Switched Mode DC Power Supply

Type: 12V-62A-750W-HSTNS-PL18

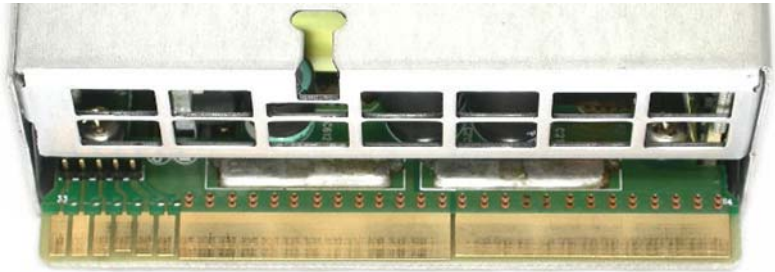
http://www.casa.co.nz

DRAFT

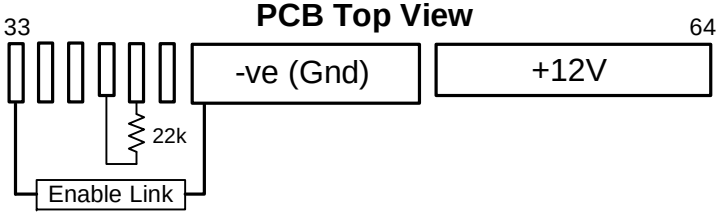
HP: 506822-201

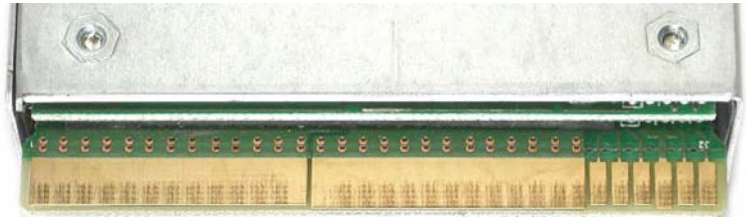
Rear Panel View & Basic Connection Details

WARNING – output negatives are earthed

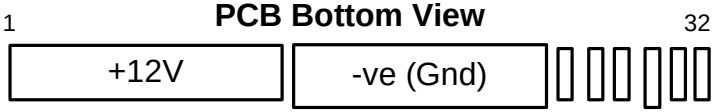


PCB Top View





PCB Bottom View



NOTICE – the information on this page is not guaranteed for accuracy – CASA accepts no responsibility *(neither expressed nor implied)* for any errors or the consequence therefrom.

General Data

Brand: HP (Common Slot series)
HP Part #: 506822-201
Spares #: 511778-001
Model: HSTNS-PL18
OEM: PS-2751-2CB-LF LITE-ON

Input Voltage: 100~240V
Input Current: Up to 9A @100V, 4.5A @240V
Mains Input Connection: IEC C14 chassis plug
Output Voltage: ***12.0V*** *(internally adjustable -/+?%)*
Output Current: Up to ***62.5 Amps*** (tested to 52A)
Remote Sensing: No
Minimum Load Current: 1% *(will run no-load)*
Over current protection: Yes *(%?)*
Over/Under voltage protection: Yes
Management Voltage: 12V Standby Output
Management Current: up to 2.5A
Total Output power: 750W
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 2 rows of 32 pins

Size: 240 x 86 x 40 mm *(nominal LxWxH)*
Fixing: Intended to sleeve mount
Weight: ~1.006kg

Package & Options include:

1 x 12V 62A 750W DC power supply and 22k resistor.
Optional: IEC mains input cable, flexible 50~100A output cable and printed circuit board output connector (refurbished EDAC 345-064-524-201, or equivalent, rated 3A per pin negotiable while stocks exist. Circuit breakers and other parts will be provided upon detailed request.

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 62 Amps with good regulation and compact size... ...typical applications may include:

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

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

The supply requires two additions to bring the supply into Run mode, a jumper from 33 to -ve and a 22k resistor from 36-37. The fan runs at low speed while the supply is cool and speeds up with increasing temperature. An optional SPST switch in the GND – 33 line will allow the 12V supply to be shut down reducing the fan noise without disabling the 12 Volt SB 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-interupted 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.
A standard 0.1" 32 way 2 row connector will mate to the output PCB tracks.
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. *We welcome users comments and suggestions for improving this sheet.*

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