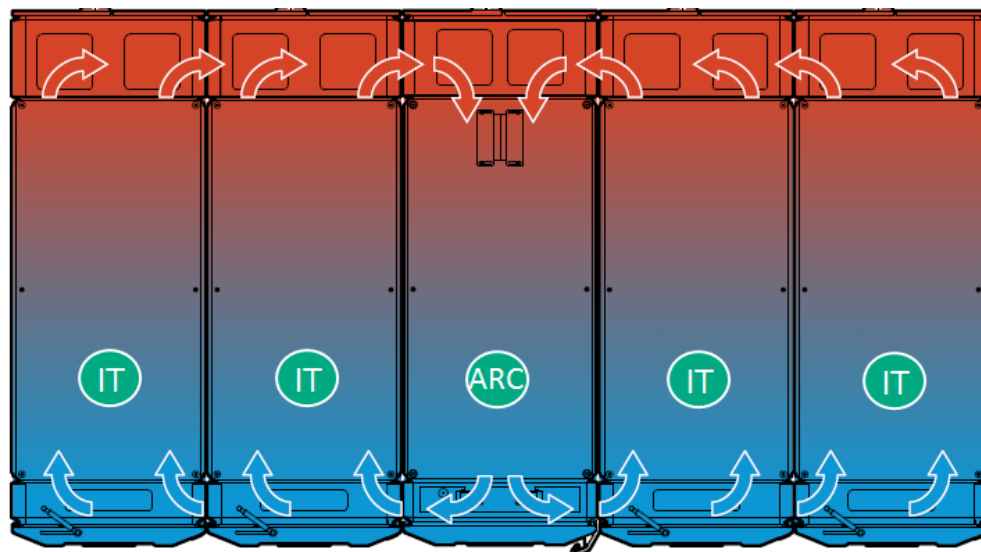
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Notes: Service Deployment activities for HPE Adaptive Rack Cooling System may include:

- Installation of the HPE Adaptive Rack Cooling System, and relevant power options purchased on the same order and intended to go into HPE Adaptive Rack Cooling System.
- This service includes the verification of the HPE Adaptive Rack Cooling System
- The water flowing into the HPE Adaptive Rack Cooling System must meet the guidelines stated in the HPE Adaptive Rack Cooling System Site Preparation Guide
- Site preparation and water connection to the facility are not included in this service.



Configuration Information



Notes: Rack count dependent on configuration

Technical Specifications

HPE Adaptive Rack Cooling Unit, 42u and 48U Rack Specifications

Notes: The HPE ARC System Rack (for IT equipment) ships separately on shock pallet and must be attached onsite.

Dimensions		ARCS Cooling Unit	42U Rack (600mm wide)	48U Rack (600mm wide)	48U Rack (800mm wide)
	Height	78.7 in. (2,007mm)	78.7 in. (2,007 mm.)	90.4 in. (2295 mm)	90.4 in. (2295 mm)
	Width	23.6 in. (600mm)	23.6 in. (600 mm.)	23.6 in. (600 mm.)	31.5 in. (800 mm.)
	Depth	65.4 in. (1,660mm)	65.4 in. (1,660 mm.)	65.4 in. (1,660 mm.)	65.4 in. (1,660 mm.)
	Shipping Height (on skid)	86.5 in. (2,197mm.)	86.5 in. (2,197 mm.)	97.44 (2,475 mm.)	97.44 (2,475 mm.)
	Shipping Width (on skid)	48 in. (1,220mm)	48 in. (1,220 mm.)	48 in. (1,220 mm.)	48 in. (1,220 mm.)
	Shipping Depth (on skid)	72 in. (1,829 mm.)	72 in. (1,829 mm.)	72 in. (1,829 mm.)	72 in. (1,829 mm.)
	Ramp Length	109 in. (2,769 mm.)	109 in. (2,769 mm.)	109 in. (2,769 mm.)	109 in. (2,769 mm.)
	Offloading Ramp	21.5 ft.	21.5 ft.	21.5 ft.	21.5 ft.
Weight	Net	1,423 lbs. (645kg)	387 lbs. (79.62 kg.)	398 lbs. (180.5 kg.)	425 lbs. (192.8 kg.)
	Shipping	1,614 lbs. (732 kg)	748 lbs. (339.3 kg.)	803 lbs. (364.2 kg.)	828 lbs. (375.6 kg.)
Load	Static	N/A	3,000 lbs. (1,364)	3,000 lbs. (1,364 kg.)	3,000 lbs. (1,364 kg.)
	Dynamic	N/A	3,000lbs. (1,364)	3,000lbs. (1,364 kg.)	3,000lbs. (1,364 kg.)
Color	Doors	Black	Black	Black	Black
	Frame	Black	Black	Black	Black
Warranty	ARCS 42U and 48U	3-3-3	3-0-0	3-0-0	3-0-0

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 web site**. 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.



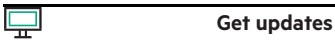
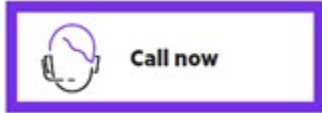
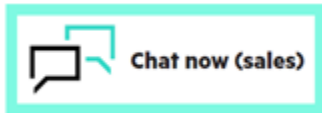
Summary of Changes

Date	Version History	Action	Description of Change
27-May-2025	Version 16	Changed	Updated facility water connection SKUs. Configuration Information section was updated
03-Mar-2025	Version 15	Changed	Added 42U IT Rack SKU Standard Features and Configuration Information sections were updated
04-Dec-2023	Version 14	Changed	HPE Services Rebranding
16-Oct-2023	Version 13	Changed	Service and Support, Configuration Information and Technical Specifications sections were updated
07-Aug-2023	Version 12	Changed	Standard Features and Configuration Information sections were updated. Obsolete SKUs were removed.
11-Oct-2021	Version 11	Changed	Service and Support section was updated.
07-Sep-2021	Version 10	Changed	Standard Features and Configuration Information sections were updated.
19-Apr-2021	Version 9	Changed	Configuration Information section was updated.
01-Feb-2021	Version 8	Changed	Configuration Information section was updated.
03-Feb-2020	Version 7	Changed	Standard Features section was updated
03-Sep-2019	Version 6	Changed	Configuration Information section was updated.
15-Jul-2019	Version 5	Changed	Configuration Information section was updated
01-Jul-2019	Version 4	Changed	Standard Features section was updated
15-Apr-2019	Version 3	Changed	Overview section was updated
07-Jan-2019	Version 2	Changed	Overview and configuration information sections were updated
03-Dec-2018	Version 1	New	New QuickSpecs



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