

FEATURES

- + Connect to D-Link Ethernet and Gigabit Switches
- + Provide Backup Power for 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-300: up to 90 watts output power
- + DPS-500/500DC: up to 140 watts output power
- + DPS-600: up to 500 watts output power
- + DPS-800 2-slot chassis: accommodates 2 DPS-200/300/500/500DC in 19-inch equipment rack
- + DPS-900 8-slot chassis: accommodates up to 8 DPS-200/300/500/500DC in 19-inch equipment rack

Redundant Power Supplies

The DPS-200, DPS-300, DPS-500/500DC 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 power availability of the switching device.

Redundant Power Backup

Each DPS-200, DPS-300, DPS-500/500DC 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-300, DPS-500/500DC or DPS-600 does not necessitate any change in configuration of the LAN switch. With the exception of the DPS-500DC, 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. The DPS-500DC provides the same output power as the DPS-500 but connects to a DC instead of an AC power source.

Two installation options are available for the DPS-200, DPS-300 and DPS-500/500DC. 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, DPS-300 or DPS-500/500DC. This chassis is useful for deployment of eight stackable switches mounted in the same rack. The DPS-800 chassis can hold two DPS-200, DPS-300 or DPS-500/500DC 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 the D-Link DES-3828P 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.



DPS-200/300/500



DPS-500DC



DPS-600



DPS-800



DPS-900

TECHNICAL SPECIFICATIONS

DPS-200

AC INPUT VOLTAGE RATING
100VAC to 240VAC

AC INPUT VOLTAGE RANGE
90VAC to 264VAC

AC INPUT FREQUENCY RANGE
47 Hz to 63 Hz

AC INPUT CURRENT

- 1.6A (RMS) max. for 115VAC
- 0.8A (RMS) max. for 230VAC

MAXIMUM IN-RUSH CURRENT

- 30A max. @ 115VAC
(at 25° C ambient cold start)
- 60A max. @ 230VAC
(at 25° C ambient cold start)

LEAKAGE CURRENT
3.5mA max.

OUTPUT VOLTAGE
+12VDC

MINIMUM LOAD CURRENT
0.5A

MAXIMUM LOAD CURRENT
5.0A

LINE REGULATION
+/-2% (measured output load from +/-10% rated load)

LOAD REGULATION
+/-5% (measured output load from 20% to 100% rated load)

OUTPUT RIPPLE & NOISE
120mV (measured bandwidth oscilloscope and terminated each output with 100uF capacitor and 0.1uF ceramic in parallel)

TOTAL OUTPUT POWER
60 watts

EFFICIENCY
75% min. @ max. load and 115VAC input

HOLD UP TIME
16mS min. at max. load and 115VAC input, @ 60Hz output drop down to 95% output voltage

OVER CURRENT PROTECTION
Power supply protected against overload and short circuit applied to any one terminal auto restart *

* Output can be shorted permanently with damage

OVER VOLTAGE PROTECTION
13.5V to 17V

AC POWER GOOD (PWR-GOOD) SIGNAL REQUIRED
+3.3V *

* (1) Minimum high voltage is 2.0V with a maximum load current of 5.0mA
(2) Maximum high voltage is 3.4V
(3) Minimum low voltage is 0.0V
(4) Power good signal must go low within 0.5ms before 12V output drops out of below 10.0V
(5) Power good signal must go high within 2.5 seconds of application of power to the system

LED STATUS

- On: RPS good
- Off: RPS failed

DIMENSIONS
127mm (L) x 76mm (W) x 37mm (H)

WEIGHT
0.83 kg

OPERATING ALTITUDE
3,000 m (10,000 feet) max.

STORAGE ALTITUDE
12,000 m (40,000 feet) max.

OPERATING TEMPERATURE
0° to 50°C

STORAGE TEMPERATURE
-20° to 80°C

OPERATING HUMIDITY
10% to 90% RH

STORAGE HUMIDITY
10% to 90% RH

SAFETY STANDARDS

- UL 60950 3rd Edition
- TUV EN 60950
- CE Mark (LVD)

SAFETY APPROVALS

- CSA

EMI

- FCC Class B
- EN55022 (CISPR22) Class B

HI-POT TEST

- Input to secondary: 3000VAC for 1 minute, 10mA
- Input to P.E.: 1500VAC for 1 minute, 10mA

INSULATION RESISTANCE
Input to secondary: >20Mohm 500VDC

RELIABILITY (MTBF)
50K Hrs Min. at 25 degrees C 240VAC (max load)

SHOCK & VIBRATION

10-55Hz, amplitude 2G over entire frequency range. Sweep minute for X, Y and Z axis each 20 cycles.

MTBF
71,713 hours

DPS-300

AC INPUT VOLTAGE RATING
100VAC to 240VAC

AC INPUT VOLTAGE RANGE
90VAC to 264VAC

AC INPUT FREQUENCY RANGE
47 Hz to 63 Hz

AC INPUT CURRENT

- 2A (RMS) max. for 115VAC
- 1A (RMS) max. for 230VAC

MAXIMUM IN-RUSH CURRENT

- 30A max. @ 115VAC
(at 25° C ambient cold start)
- 50A max. @ 230VAC
(at 25° C ambient cold start)

OUTPUT VOLTAGE
+12VDC

MINIMUM LOAD CURRENT
0A

MAXIMUM LOAD CURRENT
7.5A

TOTAL OUTPUT POWER
90 watts

EFFICIENCY
80% min. @ max.

OVER VOLTAGE PROTECTION
13.5V to 17V

AC POWER GOOD (PWR_GOOD) SIGNAL REQUIRED
+5V

LED STATUS

- On: RPS good
- Off: RPS failed

DIMENSIONS
196mm (L) x 195mm (W) x 50mm (H)

WEIGHT
1.7 kg

OPERATING TEMPERATURE
0° to 40° C

STORAGE TEMPERATURE

-10° to 55° C

OPERATING HUMIDITY

5% to 95% non-condensing

STORAGE HUMIDITY

5% to 95% non-condensing

SAFETY STANDARDS

- UL 60950 3rd Edition
- TUV EN 60950
- CE Mark (LVD)

SAFETY APPROVALS

- CSA International
- CE
- CCC

EMI

- FCC Class B
- BSMI
- C-Tick

MTBF

211,493 hours

DPS-500/500DC

INPUT VOLTAGE RANGE

- DPS-500: 90VAC to 264VAC
- DPS-500DC: -36VDC to -72VDC

INPUT FREQUENCY RANGE

47 Hz to 63 Hz

AC INPUT CURRENT

- DPS-500: 4A max. @ 115VAC
- DPS-500: 2A max. @ 230VAC
- DPS-500DC: 6A max. @ -36VDC
- DPS-500DC: 3A max. @ -72VDC

MAXIMUM IN-RUSH CURRENT

- DPS-500: 30A max. @ 115VAC (at 25° C ambient cold start)
- DPS-500: 50A max. @ 230VAC (at 25° C ambient cold start)
- DPS-500DC: 20A max. @ -48VDC (at 25° C ambient cold start)
- DPS-500DC: 50A max. @ -72VDC (at 25° C ambient cold start)

LEAKAGE CURRENT

3.5mA max.

OUTPUT VOLTAGE

- +5VDC
- +12VDC

MINIMUM LOAD CURRENT

- 0A (+5VDC output)
- 0A (+12VDC output)

MAXIMUM LOAD CURRENT

- 1.5A (+5VDC output)
- 13A (+12VDC output)

TOTAL OUTPUT POWER

140 watts

EFFICIENCY

80% min. @ max.

OVER VOLTAGE PROTECTION

13.5V to 17V

AC POWER GOOD (PWR-GOOD) SIGNAL REQUIRED (DPS-500 ONLY)

+5V
+12V

LED STATUS

- On: RPS good
- Off: RPS failed

DIMENSIONS

196mm (L) x 195mm (W) x 50mm (H)

WEIGHT

1.5 kg

OPERATING ALTITUDE

3,000 m (10,000 feet) max.

STORAGE ALTITUDE

12,000 m (40,000 feet) max.

OPERATING TEMPERATURE

0° to 50° C

STORAGE TEMPERATURE

-20° to 80° C

OPERATING HUMIDITY

- DPS-500: 5% to 95% RH
- DPS-500DC: 10% to 90% RH

STORAGE HUMIDITY

- DPS-500: 5% to 95% RH
- DPS-500DC: 10% to 90% RH

SAFETY STANDARDS

- UL 60950 3rd Edition
- CSA 22.2 No.234
- EN 60 950

SAFETY APPROVALS

- UL
- CSA

EMI

FCC Class B

MTBF

- DPS-500: 598,552hours
- DPS-500DC: 120,295hours

DPS-600

INPUT VOLTAGE

90VAC to 264VAC

INPUT FREQUENCY

47Hz to 63Hz

INPUT CURRENT

- 10A at 115VAC, 60Hz (max.)
- 5A at 230VAC, 50Hz (max.)

INRUSH CURRENT

- 30A at 115VAC, 60Hz input, 25 C (max.)
- 60A at 230VAC, 50Hz input, 25 C (max.)

TOTAL OUTPUT POWER

500 watts (max.)

LINE REGULATION

Less than + 2% (measuring at rated load and changing +/-10% of nominal input voltage)

LOAD REGULATION

(Includes cross regulation between output voltages)

- 105 for +12V
- 3% for - 50V

HOLD UP TIME

16mS (typical) at 115VAC input and rated load from end of last charging pulse to when main output drops to 95% output voltage

EFFICIENCY

80% (typical) at nominal line and maximum load

OVER VOLTAGE PROTECTION

- Trip point: below 16V for +12V output
- Auto-recovery mode against short circuit or over load conditions
- -50V output below -57V will protect itself against short circuit or over load conditions

DIAGNOSTIC LED

RPS good/failed

OPERATING TEMPERATURE

0° to 50° C

STORAGE TEMPERATURE

-40° to 70° C

HUMIDITY

10% to 90% non-condensing

DIMENSIONS

441 (W) x 139 (D) x 44.5 (H) mm
19-inch rack-mount width, 1U height

WEIGHT

3.5 kg

EMI APPROVALS

- FCC Class B
- CE

SAFETY APPROVALS

- UL
- CUL

MTBF

598,664 hours

Redundant Power Supply & LAN Switch Compatibility

Switch \ RPS	DPS-200	DPS-300	DPS-500/500DC	DPS-600
DES-3528	✓			
DES-3528P				✓
DES-3528G	✓			
DES-3552	✓			
DES-3552P				✓
DES-3526	✓			
DES-3550	✓			
DES-3828	✓			
DES-3828P				✓
DES-3852	✓			
DGS-3024		✓		
DGS-3048			✓	
DGS-3100-24	✓			
DGS-3100-24TG	✓			
DGS-3100-24P				✓
DGS-3100-48			✓	
DGS-3100-48P				✓
DGS-3224TGR		✓		
DGS-3312SR		✓		
DGS-3426			✓	
DGS-3427			✓	
DGS-3450			✓	
DGS-3612	✓			
DGS-3612G			✓	
DGS-3627			✓	
DGS-3627G			✓	
DGS-3650			✓	



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 Release 03 (June, 2008)