

DPS-600



DPS-900

DPS-200/500/600/800/900 Series

DPS-800



DPS-200

DPS-500

Features

- Connect to D-Link Ethernet and Gigabit Switches
- Provide Backup Power for the Switch's Built-in Power Supply
- Can be Installed as Stand-Alone Power Supply Units or Mounted in 19-Inch Multi-Slots Chassis
- Hot Swappable When Installed in Chassis
- Solid Metal Case Housing
- LED Status Indicators
- 90 to 264 Volts, 47 to 63Hz AC Input Range
- Over Current Protection
- DPS-200: up to 60 watts output power
- DPS-500: up to 140 watts output power
- DPS-600: up to 500 watts output power
- DPS-800 2-slot chassis: accommodates 2 DPS-200/500 in 19-inch equipment rack
- DPS-900 8-slot chassis: accommodates up to 8 DPS-200/500 in 19-inch equipment rack

Redundant Power Supplies

Introduction

The DPS-200, DPS-500 and DPS-600 redundant power supplies (RPS) are designed to conform to the wattage requirements of D-Link's Ethernet and Gigabit switches. They are external RPS enclosed in solid metal cases with sockets to AC or DC power sources on one end, and connectors to the switch's internal power supply on the other end. They provide a low-cost, simple solution to the problem of an inadvertent failure of the internal power-supply of the Ethernet switch, which can result in the shutdown of that switching device, the devices attached to its ports, or an entire network. Supporting full output power for the switch, these redundant power supplies can maximize the availability of the switching device.

Redundant Power Backup

Each DPS-200, DPS-500 or DPS-600 is equipped with an integrated detection circuit that continuously monitors the switching device's internal power supply. In the event of a power interruption, the redundant power supply is immediately triggered so that the LAN switch and its connected devices can continue providing service. This results in a more reliable network infrastructure and protects the network from a single failure of a network device power supply.

Easy and Flexible Deployment

Deployment of a DPS-200, DPS-500 or DPS-600 does not necessitate any change in configuration of the LAN switch. Each RPS is equipped with a universal internal power supply, and can be connected to any AC main power source from 90VAC to 264VAC, 47Hz to 63Hz through a standard AC power cable.

Two installation options are available for the DPS-200, DPS-300 and DPS-500. These power supplies can be installed as independent power supply units, or placed inside a DPS-800 or DPS-900 chassis. The chassis are designed for mounting in a standard 19-inch equipment rack. Multiple power supplies can be placed inside a chassis, from which they can connect to the switches mounted in the same rack.

Rack-Mount Chassis

DPS-900 8-slot chassis is designed to accommodate up to eight DPS-200 or DPS-500. This chassis is useful for deployment of eight stackable switches mounted in the same rack. The DPS-800 chassis can hold two DPS-200 or DPS-500 and is useful for adding a few RPS to the equipment rack.

Using the chassis, users can save space, while their cabling will look neat. The chassis are not equipped with any power supply of their own. All redundant power supply units installed in the chassis will connect directly to their power source. As they are independent units, they are hot-swappable when used with the chassis.

DPS-600 Redundant Power Supply

DPS-600 is designed to conform to the wattage requirements of D-Link Ethernet switches with Power over Ethernet (PoE). This switch is capable of providing PoE for all of its Ethernet ports, and is equipped with an internal power supply with a high power output conforming to the wattage requirements. The DPS-600 is encased in a low-profile 19-inch standard-size rack mount metal housing, and can be mounted in the same equipment rack as the switching device that it connects to.

## Technical Specifications

### DPS-200

AC Input Voltage Rating	<ul style="list-style-type: none"> <li>100VAC to 240VAC</li> </ul>
AC Input Voltage Range	<ul style="list-style-type: none"> <li>90VAC to 264VAC</li> </ul>
AC Input Frequency Range	<ul style="list-style-type: none"> <li>47 Hz to 63 Hz</li> </ul>
AC Input Current	<ul style="list-style-type: none"> <li>1.6A (RMS) max. for 115VAC</li> <li>0.8A (RMS) max. for 230VAC</li> </ul>
Maximum In-rush Current	<ul style="list-style-type: none"> <li>30A max. @ 115VAC (at 25° C ambient cold start)</li> <li>60A max. @ 230VAC (at 25° C ambient cold start)</li> </ul>
Leakage Current	<ul style="list-style-type: none"> <li>3.5mA max.</li> </ul>
Output Voltage	<ul style="list-style-type: none"> <li>+12VDC</li> </ul>
Minimum Load Current	<ul style="list-style-type: none"> <li>0.5A</li> </ul>
Maximum Load Current	<ul style="list-style-type: none"> <li>5.0A</li> </ul>
Line Regulation	<ul style="list-style-type: none"> <li>+/-2% (measured output load from +/-10% rated load)</li> </ul>
Load Regulation	<ul style="list-style-type: none"> <li>+/-5% (measured output load from 20% to 100% rated load)</li> </ul>
Output Ripple & Noise	<ul style="list-style-type: none"> <li>120mV (measured bandwidth oscilloscope and terminated each output with 100uF capacitor and 0.1uF ceramic in parallel)</li> </ul>
Total Output Power	<ul style="list-style-type: none"> <li>60 watts</li> </ul>
Efficiency	<ul style="list-style-type: none"> <li>75% min. @ max. load and 115VAC input</li> </ul>
Hold Up Time	<ul style="list-style-type: none"> <li>16mS min. at max. load and 115VAC input, @ 60Hz output drop down to 95% output voltage</li> </ul>
Over Current Protection	<ul style="list-style-type: none"> <li>Power supply protected against overload and short circuit applied to any one terminal - auto restart *</li> <li>*Output can be shorted permanently with damage</li> </ul>
Over Voltage Protection	<ul style="list-style-type: none"> <li>13.5V to 17V</li> </ul>
AC Power Good (pwr-good) Signal Required	<ul style="list-style-type: none"> <li>+3.3V *</li> <li>*(1) Minimum high voltage is 2.0V with a maximum load current of 5.0mA</li> <li>(2) Maximum high voltage is 3.4V</li> <li>(3) Minimum low voltage is 0.0V</li> <li>(4) Power good signal must go low within 0.5ms before 12V output drops out of below 10.0V</li> <li>(5) Power good signal must go high within 2.5 seconds of application of power to the system</li> </ul>
LED Status	<ul style="list-style-type: none"> <li>On: RPS good</li> <li>Off: RPS failed</li> </ul>
Dimensions	<ul style="list-style-type: none"> <li>127mm (L) x 76mm (W) x 37mm (H)</li> </ul>
Weight	<ul style="list-style-type: none"> <li>0.83 kg</li> </ul>
Operating Altitude	<ul style="list-style-type: none"> <li>3,000 m (10,000 feet) max.</li> </ul>
Storage Altitude	<ul style="list-style-type: none"> <li>12,000 m (40,000 feet) max.</li> </ul>
Operating Temperature	<ul style="list-style-type: none"> <li>0° to 50° C</li> </ul>
Storage Temperature	<ul style="list-style-type: none"> <li>-20° to 80° C</li> </ul>
Safety Standards	<ul style="list-style-type: none"> <li>-CSA</li> </ul>
EMI	<ul style="list-style-type: none"> <li>FCC Class B</li> <li>EN55022 (CISPR22) Class B</li> </ul>
HI-POT Test	<ul style="list-style-type: none"> <li>Input to secondary: 3000VAC for 1 minute, 10mA</li> <li>Input to P.E.: 1500VAC for 1 minute, 10mA</li> </ul>
Insulation Resistance	<ul style="list-style-type: none"> <li>Input to secondary: &gt;20Mohm 500VDC</li> </ul>
Reliability (MTBF)	<ul style="list-style-type: none"> <li>50K Hrs Min. at 25 degrees C 240VAC (max load)</li> </ul>
Shock & Vibration	<ul style="list-style-type: none"> <li>10-55Hz, amplitude 2G over entire frequency range. Sweep minute for X, Y and Z axis each 20 cycles.</li> </ul>
MTBF	<ul style="list-style-type: none"> <li>71,713 hours</li> </ul>

**DPS-500**

Input Voltage Range	<ul style="list-style-type: none"> <li>• 90VAC to 264VAC</li> </ul>
Input Frequency Range	<ul style="list-style-type: none"> <li>• 47 Hz to 63 Hz</li> </ul>
AC Input Current	<ul style="list-style-type: none"> <li>• 4A max. @ 115VAC</li> <li>• 2A max. @ 230VAC</li> </ul>
Maximum In-rush Current	<ul style="list-style-type: none"> <li>• 30A max. @ 115VAC (at 25° C ambient cold start)</li> <li>• 60A max. @ 230VAC (at 25° C ambient cold start)</li> </ul>
Leakage Current	<ul style="list-style-type: none"> <li>• 3.5mA max.</li> </ul>
Output Voltage	<ul style="list-style-type: none"> <li>• +5VD</li> <li>• +12VDC</li> </ul>
Minimum Load Current	<ul style="list-style-type: none"> <li>• 0A (+5VDC output)</li> <li>• 0A (+12VDC output)</li> </ul>
Maximum Load Current	<ul style="list-style-type: none"> <li>• 1.5A (+5VDC output)</li> <li>• 13A (+12VDC output)</li> </ul>
Total Output Power	<ul style="list-style-type: none"> <li>• 140 watts</li> </ul>
Efficiency	<ul style="list-style-type: none"> <li>• 80% min. @ max.</li> </ul>
Over Voltage Protection	<ul style="list-style-type: none"> <li>• 13.5V to 17V</li> </ul>
AC Power Good (pwr-good) Signal Required	<ul style="list-style-type: none"> <li>• +5V</li> <li>• +12V</li> </ul>
LED Status	<ul style="list-style-type: none"> <li>• On: RPS good</li> <li>• Off: RPS failed</li> </ul>
Dimensions	<ul style="list-style-type: none"> <li>• 196mm (L) x 195mm (W) x 50mm (H)</li> </ul>
Weight	<ul style="list-style-type: none"> <li>• 1.5 kg</li> </ul>
Operating Altitude	<ul style="list-style-type: none"> <li>• 3,000 m (10,000 feet) max.</li> </ul>
Storage Altitude	<ul style="list-style-type: none"> <li>• 12,000 m (40,000 feet) max.</li> </ul>
Operating Temperature	<ul style="list-style-type: none"> <li>• 0° to 50° C</li> </ul>
Storage Temperature	<ul style="list-style-type: none"> <li>• -20° to 80° C</li> </ul>
Operating Humidity	<ul style="list-style-type: none"> <li>• 5% to 95% RH</li> </ul>
Storage Humidity	<ul style="list-style-type: none"> <li>• 5% to 95% RH</li> </ul>
Safety Standards	<ul style="list-style-type: none"> <li>• UL 60950 3rd Edition</li> <li>• CSA 22.2 NO.234</li> <li>• EN 60 950</li> </ul>
Safety Approvals	<ul style="list-style-type: none"> <li>• UL</li> <li>• CSA</li> </ul>
EMI	<ul style="list-style-type: none"> <li>• FCC Class B</li> </ul>
MTBF	<ul style="list-style-type: none"> <li>• 598,552hours</li> </ul>

**DPS-600**

Input Voltage Range	<ul style="list-style-type: none"> <li>• 90VAC to 264VAC</li> </ul>
Input Frequency Range	<ul style="list-style-type: none"> <li>• 47 Hz to 63 Hz</li> </ul>
Input Current	<ul style="list-style-type: none"> <li>• 10A at 115VAC, 60Hz (max.)</li> <li>• 5A at 230VAC, 50Hz (max.)</li> </ul>
Maximum In-rush Current	<ul style="list-style-type: none"> <li>• 30A at 115VAC, 60Hz input, 25 C (max.)</li> <li>• 60A at 230VAC, 50Hz input, 25 C (max.)</li> </ul>
Leakage Current	<ul style="list-style-type: none"> <li>• 3.5mA max.</li> </ul>
Output Power	<ul style="list-style-type: none"> <li>• 500 watts (max.)</li> </ul>
Line Regulation	<ul style="list-style-type: none"> <li>• Less than + 2% (measuring at rated load and changing + -10% of nominal input voltage)</li> </ul>

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Load Regulation	<ul style="list-style-type: none"> <li>• (Includes cross regulation between output voltages)</li> <li>• 105 for +12V</li> <li>• 3% for -50V</li> </ul>
Hold Up Time	<ul style="list-style-type: none"> <li>• 16mS (typical) at 115VAC input and rated load from end of last charging pulse to when main output drops to 95% output voltage</li> </ul>
Efficiency	<ul style="list-style-type: none"> <li>• 80% (typical) at nominal line and maximum load</li> </ul>
Over Voltage Protection	<ul style="list-style-type: none"> <li>• Trip point: below 16V for +12V output</li> <li>• Auto-recovery mode against short circuit or over load conditions</li> <li>• -50V output below -57V will protect itself against short circuit or over load condition</li> </ul>
LED Status	<ul style="list-style-type: none"> <li>• On: RPS good</li> <li>• Off: RPS failed</li> </ul>
Dimensions	<ul style="list-style-type: none"> <li>• 441 (W) x 139 (D) x 44.5 (H) mm</li> <li>• 19-inch rack-mount width, 1U height</li> </ul>
Weight	<ul style="list-style-type: none"> <li>• 3.5 kg</li> </ul>
Operating Temperature	<ul style="list-style-type: none"> <li>• 0° to 50° C</li> </ul>
Storage Temperature	<ul style="list-style-type: none"> <li>• -40° to 70° C</li> </ul>
Operating Humidity	<ul style="list-style-type: none"> <li>• 10% to 90% RH</li> </ul>
Storage Humidity	<ul style="list-style-type: none"> <li>• 10% to 90% RH</li> </ul>
Safety Approvals	<ul style="list-style-type: none"> <li>• UL</li> <li>• CUL</li> </ul>
EMI Approvals	<ul style="list-style-type: none"> <li>• FCC Class B</li> <li>• CE</li> </ul>
MTBF	<ul style="list-style-type: none"> <li>• 598,664 hours</li> </ul>

### Redundant Power Supply & Lan Switch Compatibility

<i>DPS-200</i>	<i>DPS-500</i>	<i>DPS-600</i>	<i>DPS-800</i>	<i>DPS-900</i>
DES-3526	DGS-3048	DES-3528P	DPS-200	DPS-200
DES-3528	DGS-3100-48	DES-3552P	DPS-500	DPS-500
DES-3550	DGS-3427	DES-3828P		
DES-3552	DGS-3450	DGS-3100-24P		
DES-3828	DGS-3612G	DGS-3100-48P		
DES-3326SRM	DGS-3627	DGS-3426P		
DES-3350SR	DGS-3627G	DWS-3024		
DGS-3212SR	DGS-3650	DWS-3024L		
DGS-3312SR	DGS-3224SR	DWS-3026		
DGS-3100-24	DGS-3324SR	DWS-4026		
DGS-3200-24	DXS-3220GSR	DXS-3227P		
DGS-3612	DXS-3350SR			

Updated 11/22/10

<sup>1</sup> Available in the U.S.A and Canada only.

All references to speed are for comparison purposes only. Product specifications, size and shape are subject to change without notice, and actual product appearance may differ from that depicted. See inside package for warranty details.

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For more information

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