## 500W, Single-output, Low Voltage Power Supply LVC 319 Series

- 12VDC regulated and adjustable output
- Convection/conduction cooling
- Full electronic protection
- Industrial quality
- Field-proven design
- Also available as plug-in module
- N+1 redundancy available



The LVC319 Series AC/DC power supply uses an advanced high frequency conversion technology to generate 500W output power at 12VDC with convection cooling. This low profile design features low component count and high efficiency. The use of professional quality components and rigorous quality control results in an MTBF exceeding 100,000 hours at 45°C.

## **SPECIFICATIONS**

Input Voltage

115/230VAC +/- 15% 47 - 63Hz, selection by jumper

**Input Protection** 

Internal safety fuse
Inrush current limiting
Varistors
Lower voltage than the specified
minimum input will not damage
the unit

Input Isolation/Safety

2250VDC input to chassis 4300VDC input to output 8mm spacing 500VDC output to chassis

Standards

Designed to meet EN60950 and related standards CSA and UL standards

**EMI** 

Meets EN 55022 Class A

**Hold Up Time** 

Minimum 10ms at full load for 5% drop of output voltage at nominal input

Switching Frequency

55KHz +/- 3KHz

**Output Voltages** 

12VDC/40A Consult factory for other voltages

**Redundancy Diode** 

Optional

Line/Load Regulation

 $\pm$  1% combined from no load to full load

Dynamic Response ???

Max 5% voltage deviation for 10% to 50% load step, with better than 1msec recovery time

**Output Ripple/Noise** 

Better than 1% of output voltage peak to peak or 0.2% RMS of the output voltage (20MHZ BW)

**Output Overload Protection** 

Current limiting with short circuit protection (hiccup mode) Self-resetting thermostat for thermal protection **Output Overvoltage Protection** 

Double regulator loop and Transzorb clamp

Efficiency

Min 85% typical (depending on input/output configuration)

**Operating Temperature** 

0 to 50°C at full power without derating.

Extended temperature range available

Temperature Drift

0.03% per °C over operating temperature range

Cooling

Natural convection and conduction via base plate

MTBF

100,000 at 45°C Demonstrated MTBF is significantly higher

**Indicators** 

None

**Control Input** 

None

Alarm Output

**Environmental Protection** 

Basic ruggedizing

Dimensions (WxHxD)

F4: 5.1x 2.63" x 13.82

Weight

4.4 lb (2.0 kg)

**Connections:** 

Screw type terminal block For other connectors please consult factory

Warranty

Twelve months subject to application within good engineering practice

