## Overview

HPE Flexible Slot Power Supplies

HPE Flexible Slot (Flex Slot) Power Supplies share a common electrical and physical design that allows for hot plug, tool-less installation into HPE server solutions. HPE's Flex Slot power supplies are certified for high-efficiency operation and offer multiple power output options, allowing users to "right-size" a power supply for specific server configurations. This flexibility helps to reduce power waste, lower overall energy costs, and avoid "trapped" power capacity in the data center.

Flex Slot power supplies are rated for Platinum-level certification with efficiency of up to 94%, and Titanium-level certification with efficiency of up to 96%. Support for HPE Power Discovery Services, via embedded power line communication technology on the Gen9 ProLiant Servers, is also available with the 1400W Platinum Plus model. This feature enables each server to communicate identification, location, and power-related data to optional Intelligent Power Distribution Units in the rack.
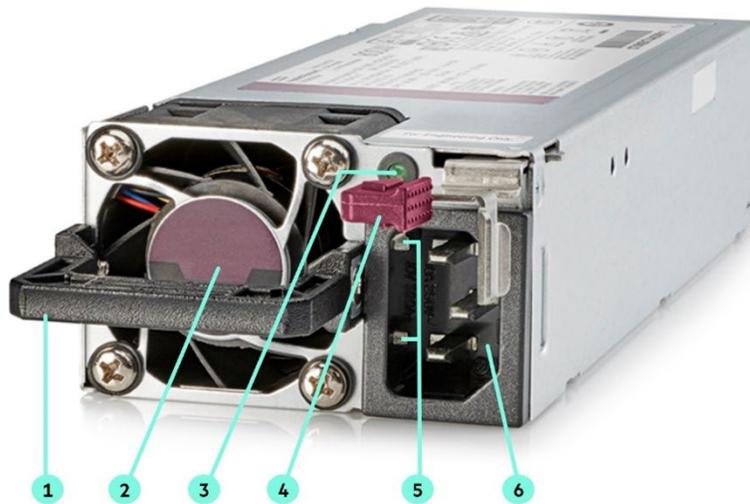
HPE Flexible Slot Power Supplies

1. Power Supply Handle
2. Identification Label

3. Power Supply LED Status Indicator

4. Release Lever
5. Power Discovery Services Communication Ports (Gen9 1400W Platinum Plus model only)
6. C14 Input Connector

What's New
- HPE 1800W-2200W Flex Slot Titanium Hot Plug Power Supply Kit
- HPE 1000W Flex Slot Titanium Hot Plug Power Supply Kit

Overview

Models
HPE Power Supplies
Gen9 Flexible Slot Power Supplies
Notes:
– Mixing different power supplies in the same server may limit or disable some power supply features including support for power redundancy. To ensure access to all available features, all power supplies within the same server should have the same output and efficiency ratings.

Gen10 Flexible Slot Power Supplies
Notes:
– Mixing different power supplies in the same server may limit or disable some power supply features including support for power redundancy. To ensure access to all available features, all power supplies within the same server should have the same output and efficiency ratings.
– Low Halogen Power Supplies are not compatible with HPE Gen9 Servers.

HPE Flexible Slot Platinum Power Supply Kits
Notes: Flex Slot Platinum power supplies support power efficiency of up to 94% and include a standard C-14 power inlet connector.

HPE 500W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	865408-B21
HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	865414-B21
HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	P38995-B21

Notes: Only compatible with Gen11, Gen10 Plus Intel and Gen10 Plus v2 AMD servers.

HPE 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	830272-B21

Notes: Must be used with high-line input (200V – 240V AC).

HPE 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	P38997-B21

Notes:
– Must be used with high-line input (200V – 240V AC).
– Only compatible with Gen11, Gen10 Plus Intel and Gen10 Plus v2 AMD servers.

HPE 1800W-2200W Flex Slot Platinum Hot Plug Power Supply Kit	876935-B21

Notes:
– Must be used with high-line input (200V – 240V AC).
– Only supported on Apollo 2000 Gen10 systems.

HPE Flexible Slot Titanium Power Supply Kits
Notes: Flex Slot Titanium power supplies support power efficiency of up to 96% and include a standard C-14 power inlet connector.

HPE 800W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit	865438-B21

Notes: Must be used with high-line input (200V – 240V AC).

HPE 1000W Flex Slot Titanium Hot Plug Power Supply Kit	P03178-B21
HPE 1800W-2200W Flex Slot Titanium Hot Plug Power Supply Kit	P44712-B21

Notes:
– Must be used with high-line input (200V – 240V AC).
– Power supply output a result of input voltage. 2200W requires 240VAC input.
– Gen10 & Gen10 Plus output capped at 1600W maximum output, greater than 1600W only feasible on Gen11 systems.

Overview

HPE Flexible Slot -48VDC Power Supply Kits

Notes:
– Flex Slot -48VDC power supplies support power efficiency of up to 94%.
– Flex Slot -48VDC power supplies may require separate purchase of power cords or lugs

HPE 800W Flex Slot -48VDC Hot Plug Low Halogen Power Supply Kit   865434-B21
HPE 1600W Flex Slot -48VDC Hot Plug Power Supply Kit   P17023-B21

HPE Flexible Slot HVAC/HVDC Power Supply Kits

HPE 800W Flex Slot Universal Hot Plug Low Halogen Power Supply Kit   865428-B21

Notes:
– Flex Slot universal power supplies support power efficiency of up to 94% and either 277VAC or 380VDC power inputs.
– SAFDGRID-SAFDGRID connection only (J6X00A jumper cord). No other connectors are supported.

Standard Features

Features/Benefits
Titanium-Certified Power Efficiency
- Titanium (96%) power efficiency certification from 80Plus program – one of the highest power efficiency certifications available in the IT industry
- Reduces data center operating costs related to power by reducing server power requirements and power waste

Flex Slot Design
- Tool-less hot plug design improves serviceability by allowing quick and easy access to system power supplies
- Common form factor across all ProLiant Gen9 and Gen10servers allows multiple server platforms to share power supply spares, reducing cost and space requirements for spares

Multiple Power Output Options
- Multiple output options allowing users to "right-size" their power needs and avoid "trapped" power capacity in their data centers caused by over-subscribing power needs
- Support for both low-line and high-line AC input voltages providing additional flexibility to operate in multiple IT environments. -48VDC, 277VAC and 380VDC input voltages are also available.

Power Management
- Supports multiple operating modes to maximize power efficiency when configuring servers with redundant power supplies
- Integrated support for HPE's Power Discovery Services which communicates with the intelligent PDU to monitor and manage power usage (Gen9 1400W Platinum Plus only)

80Plus Certification

The 80PLUS test protocol was developed jointly by Ecova Plug Load Solutions and the Electric Power Research Institute (EPRI) in 2003, with the program being formally launched in 2004.

The 80 PLUS performance specification requires power supplies in servers to be 80% or greater energy efficient at 20%, 50% and 100% of rated load with a true power factor of 0.9 or greater. This makes an 80 PLUS certified power supply substantially more efficient than typical power supplies found in many other electrical devices.

Who benefits from the 80PLUS power supply program?
- Commercial/Residential Consumers - empowered with information regarding energy efficient IT options that help them cut energy costs and reduce their environmental impact
- Utility/Power Providers - participation in a program that focuses on reducing power demands on overburdened grids as well as reducing power waste and its associated environmental impact

What are the efficiency requirements for each certification level?

80 PLUS Certification	230V Internal		
% of Rated Load	20%	50%	100%
80 PLUS Bronze	81%	85%	81%
80 PLUS Silver	85%	89%	85%
80 PLUS Gold	88%	92%	88%
80 PLUS Platinum	90%	94%	91%
80 PLUS Titanium	94%	96%	91%

What level of certification do HPE Flexible Slot Power Supplies meet?
HPE's Platinum and Platinum Plus power supply options meet 80PLUS requirements for Platinum certification. HPE's Titanium and Titanium Plus power supply options meet 80PLUS requirements for Titanium certification. To review 80Plus certification reports for each HPE Flexible Slot Power Supply, please refer to the 80Plus website at: **https://www.plugloadsolutions.com/**.

Standard Features

Support for Redundant Power Supplies

An HPE ProLiant server solution configured with 2 identical Flex Slot Power Supplies – 500W, 800W, 1400W, 1600W, or 1800W-2200W - supports the following three power scenarios:
- Operation with a single power supply
- Operation with redundant power supplies in load-balanced mode
- Operation with redundant power supplies in high-efficiency mode

A single Flex Slot Power Supply supporting the entire load of the server can achieve the highest efficiency when operating in the middle range (50%) of its capacity.

For redundant Flex Slot Power Supplies operating in load-balanced mode (the default mode when adding redundant power supplies), the load is shared equally between the two power supplies. In general, the load-balanced mode offers better efficiency for loads requiring more than 60 percent of the primary power supply capacity.

When high-efficiency mode is enabled for redundant supplies (via the server's ROM-based setup utility under System options -> Redundancy options), each power supply in the server is designated as either a primary or secondary supply, and the entire server load is shifted to the primary power supply. This allows the primary power supply to operate at higher efficiency points on the load curve while the secondary power supply operates in idle mode, providing no output power and consuming very little energy (typically two to four watts per supply). The user can also specify that odd or even power supplies will be designated manually or automatically as secondary supplies. This flexibility allows users to balance the load across a rack manually or automatically.

Compatibility

HPE Gen10 Flex Slot Low Halogen power supplies are compatible with most HPE ProLiant servers including the:
- HPE ProLiant DL20 Gen10 and Gen10 Plus
- HPE ProLiant DL320 Gen11
- HPE ProLiant DL325 Gen10, Gen10 Plus, Gen10 Plus v2 and Gen11
- HPE ProLiant DL345 Gen10 Plus and Gen11
- HPE ProLiant DL360 Gen10, Gen10 Plus and Gen11
- HPE ProLiant DL365 Gen10 Plus and Gen11
- HPE ProLiant DL380 Gen10, Gen10 Plus and Gen11
- HPE ProLiant DL385 Gen10, Gen10 Plus, Gen10 Plus v2 and Gen11
- HPE ProLiant DL560 Gen10
- HPE ProLiant DL580 Gen10
- HPE ProLiant ML30 Gen10 and Gen10 Plus
- HPE ProLiant ML110 Gen10
- HPE ProLiant ML350 Gen10 and Gen11
- HPE ProLiant RL300 Gen11
- HPE Alletra 4110
- HPE Alletra 4120
- HPE Apollo 2000 Gen10 and Gen10 Plus
- HPE Apollo 4200 Gen10 and Gen10 Plus
- HPE Apollo 4500 Gen10

Notes:
- Gen11 servers as well as DL325 Gen10 Plus v2 and Gen11, DL345 Gen10 Plus and Gen11, DL360 Gen10 Plus, DL365 Gen10 Plus and Gen11, DL380 Gen10 Plus, DL385 Gen10 Plus v2 and Gen11, Apollo 2000 Gen10 Plus and Apollo 4200 Gen10 Plus must select P38995-B21 for 800W or P38997-B21 for 1600W power supplies.
- To check for power supply compatibility, please review the appropriate HPE Server QuickSpecs at **http://www.hpe.com/info/qs**.

Service and Support

HPE Pointnext - Service and Support

Get the most from your HPE Products. Get the expertise you need at every step of your IT journey with **HPE Pointnext 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 Pointnext **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 Pointnext 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

HPE   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, HPE 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

HPE   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 Pointnext Tech Care

HPE Pointnext Tech Care 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 Pointnext Tech Care 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 Pointnext Tech Care 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

HPE Pointnext Complete Care

HPE Pointnext Complete Care 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 Pointnext Services experts. HPE Pointnext Complete Care 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/completecare

Notes: HPE Flexible Slot Power supplies are supported as a part of the HPE Server Infrastructure. No separate HPE Pointnext operational are needed to be purchased.

Service and Support

HPE Technology Services for Industry Standard Servers
HPE Technology Services delivers confidence, reduces risk and helps customers realize agility and stability. Connect to HPE to help prevent problems and solve issues faster. Our support technology lets you to tap into the knowledge of millions of devices and thousands of experts to stay informed and in control, anywhere, any time.

Protect your business beyond warranty with HPE Pointnext operational services
HPE Pointnext operational services enable you to order the right service level, length of coverage and response time as you purchase your new server, giving you full entitlement for the term you select.

Get connected to HPE to improve your support experience
Connecting products to Hewlett Packard Enterprise will help prevent problems with 24x7monitoring, prefailure alerts, automatic call logging, and parts dispatch. With Connected products, you can have a dashboard to manage your IT anywhere, anytime, from any device. Please visit **https://www.hpe.com/us/en/services/get-connected.html** for more information.

Parts and Materials
Hewlett Packard Enterprise 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 QuickSpecs, or the technical product data sheet will not be provided, repaired, or replaced as part of these services.

The defective media retention service feature option applies only to Disk or eligible SSD/Flash Drives replaced by Hewlett Packard Enterprise due to malfunction.

Warranty / Service Coverage
For ProLiant servers and storage systems, this service covers HPE-branded hardware options qualified for the server, purchased at the same time or afterward, internal to the enclosure, as well as external monitors up to 22" and tower UPS products; these items will be covered at the same service level and for the same coverage period as the server unless the maximum supported lifetime and/or the maximum usage limitation has been exceeded. Coverage of the UPS battery is not included; standard warranty terms and conditions apply.

The defective media retention service feature option applies only to Disk or eligible SSD/Flash Drives replaced by HPE due to malfunction. It does not apply to any exchange of Disk or SSD/Flash Drives that have not failed. SSD/Flash Drives that are specified by HPE as consumable parts and/or that have exceeded maximum supported lifetime and/or the maximum usage limit as set forth in the manufacturer's operating manual or the technical data sheet are not eligible for the defective media retention service feature option.

For more information
To learn more on services for HPE server options, please contact your Hewlett Packard Enterprise sales representative or Hewlett Packard Enterprise Authorized Channel Partner. Or visit: **http://www.hpe.com/services**

Related Options

Locking IEC Jumper Cables

HPE C13 - C14 WW 250V 10Amp 0.7m Black Locking Power Cord	Q0P67A
HPE C13 - C14 WW 250V 10Amp 1.4m Black Locking Power Cord	Q0P68A
HPE C13 - C14 WW 250V 10Amp 2m Black Locking Power Cord	Q0P69A
HPE C13 - C14 WW 250V 10Amp 3m Black Locking Power Cord	Q0P70A
HPE C19 - C20 WW 250V 16Amp 2m Black Locking Power Cord	Q0P72A
HPE C13 - C14 WW 250V 10Amp 0.7m Black 6-pack Locking Power Cord	Q0Q02A
HPE C13 - C14 WW 250V 10Amp 1.4m Black 6-pack Locking Power Cord	Q0Q03A
HPE C13 - C14 WW 250V 10Amp 2m Black 6-pack Locking Power Cord	Q0Q04A

Notes: Standard power cables and jumpers do not support Power Line Communications or Power Discovery Services.

IEC Jumper Cables

HPE C13 - C14 WW 250V 10Amp Flint Gray 2.0m Jumper Cord	AF573A
HPE C13 - C14 WW 250V 10Amp 1.4m Jumper Cord	142257-006
HPE C13 - C14 WW 250V 10Amp 2.0m Jumper Cord	A0K02A
HPE C13 - C14 WW 250V 10Amp 2.5m Jumper Cord	142257-002
HPE C13 - C14 WW 250V 10Amp 3.0m Jumper Cord	142257-003
HPE C13 - JIS C8303 JP 100V 12Amp 2.0m Power Cord	AF572A
HPE C13 - AS3112-3 AU 250V 10Amp 2.5m Power Cord	AF569A
HPE C13 - Nema 5-15P US/CA 110V 10Amp 1.83m Power Cord	AF556A
HPE C13-NEMA 6-15P 10A/250V 3.6m Black Power Cord	A0N33A
HPE C13 - GB-1002 CN 250V 10Amp 1.83m Power Cord	AF557A
HPE C13 - IS-1293 IN 240V 6Amp LV 2.0m Power Cord	AF562A
HPE C13 - CNS-690 TW 110V 13Amp 1.83m Power Cord	AF561A
HPE C13 - IRAM -2073 AR 250V 10A 2.5m Power Cord	AF558A
HPE C13 - NBR-14136 BR 250V 10Amp 1.83m Power Cord	AF591A
HPE C13 - DK-2.5A DK 250V 10Amp 1.83m Power Cord	AF566A
HPE C13 - CEE-VII EU 250V 10Amp 1.83m Power Cord	AF568A
HPE C13 - SI-32 IL 250V 10Amp 1.83m Power Cord	AF564A
HPE C13 - KSC- 8305 KR 250V 10Amp 1.83m Power Cord	AF560A
HPE C13 - SABS-164 ZA 250V 10Amp 2.5m Power Cord	AF567A
HPE C13 - SEV 1011 CH 250V 10Amp 1.83m Power Cord	AF565A
HPE C13 - Nema 5-15P TH/PH 250V 10Amp 1.83m Power Cord	AF559A
HPE C13 - BS-1363A UK/HK/SG 250V 10Amp 1.83m Power Cord	AF570A

Notes: Standard power cables and jumpers do not support Power Line Communications or Power Discovery Services.

Localized Power Cords

HPE C13 - JIS C8303 JP 100V 12Amp 2.0m Power Cord	AF572A
HPE C13 - AS3112-3 AU 250V 10Amp 2.5m Power Cord	AF569A
HPE C13 - Nema 5-15P US/CA 110V 10Amp 1.83m Power Cord	AF556A
HPE C13-NEMA 6-15P 10A/250V 3.6m Black Power Cord	A0N33A
HPE C13 - GB-1002 CN 250V 10Amp 1.83m Power Cord	AF557A
HPE C13 - IS-1293 IN 240V 6Amp LV 2.0m Power Cord	AF562A
HPE C13 - CNS-690 TW 110V 13Amp 1.83m Power Cord	AF561A
HPE C13 - IRAM -2073 AR 250V 10A 2.5m Power Cord	AF558A
HPE C13 - NBR-14136 BR 250V 10Amp 1.83m Power Cord	AF591A
HPE C13 - DK-2.5A DK 250V 10Amp 1.83m Power Cord	AF566A
HPE C13 - CEE-VII EU 250V 10Amp 1.83m Power Cord	AF568A
HPE C13 - SI-32 IL 250V 10Amp 1.83m Power Cord	AF564A
HPE C13 - KSC- 8305 KR 250V 10Amp 1.83m Power Cord	AF560A
HPE C13 - SABS-164 ZA 250V 10Amp 2.5m Power Cord	AF567A

Related Options

HPE C13 - SEV 1011 CH 250V 10Amp 1.83m Power Cord	AF565A
HPE C13 - Nema 5-15P TH/PH 250V 10Amp 1.83m Power Cord	AF559A
HPE C13 - BS-1363A UK/HK/SG 250V 10Amp 1.83m Power Cord	AF570A

Notes: Standard power cables and jumpers do not support Power Line Communications or Power Discovery Services.

-48VDC Power Cables and Lugs

HPE 48VDC 2.85m Power Cable	Q0H80A

Notes: Q0H80A is to be used with both
–   Gen9   HPE 800W Flex Slot -48VDC Hot Plug Power Supply (720480-B21) and
–   Gen10 HPE 800W Flex Slot -48VDC Hot Plug Low Halogen Power Supply Kit (865434-B21)

HPE 1600W -48VDC 600V 3.5m Power Cable Kit	P22173-B21
HPE 1600W -48VDC Power Cable Lug Kit	P36877-B21

Notes:
–   1-. P22173-B21 and P36877-B21 are to be used with HPE 1600W Flex Slot -48VDC Power Supply Kit
–   2-. Only one power cable kit or power cable lug kit needs to be selected with the power supply
–   3-. Power cable lug kit spare PN: P23149-001

HPE SAFDGRID-SAFDGRID 277V 15Amp DC 2.0m Jumper Cord	J6X00A

Notes: This cable is used only with the 277VAC/380VDC Flex Slot Power supply (865428-B21) and is the only supported by this power supply.

Technical Specifications

HPE 500W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit (865408-B21)	HPE's Generic Part Number					865398-001		
	HPE's Spares Part Number					866729-001		
Input Voltage Range (V rms)	100-240							
Frequency Range (Nominal) (Hz)	50-60							
Nominal Input Voltage (V rms)	100	120	127	200	208	220	230	240
Maximum Rated Output Wattage Rating (Watts)	500	500	500	500	500	500	500	500
Nominal Input Current (A rms)	5.6	4.6	4.4	2.7	2.6	2.5	2.4	2.3
Maximum Rated Input Wattage Rating (Watts)	557	550	549	539	539	538	537	537
Maximum Rated VA (Volt-Amp)	563	556	554	545	544	543	543	542
Efficiency (%)	89.7	90.8	91.1	92.7	92.8	93.0	93.1	93.1
Power Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Leakage Current (mA)	0.33	0.39	0.41	0.65	0.68	0.72	0.75	0.78
Maximum Inrush Current (A peak)	30							
Maximum Inrush Current duration (ms)	10							
Maximum British Thermal Unit Rating (BTU-Hr)	1902	1878	1873	1840	1838	1835	1833	1832

HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit (865414-B21)	HPE's Generic Part Number					865409-002		
	HPE's Spares Part Number					P39385-001		
Input Voltage Range (V rms)	100-240							
Frequency Range (Nominal) (Hz)	50-60							
Nominal Input Voltage (V rms)	100	120	127	200	208	220	230	240
Maximum Rated Output Wattage Rating (Watts)	800	800	800	800	800	800	800	800
Nominal Input Current (A rms)	9.1	7.5	7.0	4.4	4.2	4.0	3.8	3.6
Maximum Rated Input Wattage Rating (Watts)	899	887	883	867	866	865	864	864
Maximum Rated VA (Volt-Amp)	908	896	892	876	875	874	873	873
Efficiency (%)	89.0	90.2	90.6	92.3	92.4	92.5	92.6	92.6
Power Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Leakage Current (mA)	0.33	0.39	0.41	0.65	0.68	0.72	0.75	0.78
Maximum Inrush Current (A peak)	30							
Maximum Inrush Current duration (ms)	10							
Maximum British Thermal Unit Rating (BTU-Hr)	3067	3025	3012	2958	2956	2951	2948	2949

Technical Specifications

HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit (P38995-B21)	HPE's Generic Part Number					865409-002		
	HPE's Spares Part Number					P39385-001		
Input Voltage Range (V rms)	100-240							
Frequency Range (Nominal) (Hz)	50-60							
Nominal Input Voltage (V rms)	100	120	127	200	208	220	230	240
Maximum Rated Output Wattage Rating (Watts)	800	800	800	800	800	800	800	800
Nominal Input Current (A rms)	9.1	7.5	7.0	4.4	4.2	4.0	3.8	3.6
Maximum Rated Input Wattage Rating (Watts)	899	887	883	867	866	865	864	864
Maximum Rated VA (Volt-Amp)	908	896	892	876	875	874	873	873
Efficiency (%)	89.0	90.2	90.6	92.3	92.4	92.5	92.6	92.6
Power Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Leakage Current (mA)	0.33	0.39	0.41	0.65	0.68	0.72	0.75	0.78
Maximum Inrush Current (A peak)	30							
Maximum Inrush Current duration (ms)	10							
Maximum British Thermal Unit Rating (BTU-Hr)	3067	3025	3012	2958	2956	2951	2948	2949

HPE 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit (830272-B21)	HPE's Generic Part Number			830262-002	
	HPE's Spares Part Number			P39384-001	
Input Voltage Range (V rms)	200-240				
Frequency Range (Nominal) (Hz)	50-60				
Nominal Input Voltage (V rms)	200	208	220	230	240
Maximum Rated Output Wattage Rating (Watts)	1600	1600	1600	1600	1600
Nominal Input Current (A rms)	8.7	8.3	7.9	7.5	7.2
Maximum Rated Input Wattage Rating (Watts)	1734	1732	1726	1727	1725
Maximum Rated VA (Volt-Amp)	1736	1734	1729	1729	1728
Efficiency (%)	92.2	92.4	92.7	92.7	92.8
Power Factor	1.00	1.00	1.00	1.00	1.00
Leakage Current (mA)	0.63	0.65	0.69	0.72	0.75
Maximum Inrush Current (A peak)	30				
Maximum Inrush Current duration (ms)	10				
Maximum British Thermal Unit Rating (BTU-Hr)	5918	5911	5888	5891	5884

Technical Specifications

HPE 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit (P38997-B21)	HPE's Generic Part Number			830262-002	
	HPE's Spares Part Number			P39384-001	
Input Voltage Range (V rms)	200-240				
Frequency Range (Nominal) (Hz)	50-60				
Nominal Input Voltage (V rms)	200	208	220	230	240
Maximum Rated Output Wattage Rating (Watts)	1600	1600	1600	1600	1600
Nominal Input Current (A rms)	8.7	8.3	7.9	7.5	7.2
Maximum Rated Input Wattage Rating (Watts)	1734	1732	1726	1727	1725
Maximum Rated VA (Volt-Amp)	1736	1734	1729	1729	1728
Efficiency (%)	92.2	92.4	92.7	92.7	92.8
Power Factor	1.00	1.00	1.00	1.00	1.00
Leakage Current (mA)	0.63	0.65	0.69	0.72	0.75
Maximum Inrush Current (A peak)	30				
Maximum Inrush Current duration (ms)	10				
Maximum British Thermal Unit Rating (BTU-Hr)	5918	5911	5888	5891	5884

HPE 1800W-2200W Flex Slot Platinum Hot Plug Power Supply Kit (876935-B21)	HPE's Generic Part Number			876932-001	
	HPE's Spares Part Number			882135-001	
Input Voltage Range (V rms)	200-240				
Frequency Range (Nominal) (Hz)	50-60				
Nominal Input Voltage (V rms)	200	208	220	230	240
Maximum Rated Output Wattage Rating (Watts)	1800	1900	2000	2100	2200
Nominal Input Current (A rms)	9.75	9.91	9.88	9.94	9.99
Maximum Rated Input Wattage Rating (Watts)	1931	2041	2153	2262	2373
Maximum Rated VA (Volt-Amp)	1951	2062	2175	2285	2397
Efficiency (%)	93.20	93.09	92.90	92.83	92.72
Power Factor	0.99	0.99	0.99	0.99	0.99
Leakage Current (mA)	0.63	0.65	0.69	0.72	0.75
Maximum Inrush Current (A peak)	30				
Maximum Inrush Current duration (ms)	10				
Maximum British Thermal Unit Rating (BTU-Hr)	6590	6964	7345	7719	8096

Technical Specifications

HPE 800W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit (865438-B21)	HPE's Generic Part Number			865435-001	
	HPE's Spares Part Number			866793-001	
Input Voltage Range (V rms)	200-240				
Frequency Range (Nominal) (Hz)	50-60				
Nominal Input Voltage (V rms)	200	208	220	230	240
Maximum Rated Output Wattage Rating (Watts)	800	800	800	800	800
Nominal Input Current (A rms)	4.3	4.1	3.9	3.7	3.6
Maximum Rated Input Wattage Rating (Watts)	851	851	850	848	848
Maximum Rated VA (Volt-Amp)	860	859	858	857	857
Efficiency (%)	94.0	94.0	94.2	94.3	94.3
Power Factor	0.99	0.99	0.99	0.99	0.99
Leakage Current (mA)	0.65	0.68	0.72	0.75	0.78
Maximum Inrush Current (A peak)	30				
Maximum Inrush Current duration (ms)	10				
Maximum British Thermal Unit Rating (BTU-Hr)	2905	2903	2899	2895	2893

HPE 1000W Flex Slot Titanium Hot Plug Power Supply (P03178-B21)	HPE's Generic Part Number					P03159-001		
	HPE's Spares Part Number					P44412-001		
Input Voltage Range (V rms)	100-240							
Frequency Range (Nominal) (Hz)	50-60							
Nominal Input Voltage (V rms)	100	120	127	200	208	220	230	240
Maximum Rated Output Wattage Rating (Watts)	1000	1000	1000	1000	1000	1000	1000	1000
Nominal Input Current (A rms)	11.0	9.0	8.5	5.3	5.1	4.8	4.6	4.4
Maximum Rated Input Wattage Rating (Watts)	1097	1079	1075	1054	1053	1052	1051	1050
Maximum Rated VA (Volt-Amp)	1097	1079	1075	1054	1053	1063	1062	1061
Efficiency (%)	91.2	92.7	93.0	94.9	94.9	95.1	95.2	95.3
Power Factor	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99
Leakage Current (mA)	0.33	0.39	0.41	0.65	0.68	0.72	0.75	0.78
Maximum Inrush Current (A peak)	30							
Maximum Inrush Current duration (ms)	10							
Maximum British Thermal Unit Rating (BTU-Hr)	3741	3682	3668	3596	3594	3589	3586	3582

Technical Specifications

HPE 1800W-2200W Flex Slot Titanium Hot Plug Power Supply (P44712-B21)	HPE's Generic Part Number			P44714-001	
	HPE's Spares Part Number			P47163-001	
Input Voltage Range (V rms)	200-240				
Frequency Range (Nominal) (Hz)	50-60				
Nominal Input Voltage (V rms)	200	208	220	230	240
Maximum Rated Output Wattage Rating (Watts)	1799	1900	2000	2100	2200
Nominal Input Current (A rms)	9.6	9.8	9.7	9.8	9.8
Maximum Rated Input Wattage Rating (Watts)	1904	2013	2119	2226	2334
Maximum Rated VA (Volt-Amp)	1923	2033	2140	2249	2357
Efficiency (%)	94.5	94.4	94.4	94.3	94.3
Power Factor	0.99	0.99	0.99	0.99	0.99
Leakage Current (mA)	0.66	0.69	0.73	0.76	0.80
Maximum Inrush Current (A peak)	30				
Maximum Inrush Current duration (ms)	10				
Maximum British Thermal Unit Rating (BTU-Hr)	6497	6868	7230	7596	7962

HPE 800W Flex Slot -48VDC Hot Plug Low Halogen Power Supply Kit (865434-B21)	HPE's Generic Part Number		865431-001
	HPE's Spares Part Number		866728-001
Input Voltage Range (V DC)	-40 to -72		
Frequency Range (Nominal) (Hz)	DC		
Nominal Input Voltage (V DC)	40	48	72
Maximum Rated Output Wattage Rating (Watts)	800	800	800
Nominal Input Current (A DC)	22.1	18.2	12.0
Maximum Rated Input Wattage Rating (Watts)	874	865	854
Maximum Rated VA (Volt-Amp)	883	873	862
Efficiency (%)	91.5	92.5	93.7
Power Factor	1.0		
Leakage Current (mA)	0.13	0.16	0.23
Maximum Inrush Current (A peak)	30		
Maximum Inrush Current duration (ms)	10		
Maximum British Thermal Unit Rating (BTU-Hr)	2983	2951	2912

Technical Specifications

HPE 1600W Flex Slot -48VDC Hot Plug Power Supply Kit (P17023-B21)	HPE's Generic Part Number		P17021-001
	HPE's Spares Part Number		P18510-001
Input Voltage Range (V DC)	-40 to -72		
Frequency Range (Nominal) (Hz)	DC		
Nominal Input Voltage (V DC)	40	48	72
Maximum Rated Output Wattage Rating (Watts)	1600	1600	1600
Nominal Input Current (A DC)	44.2	36.6	24.4
Maximum Rated Input Wattage Rating (Watts)	1766	1758	1755
Maximum Rated VA (Volt-Amp)	1766	1758	1755
Efficiency (%)	90.6	91.0	91.2
Power Factor	1.0		
Leakage Current (mA)	N/A	N/A	N/A
Maximum Inrush Current (A peak)	30		
Maximum Inrush Current duration (ms)	10		
Maximum British Thermal Unit Rating (BTU-Hr)	6026	6000	5989

HPE 800W Flex Slot Universal Hot Plug Low Halogen Power Supply Kit (865428-B21) 277VAC	HPE's Generic Part Number				865425-001
	HPE's Spares Part Number				866727-001
Input Voltage Range (V rms)	200-277				
Frequency Range (Nominal) (Hz)	50-60				
Nominal Input Voltage (V rms)	200	208	230	240	277
Maximum Rated Output Wattage Rating (Watts)	800	800	800	800	800
Nominal Input Current (A rms)	4.4	4.2	3.8	3.6	3.1
Maximum Rated Input Wattage Rating (Watts)	869	868	865	864	861
Maximum Rated VA (Volt-Amp)	877	876	874	872	869
Efficiency (%)	92.1	92.2	92.5	92.6	93.0
Power Factor	0.99	0.99	0.99	0.99	0.99
Leakage Current (mA)	0.65	0.68	0.75	0.78	0.90
Maximum Inrush Current (A peak)	8				
Maximum Inrush Current duration (ms)	10				
Maximum British Thermal Unit Rating (BTU-Hr)	2964	2960	2951	2947	2936

Technical Specifications

HPE 800W Flex Slot Platinum Hot Plug Power Supply (720479-B21)	HPE's Generic Part Number					723599-001		
	HPE's Spares Part Number					754381-001		
Input Voltage Range (V rms)	100-240							
Frequency Range (Nominal) (Hz)	50-60							
Nominal Input Voltage (V rms)	100	120	127	200	208	220	230	240
Maximum Rated Output Wattage Rating (Watts)	800	800	800	800	800	800	800	800
Nominal Input Current (A rms)	9.1	7.5	7.0	4.4	4.2	4.0	3.8	3.7
Maximum Rated Input Wattage Rating (Watts)	906	891	878	871	870	869	868	868
Maximum Rated VA (Volt-Amp)	915	900	887	880	879	877	876	877
Efficiency (%)	88.3	89.8	91.1	91.9	92.0	92.1	92.2	92.1
Power Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Leakage Current (mA)	0.32	0.38	0.40	0.63	0.65	0.69	0.72	0.75
Maximum Inrush Current (A peak)	30							
Maximum Inrush Current duration (ms)	10							
Maximum British Thermal Unit Rating (BTU-Hr)	3090	3040	2997	2972	2968	2963	2960	2963

HPE 800W Flex Slot Titanium Hot Plug Power Supply (720482-B21)	HPE's Generic Part Number				734868-001	
	HPE's Spares Part Number				754378-001	
Input Voltage Range (V rms)	200-240					
Frequency Range (Nominal) (Hz)	50-60					
Nominal Input Voltage (V rms)	200	208	220	230	240	
Maximum Rated Output Wattage Rating (Watts)	800	800	800	800	800	
Nominal Input Current (A rms)	9.1	7.5	7.0	4.4	4.2	
Maximum Rated Input Wattage Rating (Watts)	906	891	878	871	870	
Maximum Rated VA (Volt-Amp)	915	900	887	880	879	
Efficiency (%)	88.3	89.8	91.1	91.9	92.0	
Power Factor	0.99	0.99	0.99	0.99	0.99	
Leakage Current (mA)	0.32	0.38	0.40	0.63	0.65	
Maximum Inrush Current (A peak)	30					
Maximum Inrush Current duration (ms)	10					
Maximum British Thermal Unit Rating (BTU-Hr)	2910	2907	2904	2901	2899	

Technical Specifications

HPE 800W Flex Slot -48VDC Hot Plug Power Supply (720480-B21)	HPE's Generic Part Number		735040-001
	HPE's Spares Part Number		754382-001
Input Voltage Range (V DC)	-40 to -72		
Frequency Range (Nominal) (Hz)	DC		
Nominal Input Voltage (V DC)	-40	-48	-72
Maximum Rated Output Wattage Rating (Watts)	800	800	800
Nominal Input Current (A DC)	22.0	18.1	11.9
Maximum Rated Input Wattage Rating (Watts)	882	871	858
Maximum Rated VA (Volt-Amp)	882	871	858
Efficiency (%)	90.7	91.9	93.2
Power Factor	1.0		
Leakage Current (mA)	0.0		
Maximum Inrush Current (A peak)	30		
Maximum Inrush Current duration (ms)	10		
Maximum British Thermal Unit Rating (BTU-Hr)	3008	2971	2929

HPE 1400W Flex Slot Platinum Plus Hot Plug Power Supply Kit (720620-B21)	HPE's Generic Part Number		733427-001		
	HPE's Spares Part Number		754383-001		
Input Voltage Range (V rms)	200-240				
Frequency Range (Nominal) (Hz)	50-60				
Nominal Input Voltage (V rms)	200	208	220	230	240
Maximum Rated Output Wattage Rating (Watts)	1400	1400	1400	1400	1400
Nominal Input Current (A rms)	7.9	7.6	7.2	6.8	6.5
Maximum Rated Input Wattage Rating (Watts)	1567	1564	1560	1557	1554
Maximum Rated VA (Volt-Amp)	1583	1580	1575	1572	1570
Efficiency (%)	89.4	89.5	89.8	89.9	90.1
Power Factor	0.99	0.99	0.99	0.99	0.99
Leakage Current (mA)	0.63	0.65	0.69	0.72	0.75
Maximum Inrush Current (A peak)	30				
Maximum Inrush Current duration (ms)	10				
Maximum British Thermal Unit Rating (BTU-Hr)	5346	5336	5322	5311	5302

Technical Specifications

All AC Power Supplies:	
Operating Temperature	41° to 131°F (5° to 55°C)
Operating Relative Humidity (%)	5% to 95%, non-condensing
Operating Elevation	The maximum ambient temperature of the power supply shall have an altitude de-rating, from sea level, of 1.0°C per every 304.8 m (1.8°F per every 1000 ft) above sea level to a maximum of 3048 m (10,000 ft).
Storage Temperature	-40° to 185°F (-40 to 85°C)
Storage Relative Humidity (%)	5% to 95%, non-condensing
Storage Elevation	0 to 50,000ft (0 to 15,240m)
Input Voltage	Low Line - Rated: 100V - 127V; Min 90V to Max 132V High Line - Rated: 200 - 240V; Min 180V to Max 264V (model 720620-B21, 720482-B21, 830272-B21, 865438-B21, 876935-B21, P38997-B21 supports High Line AC input only) High Line - Rated: 200 - 277VAC; Min 180VAC to Max 305VAC (model 720484-B21 only) 240VDC Support - Rated 240VDC; Min 180VDC to Max 320VDC (model 720479-B21**, 720620-B21, 865408-B21, 865414-B21, 865438-B21, 830272-B21, 876935-B21, P38995-B21, and P38997-B21 only)**
Input Frequency	Rated: 50 - 60Hz; Min 47Hz to Max 63Hz
FCC EMI Certification	CE Mark, UL, cUL, IEC, EN, KCC, BSMI, CCC, TUV, C-tick, CISPR Class A
Mechanical Dimensions (WxHxD)	2.68 x 1.59 x 8.87 in (6.80 x 4.04 x 22.53 cm) **Notes:** Length includes from handle to card-edge.
Unit Weight	2.0 lbs. (0.91 kg) 3.0 lbs. (1.36 kg) (model 720620-B21 only)
Shipping Dimensions (WxHxD)	14.75 x 7.5 x 5.75 in (37.47 x 19.05 x 14.61 cm)
Shipping Weight	3.5 lb (1.59 kg) 4.5 lb (2.04 kg) (model 720620-B21 only)
Kit Contents	Models P44712-B21, P03178-B21, 720479-B21, 720620-B21 720482-B21, 865408-B21, 865414-B21, 830272-B21, and 865438-B21 ship with: (1) Power supply unit, (1) IEC C13-C14 jumper cable, installation/safety guide Model 720484-B21, 865428-B21 ship with: (1) Power supply unit, installation/safety guide
Power Supply Hold-Up time in the event of AC loss	
Condition: 100% rated output power (Time in Milliseconds – Minimum)	Non-Redundant (1+0) – 10ms Redundant (1+1) – 20ms
Condition: 50% rated output power (Time in Milliseconds – Minimum)	Non-Redundant (1+0) – 20ms Redundant (1+1) – 30ms

Technical Specifications

All DC Power Supplies:	
Operating Temperature	41° to 131°F (5° to 55°C)
Operating Relative Humidity (%)	5% to 95%, non-condensing
Operating Elevation	0 to 5,000ft (1,524m) with no derating; The maximum ambient temperature of the power supply shall have an altitude derating from sea level, of 1.0°C per every 304.8 m (1.8°F per every 1000 ft) above sea level to a maximum of 3048 m (10,000 ft).
Storage Temperature	-40° to 185°F (-40 to 85°C)
Storage Relative Humidity (%)	5% to 95%, non-condensing
Storage Elevation	0 to 50,000ft msl
Input Voltage	48VDC to 54VDC (nominal); Min 40VDC to Max 72VDC (model 720480-B21, 865434-B21, P17023-B21 only) 380VDC(nominal); Min 240VDC to Max 420VDC (model 865428-B21 only)
Input Frequency	DC input
Conformance Standards	CE Mark, UL, CSA, IEC, EN, CNS, KC, CCC, C-tick, TUV, CISPR Class A
Mechanical Dimensions (WxHxD)	1.58 x 2.67 x 7.20 in (4.03 x 6.80 x 18.29 cm)
Unit Weight	2.5 lb (1.13 kg)
Shipping Dimensions (WxHxD)	14.87 x 7.25 x 5.63 in (37.77 x 18.42 x 14.30 cm)
Shipping Weight	3.5 lb (1.59 kg) (for model 720480-B21, 865428-B21, 865434-B21, P17023-B21)
Kit Contents	Models 720480-B21, 865434-B21, P17023-B21 and 865428-B21 ship with:
	(1) Power supply unit, installation/safety guide

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
06-Mar-2023	Version 16	Added	New 1800W-2200W Flex Slot Power Supply was added to the QuickSpecs. Added new target platforms.
06-Feb-2023	Version 15	Changed	Overview and Related Options were revised.
05-Dec-2022	Version 14	Added	New 1000W Flex Slot Power Supply was added to the QuickSpecs. Added new target platforms.
07-Feb-2022	Version 13	Changed	Standard Features, Related Options, and Technical Specifications were revised.
15-Nov-2020	Version 12	Changed	Service and Support Section was updated
07-Dec-2020	Version 11	Changed	Standard Features, Related Options, and Technical Specifications were revised.
04-May-2020	Version 10	Changed	SKUs were Updated
01-Oct-2018	Version 9	Changed	SKUs were Updated
02-Jul-2018	Version 8	Changed	Standard Features, Related Options, and Technical Specifications were revised.
04-Jun-2018	Version 7	Added	New 1800W-2200W Flex Slot Power Supply was added to the QuickSpecs.
		Changed	Overview, Standard Features, and Power Specifications were revised.
04-Dec-2017	Version 6	Changed	Overview and Standard Features were revised.
25-Sep-2017	Version 5	Added	New HPE Scalable Persistent Memory 800W Flex Slot PSU and 400W BBU 2-pack FIO Kit was added to the QuickSpecs.
		Changed	Overview, Standard Features, Power Specifications, and Technical Specifications were revised.
11-Jul-2017	Version 4	Changed	Overview, Standard Features, Related Options, Power Specifications, and Technical Specifications were revised.
08-Jan-2016	Version 3	Changed	Overview and Related Options sections were revised.
30-Mar-2015	Version 2	Added	Added new Power Supply Kits.
		Changed	Overview, Standard Features, Service and Support, Related Options, Power Specifications, and Technical Specifications were revised.
30-Mar-2015	Version 1	Created	New QuickSpecs

Copyright

**Make the right purchase decision.
Contact our presales specialists.**

Chat now (sales)

Call now

Get updates

**Hewlett Packard
Enterprise**

c04346217 - 15029 - Worldwide - V16 - 06-March-2023