

# PS319 Series AC Power Supply



## Benefits

- Ultra-Quiet
- Power sensitive electronics without interference
- Rugged & Reliable
- Ensure years of safe and trouble free operation

## Applications

- Marine / Automotive / RV
- Electric Utilities and Substations
- Telecom Power Plants
- Manufacturing Locations
- Steel Mills
- Military Applications (COTS)
- Industrial Controls
- OEM Applications
- Solar / Alternative Power Systems
- Fuel Cells

## Power Supplies

### PS319 Series 500W

#### Description

The PS319 Series AC/DC power supply uses a high frequency half-bridge topology with many years of field proven reliability.

It generates 500W output power with convection/conduction cooling and 600W if external forced air is available.

For 700W output power, the PS319F version is available with built-in fans.

Standard output voltages are from 24V to 125VDC.

The chassis-mount design features low component count and high efficiency.

The use of high quality components and rigorous quality control results in a demonstrated MTBF exceeding 1,000,000 hours confirmed by a track record established in hundreds of applications.

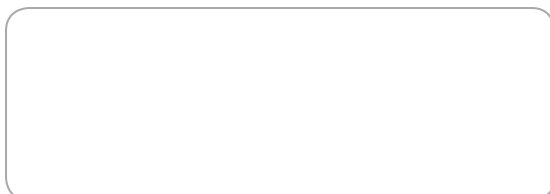
#### Features

- Compact size
- Industrial quality
- Single regulated and adjustable output
- Convection/conduction cooling
- 500W output power
- Full electronic protection
- Field-proven design
- n+1 redundancy available
- 1 year parts and labour warranty

# Specifications ( Specifications Subject to Change Without Notice)

<b>Input Voltage range</b>	115/230VAC +/- 15%, 47 - 63Hz Voltage selection by internal jumper
<b>Input Protection</b>	Inrush current limiting Varistors Internal safety fuse Lower voltage than the specified minimum input will not damage the unit
<b>Isolation</b>	2250VDC input to chassis 4300VDC input to output 8mm spacing 500VDC output to chassis
<b>Switching Frequency</b>	55KHz +/- 3KHz
<b>Hold Up Time</b>	Minimum 10ms at full load for 5% drop of output voltage at nominal input
<b>Output Voltages</b>	24VDC/20A, 48VDC/10A, 125V/5.6A standard Consult factory for other voltages
<b>Redundancy Diode</b>	Optional
<b>Line / Load Regulation</b>	± 1% combined from no load to full load
<b>Dynamic Response</b>	Max 5% voltage deviation for 10% to 50% load step, with better than 1msec recovery time
<b>Output Overvoltage Protection</b>	Double regulator loop completely stable and independent of main loop
<b>Output Overload Protection</b>	Rectangular current limiting with short-circuit protection (no hiccup) Thermal shutdown in case of insufficient cooling (self resetting)
<b>Efficiency</b>	Typical 80% at full load (Output voltage dependent)
<b>EMI</b>	EN 55022 Class B
<b>Output Ripple/Noise</b>	Less than 1% of output voltage peak to peak or 0.2% RMS of the output voltage (20MHZ BW)
<b>Operating Temperature</b>	0 to 50°C at full power without de-rating Extended temperature range available
<b>Temperature Drift</b>	0.03% per °C over operating temperature range
<b>Cooling</b>	Conduction to customer heatsink or chassis and natural convection
<b>Environmental Protection</b>	Basic ruggedizing, Optional conformal coating
<b>Humidity</b>	5 – 95% non-condensing
<b>MTBF</b>	150'000 at 45°C Demonstrated MTBF over one million hours
<b>Indicators</b>	None on standard version
<b>Control Input</b>	None
<b>Alarm Output</b>	None on standard version Available as option
<b>Connections</b>	12 pole barrier type terminal block with 3/8" spacing
<b>Dimensions</b>	F4: (5.1x 2.63" x 13.82") 12.9x6.7x 35.1cm including mounting flanges and terminals
<b>Weight</b>	2.0 kg
<b>Standards</b>	Designed to meet EN60950 and corresponding US and CSA standards
<b>RoHS Compliance</b>	(Directive 2002/95/EC) According to requirements
<b>Warranty</b>	1 year

Available from:



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The power conversion company

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