

Overview

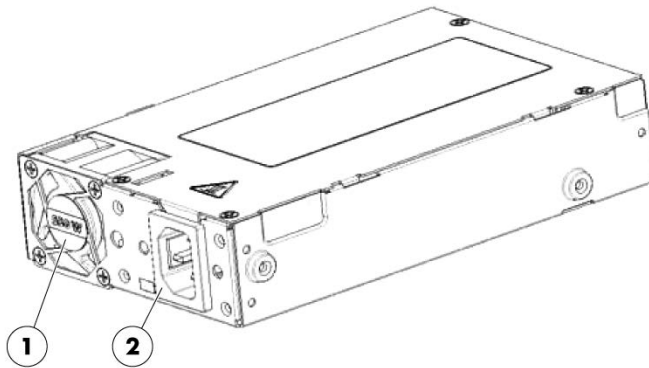
HPE Standard Power Supplies

Looking for high-efficiency power solutions at an entry-level price for your ProLiant Gen9 Essential Server or Gen10 ProLiant 10/100 Series Servers? HPE Standard Power Supplies offer an optimized set of features with options for both redundant and non-redundant power configurations.

The HPE 550W FIO Power Supply offers Silver-certified 80 Plus power efficiency up to 89% with an optimized set of features for non-redundant power configurations for Gen9 DL and ML 10/100 Series Servers.

The HPE 900W Gold Redundant AC Power Input Module with Power Backplane can be configured to support power redundancy in Gen9 DL and ML 10/100 Series Servers that offer only a single power supply bay, providing additional protection against power loss. With an 80 Plus Gold power efficiency rating up to 92%, this power option helps to reduce operating expenses while protecting against trapped power capacity in the data center. Hot-plug AC power input modules allow for better serviceability with fast and easy deployment and replacement.

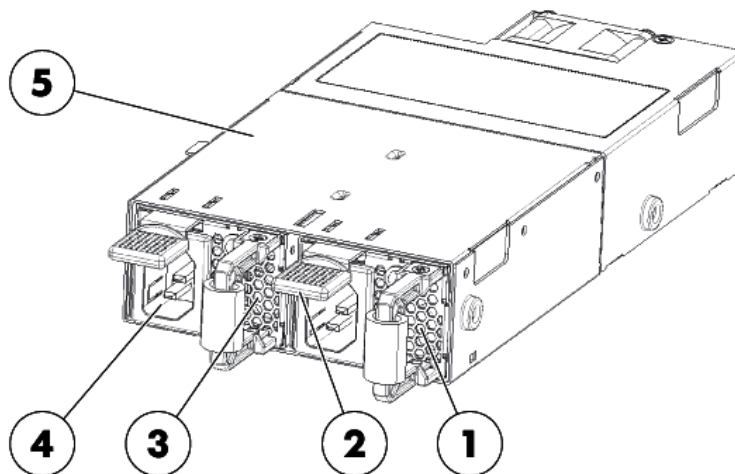
The HPE 500W FIO Power Supply offers Gold-certified 80 Plus power efficiency up to 92% with an optimized set of features for non-redundant power configurations for Gen10 ProLiant ML350 Gen10.



HPE 550W FIO Power Supply

1. Power Supply Identification Label

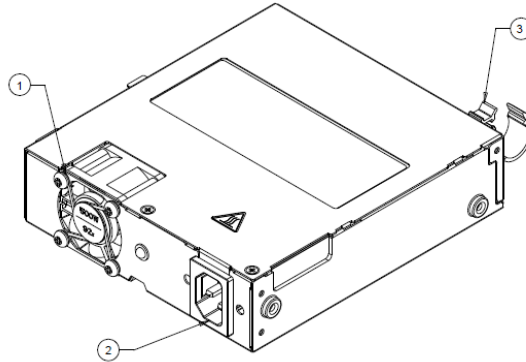
2. C-14 Input Connector



HPE 900W Gold AC 240VDC Power Input Module with Backplane

Overview

- 1. AC Power Input Module #2
- 2. Hot-Plug Quick Release Lever
- 3. AC Power Input Module #1
- 4. C-14 Power Input Connector
- 5. Power Supply Backplane



HPE 500W Non Hot Plug Low Halogen FIO Power Supply

- 1. Power Supply Identification Label
- 2. C-14 Input Connector
- 3. Cable Clip (Output Side)

Models

HPE Standard Power Supplies

HPE ProLiant Gen9 Essential Server Power Supplies – Non-Redundant

NOTE: Supports Silver-level efficiency (89%) with a standard C14 inlet connector. No support for HPE Power Discovery Services. Only compatible with select HPE ProLiant Gen9 Essential servers.

HPE 550W Standard FIO Power Supply Kit

730941-B21

NOTE: This is a Factory Installed Option (FIO) only.

HPE ProLiant Gen9 Essential Server Power Supplies – Redundant

NOTE: Supports Gold-level efficiency (92%) with a standard C14 inlet connector. No support for HPE Power Discovery Services. Only compatible with select HPE ProLiant Gen9 Essential servers.

NOTE: Each Redundant Power Supply Backplane can support up to two (2) power input modules. Non-redundant configurations with a single power input module installed can provide up to 900W (200 – 240VAC) and up to 550W (100 – 127VAC) of power. Redundant configurations with two power input modules installed can provide up to 800W (200 – 240VAC) and up to 550W (100 – 127VAC) of power.

NOTE: 744689-B21 will not work with 814835-B21.

HPE 900W Standard AC 240VDC Power Input Module

775595-B21

HPE 900W Standard AC 240VDC RPS Power Backplane

814835-B21

HPE 900W Standard AC 240VDC Redundant Power Supply Kit

820792-B21

NOTE: Each Redundant Power Supply Backplane can support up to two (2) power input modules.

NOTE: 240VDC function will not work when 775595-B21 is installed in 745813-B21. Only AC input will be enable.

NOTE: Redundant AC Power Input Modules do not share power. Redundant AC Power Input Module #1 is the primary AC Power Input Module. Redundant AC Power Input Module #2 is the backup AC Power Input Module.

NOTE: HPE 900W Gold (Redundant) AC 240VDC Power Input Module (775595-B21) must be used with Power Backplane (814835-B21).

HPE ProLiant Gen10 Entry Level Server Power Supplies – Non-Redundant

Overview

NOTE: Supports Gold-level efficiency (92%) with a standard C14 inlet connector. No support for HPE Power Discovery Services. Only compatible with select HPE ProLiant Gen10 servers.

HPE 500W Low Halogen FIO Power Supply Kit

837074-B21

NOTE: This is a Factory Installed Option (FIO) only.

Standard Features

HPE 900W Gold Power Supply	High Efficiency	Gold certified 80 Plus power efficiency rating, up to 92% efficiency, reduces operating expenses and trapped power in the data center.
	Power Redundancy	Can be configured to support power redundancy in ProLiant servers that offer only a single power supply bay, providing additional protection against power loss.
	Serviceability	Hot-plug AC power input modules that allow for fast and easy deployment and replacement.
	Compatibility	Available as an upgrade option for most ProLiant Gen9 10/100 Series servers, allowing spares to be shared across a wider range servers.
HPE 550W FIO Power Supply	High Efficiency	Silver certified 80 Plus power efficiency rating, up to 89% efficiency, reduces operating expenses and trapped power in the data center.
	Compatibility	Standard power supply for most ProLiant Gen9 10/100 Series servers, allowing spares to be shared across a wider range servers.
HPE 500W Low Halogen FIO Power Supply	High Efficiency	Gold certified 80 Plus power efficiency rating, up to 92% efficiency, reduces operating expenses and trapped power in the data center.
	Compatibility	Standard power supply for ProLiant ML350 Gen10

80Plus Certification

The 80PLUS test protocol was developed jointly by Ecos 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%

What level of certification do HPE Entry-Level Power Supplies meet?

The HPE 550W FIO Power Supply meets 80PLUS Silver certification requirements. The HPE 900W Gold Power Supply and 500W FIO Gold Power Supply meet 80PLUS Gold certification requirements. To

Standard Features

review 80Plus certification reports for all HPE Power Supply options, please refer to the 80Plus website at: <http://www.80plus.com/>.

Compatibility

To check for power supply compatibility, please review the appropriate HPE Server QuickSpecs at <http://www.hpe.com/info/qs>.

Service and Support

Service and Support **HPE Standard Power Supplies are supported as a part of the overall ProLiant infrastructure.**

HPE Technology Services for Industry Standard Servers

HPE Technology Services delivers confidence, reduces risk and helps customers realize agility and stability powered by a rich portfolio of consulting and support services designed to add value to our core products and solutions. Connect to Hewlett Packard Enterprise 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 Support Services

HPE support services offer complete care and support expertise with committed response choices that are designed to meet your IT and business needs.

Connect your devices

Unlock all of the benefits of your technology investment by connecting your products to Hewlett Packard Enterprise. Achieve up to 77%¹ reduction in down time, near 100%² diagnostic accuracy and a single consolidated view of your environment. By connecting, you will receive 24x7 monitoring, pre-failure alerts, automatic call logging, and automatic parts dispatch. HPE Proactive Care Service and HPE Datacenter Care Service customers will also benefit from proactive activities to help prevent issues and increase optimization. All of these benefits are already available to you with your server storage and networking products, securely connected to HPE support.

1- IDC Whitepaper

2- HPE CSC reports 2014 - 2015

HPE Support Center

Personalized online support portal with access to information, tools and experts to support Hewlett Packard Enterprise business products. Submit support cases online, chat with Hewlett Packard Enterprise experts, access support resources or collaborate with peers. Learn more

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

HPE's Support Center Mobile App* allows you to resolve issues yourself or quickly connect to an agent for live support. Now, you can get access to personalized IT support anywhere, anytime. HPE Insight Remote Support and HPE Support Center are available at no additional cost with a Hewlett Packard Enterprise warranty, HPE Support Services or Hewlett Packard Enterprise contractual support agreement.

NOTE: *HPE' Support Center Mobile App is subject to local availability.

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 Hewlett Packard Enterprise 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 Hewlett Packard Enterprise 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 ESSN 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

Related Options

VAC C13 to C14 Power Cables	HPE C13 - C14 WW 250V 10A Gray 0.7m Jumper Cord	AOK03A
	HPE C13 - C14 WW 250V 10A Gray 1.37m Jumper Cord	AOK04A
	HPE C13 - C14 WW 250V 10A Gray 3.0m Jumper Cord	AOK06A
	HPE C13 - C14 WW 250V 10Amp 0.7m Jumper Cord	142257-B28
	HPE C13 - C14 WW 250V 10Amp 1.4m Jumper Cord	142257-006
	HPE C13 - C14 WW 250V 10Amp 1.4m 15 pc Jumper Cord	142257-007
	HPE C13 - C14 WW 250V 10Amp 2.0m Jumper Cord	AOK02A
	HPE C13 - C14 WW 250V 10Amp 2.5m Jumper Cord	142257-002
	HPE C13 - C14 WW 250V 10Amp 3.0m Jumper Cord	142257-003

Technical Specifications

HPE 550W Standard FIO Power Supply Kit (730941-B21)	HPE's Generic Part Number								748949-001
	HPE's Spares Part Number								766879-001
Input Voltage Range (V rms)	100-240								
Frequency Range (Nominal) (Hz)	50-60								
Nominal Input Voltage (Vrms)	100	120	127	200	208	220	230	240	
Maximum Rated Output Wattage Rating	550	550	550	550	550	550	550	550	
Nominal Input Current (A rms)	6.5	5.4	5.1	3.2	3.0	2.9	2.7	2.6	
Maximum Rated Input Wattage Rating (Watts)	645	638	636	624	623	623	622	621	
Maximum Rated VA (Volt-Amp)	652	644	642	630	630	629	628	627	
Efficiency (%)	85.2	86.3	86.5	88.1	88.2	88.4	88.5	88.6	
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)	2201	2176	2169	2130	2127	2124	2121	2119	

HPE 900W Gold (Non-Redundant) AC Power Input Module (744689-B21) with Power Backplane (745813-B21)*	HPE's Generic Part Number (Backplane)								743908-001
	HPE's Generic Part Number (Power Input Mod)								743907-001
	HPE's Spares Part Number (Backplane)								754376-001
	HPE's Spares Part Number (Power Input Mod)								744689-B21
Input Voltage Range (V rms)	100-240								
Frequency Range (Nominal) (Hz)	50-60								
Nominal Input Voltage (Vrms)	100	120	127	200	208	220	230	240	
Maximum Rated Output Wattage Rating	550	550	550	900	900	900	900	900	
Nominal Input Current (A rms)	6.2	5.1	4.8	5.0	4.8	4.5	4.3	4.1	
Maximum Rated Input Wattage Rating (Watts)	616	606	604	993	993	991	988	985	
Maximum Rated VA (Volt-Amp)	622	612	610	1003	1003	1001	998	995	
Efficiency (%)	89.4	90.8	91.1	90.6	90.6	90.8	91.1	91.4	
Power Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	
Leakage Current (mA)	0.33	0.40	0.42	0.67	0.69	0.73	0.77	0.80	
Maximum Inrush Current (A peak)	30								
Maximum Inrush Current duration (ms)	10								
Maximum British Thermal Unit Rating (BTU-Hr)	2099	2065	2058	3386	3386	3379	3368	3358	

***NOTE:** The above power specifications are based on a configuration that includes a single power backplane with one AC power input modules installed.

Technical Specifications

HPE 900W Gold (Redundant) AC 240VDC Power Input Module (775595-B21) with Power Backplane (814835-B21)*	HPE's Generic Part Number (Backplane)								814832-001
	HPE's Generic Part Number (Power Input Mod)								775592-001
	HPE's Spares Part Number (Backplane)								830022-001
	HPE's Spares Part Number (Power Input Mod)								830219-B21
Input Voltage Range (V rms)	100-240								
Frequency Range (Nominal) (Hz)	50-60								
Nominal Input Voltage (Vrms)	100	120	127	200	208	220	230	240	
Maximum Rated Output Wattage Rating	550	550	550	900	900	900	900	900	
Nominal Input Current (A rms)	6.3	5.1	4.8	4.9	4.7	4.5	4.3	4.1	
Maximum Rated Input Wattage Rating (Watts)	619	611	609	976	975	973	972	971	
Maximum Rated VA (Volt-Amp)	626	617	615	986	985	983	982	981	
Efficiency (%)	88.8	90.0	90.3	92.2	92.3	92.5	92.6	92.7	
Power Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	
Leakage Current (mA)	0.37	0.45	0.47	0.75	0.78	0.82	0.86	0.90	
Maximum Inrush Current (A peak)	30								
Maximum Inrush Current duration (ms)	10								
Maximum British Thermal Unit Rating (BTU-Hr)	2112	2084	2077	3329	3325	3318	3314	3311	

***NOTE:** The above power specifications are based on a configuration that includes a single power backplane with 2 AC power input modules installed.

HPE 500W Low Halogen FIO Power Supply Kit (837074-B21)	HPE's Generic Part Number								837071-001
	HPE's Spares Part Number								866726-001
Input Voltage Range (V rms)	100-240								
Frequency Range (Nominal) (Hz)	50-60								
Nominal Input Voltage (Vrms)	100	120	127	200	208	220	230	240	
Maximum Rated Output Wattage Rating	500	500	500	500	500	500	500	500	
Nominal Input Current (A rms)	5.8	4.8	4.5	2.8	2.7	2.5	2.4	2.3	
Maximum Rated Input Wattage Rating (Watts)	572	565	564	554	553	553	552	552	
Maximum Rated VA (Volt-Amp)	578	571	569	560	559	558	558	557	
Efficiency (%)	87.4	88.4	88.7	90.3	90.4	90.5	90.6	90.6	
Power Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	
Leakage Current (mA)	0.43	0.50	0.55	0.87	0.90	0.96	1.00	1.04	
Maximum Inrush Current (A peak)	30								
Maximum Inrush Current duration (ms)	10								
Maximum British Thermal Unit Rating (BTU-Hr)	1953	1929	1923	1890	1888	1885	1884	1882	

Technical Specifications

HPE 550W FIO Power Supply:

Operating Temperature	41° to 122°F (5° to 50°C)
Operating Relative Humidity (%)	5% to 95%, non-condensing
Operating Elevation	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 1000ft) above sea level to a maximum of 3048m (10,000ft)
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
Input Frequency	Rated: 50 to 60Hz; Min 47Hz to Max 63Hz
Conformance Standards	CE Mark, UL, CUL, IEC, EN, KC, BSMI, CCC, TUV, CISPR Class A
Mechanical Dimensions (WxHxD)	4.23 x 1.57 x 6.9 in (10.74 x 3.99 x 17.53 cm)
Unit Weight	2.38 lbs (1.08 kg)
Kit Contents	Factory integrated 550W FIO power supply

HPE 900W AC 240VDC Power Input Module with Backplane:

Operating Temperature	41° to 122°F (5° to 50°C)
Operating Relative Humidity (%)	5% to 95%, non-condensing
Operating Elevation	5000ft (1524m); Derate operating temperature 1.0°C every 1000ft (304.8m) to maximum of 10,000ft (3048m)
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
Input Frequency	Rated: 50 to 60Hz; Min 47Hz to Max 63Hz
Conformance Standards	CE Mark, UL, cUL, IEC, EN, KCC, BSMI, CCC, TUV, C-tick, CISPR Class A
Mechanical Dimensions (WxHxD)	
Backplane	8.28 x 4.23 x 1.54 in (21.02 x 10.74 x 3.9 cm)
Power Input Module	4.22 x 2.04 x 1.46 in (10.72 x 5.18 x 3.7 cm)
Unit Weight	
Backplane	1.79 lbs (0.82 kg)
Power Input Module	0.77 lbs (0.35 kg)
Kit Contents	
Power Backplane (814835-B21)	(1) Power backplane, installation/safety guide, documentation
AC 240VDC Power Input Module (775595-B21)	(1) AC power input module, (1) IEC C13 – C14 jumper cable, installation/safety guide, documentation
AC 240VDC Redundant Power Supply Kit (820792-B21)	Power backplane, (2) AC 240VDC power input module, (2) IEC C13 – C14 jumper cable, installation/safety guide, documentation

Technical Specifications

HPE 500W Low Halogen FIO Power Supply:

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 derating, from sea level, of 1.0°C per every 304.8 m (1.8°F per every 1000ft) above sea level to a maximum of 3048m (10,000ft)
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
Input Frequency	Rated: 50 to 60Hz; Min 45Hz to Max 63Hz
Conformance Standards	CE Mark, UL, CUL, IEC, EN, KC, BSMI, CCC, TUV, CISPR Class A
Mechanical Dimensions (WxHxD)	5.72 x 1.57 x 6.30 in (14.55 x 4.0x 16.0 cm)
Unit Weight	2.31 lbs (1.05 kg)

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 (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard 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.
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Summary of Changes

Date	Version History	Action	Description of Change
16-Oct-2017	From Version 6 to 7	Changed	Overview and Standard Features were revised.
25-Sep-2017	From Version 5 to 6	Added	New HPE 500W Low Halogen FIO Power Supply was added to the QuickSpecs.
		Changed	Overview, Standard Features, and Technical Specifications were revised. The title was changed from HPE Entry-Level Power Supplies to HPE Standard Power Supplies.
15-Aug-2016	From Version 4 to 5	Changed	Models, Standard Features, and Technical Specifications were revised.
		Removed	800W Gold (Redundant) AC Power Input Module was removed from the QuickSpecs.
19-Feb-2016	From Version 3 to 4	Changed	Overview section was revised.
01-Dec-2015	From Version 2 to 3	Added	Added HPE 900W Gold (Redundant) AC 240DVC Power Input Module to QuickSpecs.
		Changed	Overview, Service and Support, Power Specifications, and Technical Specifications were revised.
01-Dec-2014	From Version 1 to 2	Changed	Changes made throughout the entire QuickSpecs.



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