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)*

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

Available from:

RIPEnergy®

The power conversion company

RIPEnergy AG
Wägitalstrasse 24
CH-8854 Siebnen
Switzerland

Ph +41-(0)43-818 53 85
Fax +41-(0)43-818 53 87
www.ripenergy.ch

Version 1.10.12