



Switched Mode Power Supply



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Type: **51V4DC-57A-2950W-ESP120**

DRAFT

HP/Compaq: 226510-001

Rear Panel View & Basic Connection Details



General Data

Brand: COMPAQ HP (Astec)

HP Part #: 226519-001

Spares #: 253232-001

Model: ESP120 Series

OEM: HPS3KW.... (AA21970-288) ASTEC

Input Voltage: 200~240V

Input Current: Up to 20A

Inrush Current: Up to 100A (peak)

Output Voltage: 51.4V (adjustable +/- 5%)

Output Current: up to 57A

Minimum Load Current: 10% (nominal)

Over current protection: Yes (110% - 150%)

Management Voltage: 5V Standby Output

Management Current: up to 5A

Over current protection: Yes (101% - 125%)

Output power: 2950W

Operating temperature: +5°C ~ +40°C. (Derated 50% to 70°C)

Operating frequency: 50/60Hz

Conversion efficiency: Typically 85% (depends on load.)

Power Factor: 0.98 typical. APFC

Power indicator: Yes

Over temperature protection: Yes

Wiring: DC – FCI 51875-001

AC – FCI 51871-001

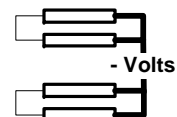
Size: 550 x 124 x 70 mm (nominal LxWxH)

Fixing: Intended to sleeve mount

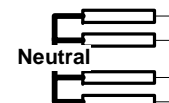
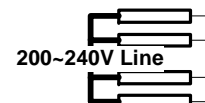
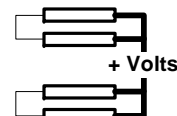
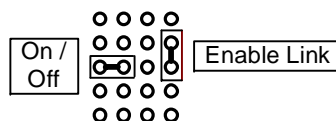
Weight: ~6 kg

Package & Options include:

1 x 57A 51V 2950W DC power supply with control header or jumpers and/or SB/Run lead for remote start/stop, flexible 50~100A output cable (optional in/out connectors negotiable if/while stock exist).



Note - output is isolated (floats above earth)



General Installation & Operation

Overview:

This DC Power Supply is a very high quality self-contained unit deemed usable in applications where 48V DC is required at continuous currents up to 57 Amps with good regulation, low RF/EMI noise 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: Basically just appropriate (safely connected & adequately sized cable etc.) connection to the mains supply and the DC output and a control-pin jumper are required to render these supplies operational.

The supply requires that the **PSON** be connected to the **5VSB** return to bring the supply into standby and **PSKI** connected to **PRESENT** to enable the 51V supply. A SPST switch in the PSKI – Present line allows the 51V supply to be shut down without disabling the 5 Volt 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 4 internal axial fans.

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. There are various WWW resources offering 'advice' along these lines.

Connection: In the absence of original sleeve and/or the proprietary mating connectors, some imagination using industry-standard practices can be applied to achieve practical connection to the mains and high-current load.
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 should be provided on the 51 Volt rail to avoid the risk of fire and/or destruction of your connected equipment under fault conditions.

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