



Switched Mode Power Supply



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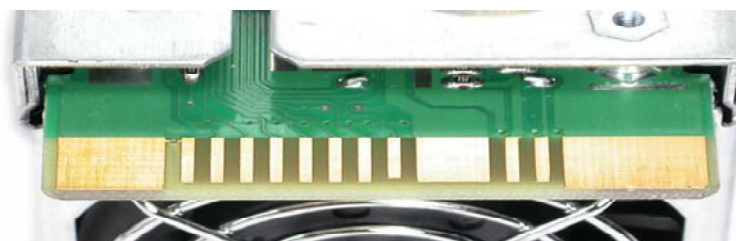
Type: **12VDC-32A-400W-ESP113**

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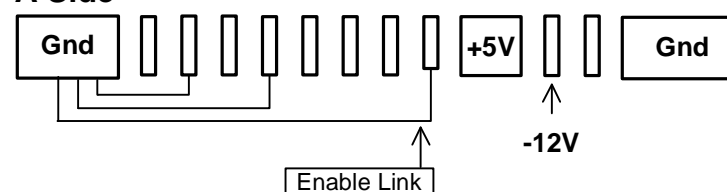
HP/Compaq: 194989-002

Rear Panel View & Basic Connection Details

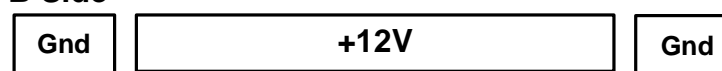
WARNING - output negatives are earthed



A Side



B Side



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General Data

Brand: HP COMPAQ (DL380G3)
HP Part #: 194989-002
Spares #: 313299-001
Model: ESP113 Series
OEM: PS3381-1C1 LITE-ON

Input Voltage: 220~240V
Input Current: Up to 4A
Output Voltage: 12.0V (internally adjustable -9/+8%)
Output Current: Up to 32A
Remote Sensing: Yes
Minimum Load Current: 1% (nominal)
Over current protection: Yes (110% - 150%?)
Over/Under voltage protection: Yes
Management Voltage: 5V Standby Output
Management Current: up to 5A
Output Voltage: -12Vdc (secondary output)
Output Current: Up to 0.30A
Total Output power: 400W
Operating temperature: +5°C ~ +40°C.
Operating frequency: 50/60Hz
Conversion efficiency: Typically 85% (load dependant)
Power Factor: >0.90. APFC
Power indicator: Yes
Over temperature protection: Yes
Wiring: PC Board Edge 0.1" pitch

Size: 320 x 78 x 63 mm (nominal LxWxH)
Fixing: Intended to sleeve mount
Weight: ~1.712kg

Package & Options include:

1 x 12V 32A 400W DC power supply.
 Optional: IEC mains input cable, flexible 50~100A output cable and in/out connectors negotiable (if/while stock exist).

General Installation & Operation

Overview:

This DC Power Supply is a very high quality self-contained unit deemed usable in applications where 12V DC is required at continuous currents up to 32 Amps with good regulation and compact size... typical applications may include:

LiPo battery charging, FM, SSB and TV transmitters, CNC machines-motor drive, original computer server systems etc..

Operation: Deploy adequately sized cable etc., connection to the mains supply and the DC output, and add control wire jumpers or switches to render the supply operational.

The supply requires no jumpers to bring the supply into standby (+5V aux), with the fan on low speed. To enable the 12V supply requires A6, A8 and A12 to be tied to ground (DC -ve). An optional SPST switch in the GND – A12 line will allow the 12V supply to be shut down reducing the fan noise without disabling the 5 Volt AUX supply.

Mounting: These units were originally deployed in 19" rack-mounted hot-swap sleeves (as part of a major computer server infrastructure) and only require adequate ventilation at the ends to facilitate un-interrupted air-flow of the internal axial fan.

Note - Free-standing or custom fixing is at the discretion of the user.

Adjustments: There are **no external adjustments**, however, for the technically competent, some internal adjustments may be made to suit special application including raising the output to 13.0V. There are various WWW resources offering 'advice' along these lines.

Connection: In the absense of an original sleeve and mating connector, some imagination using industry-standard practices can be applied to achieve practical connection to the high-current load terminations.
 Note - There are various WWW resources offering 'advice' on using the included rear Hot-Swap connections.

Control: See a typical connection and control schematic/diagram on the left:

Caution: This supply is capable of outputting destructive power levels! Suitably rated protective fusing or circuit breakers should be provided on the 12 and 5 Volt rails to avoid the risk of fire and/or destruction of your connected equipment under fault conditions.