

PSP319 Series AC Power Supply



Benefits

- Electronic power factor correction (PFC)
- 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

PSP319 Series 450W

Description

The PSP319 Series AC/DC power supply with factor corrected input delivers up to 450W output power. This fieldproven design has a well documented record of reliable operation in very demanding applications. Its rugged construction ensures that it can withstand high levels of shock and vibration. The PSP319 features low component count and high efficiency. The use of professional quality components and rigorous quality control results in an MTBF exceeding 150,000 hours at 45°C.

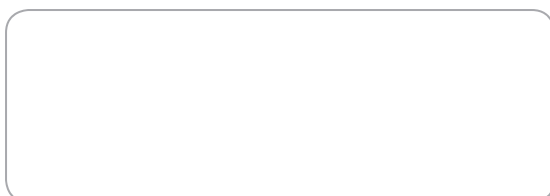
Features

- Compact size
- Rugged, industrial quality
- Single regulated and adjustable output
- Convection/conduction cooling
- 450W 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	Universal 90 ... 264VAC, 47 - 63Hz
Input Protection	Inrush current limiting Varistors Internal safety fuse Lower voltage than the specified minimum input will not damage the unit
Power Factor	Min. 0.97 at full load for the entire input range. Meets EN61000-3-2
Isolation	2250VDC input to chassis 4300VDC input to output 8mm spacing 500VDC output to chassis
Switching Frequency	50-150KHz Boost section (dependent on the load) 55 KHz +/-3KHz for the DC/DC (half-bridge) section
Hold Up Time	Minimum 10ms at full load for 5% drop of output voltage at nominal input
Output Voltages	12VDC/37.5A, 24VDC/18.7A, 48VDC/9.4A, 54VDC/8.3A, 125V/3.6A are standard Consult factory for other voltages
Redundancy Diode	Optional Not available for 12V version
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	Second regulator loop. Typically set at 120% of nominal output voltage
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 A as minimum
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 for full specification 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, Full ruggedizing and conformal coating on request
Humidity	5 – 95% non-condensing
MTBF	150'000 at 45°C Demonstrated MTBF is significantly higher
Indicators	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	According to requirements
Warranty	1 year

Available from:



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The power conversion company

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