HP ProLiant Gen8 Common Slot Power Supplies

Reduce[1] power costs with up to 94% efficiency

HP ProLiant Gen8 Common Slot Platinum Plus Hot Plug Power Supplies provide unquestionable, highly efficient power supplies for your data center servers. These next-generation, Platinum-certified power supplies offer improved power factor, total harmonic distortion (iTHD), and EMI standards compared to previous Platinum power supplies. They are ideal for ProLiant Gen8 customers operating mid-to-large data centers who want to reduce operating expenses, power, downtime, and resources.

Key features and benefits

Key features and benefits for Common Slot Platinum Plus power supplies include:

- 80 PLUS-certified power efficiency of up to 94%[2] for standard AC power supplies to reduce power waste and costs

- New input power options of 380 VDC and 277 VAC to let you choose the best distribution system for your data center

- Support for HP Power Discovery Services to optimize data center power efficiency and usage

- Improved specifications for power factor and iTHD at lower load levels, providing better reliability, lowering power costs, and minimizing the risks of unplanned downtime

- Multiple output options—available in 460 W, 750 W, and 1200 W—to let you "right-size" your power requirements for each server configuration

- Redundancy power management options, including High-Efficiency and Load-Balancing modes to let you optimize server-power efficiency in redundant power configurations

- Common slot design compatible with a wide range of HP ProLiant and HP Integrity servers, as well as HP Storage solutions, reducing the cost and inventory of maintaining power supply spares

[1] HP Common Slot power supply technology brief
[2] HP Common Slot power supply technology brief

The 80 PLUS Platinum difference

The 80 PLUS program was created in 2004 through a joint effort between Ecova and the Electric Power Research Institute (EPRI). It provides incentives for consumers (commercial and residential) and manufacturers to buy and sell high-efficiency power solutions to lower power costs and waste while reducing plug loads on overburdened power grids. The certification enables customers worldwide to use the most efficient power supplies available. In addition, ENERGY STAR® v1.0 requires a minimum of 80 PLUS Silver certification (89% power efficiency at 50% load). HP Platinum Plus power supplies provide up to 94% efficiency (at 50% load), vastly exceeding ENERGY STAR requirements. Platinum Plus power supplies are now a standard feature across many of the HP ProLiant Gen8 servers.

Reduce your power costs and reclaim power capacity

Power expenses can account for more than 50% of the data center OPEX budget. An increase in power efficiency can save your enterprise thousands, or possibly millions, of dollars annually. New Common Slot HP Platinum Plus power supplies can provide a savings of up to 60 W per server by minimizing power waste and reducing power requirements. When combined with new low voltage, high performance HP SmartMemory, you can reduce overall data center power requirements by up to 10%[3] (compared to HP ProLiant G6 power estimates).

Because Platinum Plus power supplies are available in multiple output options, they can be right-sized for individual server configurations. That helps you recover "trapped" power capacity by reducing over-provisioning of server power, allowing you to improve overall compute density by reallocating saved power within the data center.

[3] HP Common Slot power supply technology brief

Enable HP Power Discovery services

HP Power Discovery Services—which combines HP Platinum and Platinum Plus power supplies with the HP iPDu and HP Insight Control v7 Power Management software—enables the collection and display of critical temperature, workload, power, and location data for servers in the new HP Intelligent Series rack-level enclosure. This data lets you automatically track server assets and locations, and intelligently place workloads for optimum performance. Power Discovery Services is enabled through the embedded power line communication port located within the blue power connectors for both Platinum and Platinum Plus power supplies. These ports facilitate communication between the server and HP iPDu, creating an energy-aware network between IT systems and facilities management. HP Power Discovery Services prevent 100% of typical manual configuration errors, provide a 25% reduction in the causes of data center outages, and shrink deployment times from hours to minutes while helping users to reclaim up to 10% more usable power per circuit[4].

New common-slot DC and AC power options

In addition to traditional AC power supplies, HP Common Slot Power Supplies are available in 48 VDC, 380 VDC, and 277 VAC power input options. These power supplies help increase data center efficiency and reduce power-related costs by providing new high-efficiency input voltage alternatives. They are ideal for telecommunications customers and large scale out data centers that require a 48 VDC power source, and for those seeking the high efficiency of 380 VDC or 277 VAC power distribution. These power supply options include many of the features and benefits offered with HP Platinum Plus Common Slot power supplies.

[4] HP Common Slot power supply technology brief

For more information

Learn more about HP Common Slot Power Supplies. Visit these sites:

HP Qualified Options webpage
hp.com/go/hpqo

HP High-Efficiency Power Supplies website
hp.com/go/proliant/powersupply

HP Power Discovery Services website
hp.com/go/ipd

HP ProLiant Options Compatibility Guide
hpproliantoptions.com

HP Power Advisor Tool
hp.com/go/hppoweradvisor

80 PLUS Certification Program
80plus.com

HP Common Slot power supply technology brief

Technical specifications

HP Common Slot Power Supply options for HP ProLiant Gen8 servers are available in Platinum Plus and Gold efficiencies and with a range of power input and output options.

Platinum Plus[5] Power Supply Kits—Up to 94% efficiency

656362-B21	HP 460W Common Slot Platinum Plus Power Supply Kit
656363-B21	HP 750W Common Slot Platinum Plus Power Supply Kit
656364-B21	HP 1200W Common Slot Platinum Plus Power Supply Kit
684532-B21	HP 1500W Common Slot Platinum Plus Power Supply Kit

Gold Power Supply Kits—Up to 92% efficiency

503296-B21	HP 460W Common Slot Gold Power Supply Kit
512327-B21	HP 750W Common Slot Gold Power Supply Kit

-48 VDC Power Supply Kits—Up to 94% efficiency

437573-B21	HP 1200W Common Slot -48VDC Hot Plug Power Supply Kit
636673-B21	HP 750W Common Slot -48VDC Hot Plug Power Supply Kit

380 VDC Power Supply Kits—Up to 94% efficiency

684539-B21	HP 1200W Common Slot 380VDC Hot Plug Power Supply Kit

277 VAC Power Supply Kits—Up to 94% efficiency

717359-B21	HP 1200W Common Slot 277VAC Hot Plug Power Supply Kit

Learn more at
hp.com/go/proliant/powersupply

[5] The 80 PLUS certification program does not address power supplies operating at 48 VDC, 380 VDC, or 277 VAC input voltages.

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