

PSP419 Series AC Power Supply



Benefits

- Active Powerfactor Correction (PFC)
- Power sensitive electronics without interference
- Rugged & Reliable
- Ensure years of safe and trouble free operation

Applications

- Industrial Controls (OEM Applications)
- Base Station Power (Radio & Telecommunications)
- Security Systems
- Marine & other rugged environments
- Mobile Offices (TV and Radio Vans)
- Automotive / RV
- Electric Utilities and Substations
- Field Work / Construction Sites
- Solar / Alternative Power Systems
- Emergency Power Backup (UPS)
- Product Burn-in Facilities

Power Supplies

PSP419 Series 450W

Description

The PSP419 is a plug-in type industrial quality AC/DC power supply system with power factor corrected input.

A system can be built with up to five, 450W plug-in modules assembled in a 4U x 19" card-frame. It delivers a maximum of 2250W or 1800W with N+1 redundancy. Standard outputs available for each module are 24V/18A and 48V/9A.

The hot-insertable modules have built-in redundancy diodes, a feature which also makes the unit suitable for battery charging.

The system is cooled by natural air convection.

Suitable for a wide range of applications, the PSP419 has full electronic protection, high efficiency and low output noise.

It features low component count and high efficiency. Robust construction and the use of components with established reliability results in a high demonstrated MTBF.

The PSP419 is manufactured at our plant under strict quality control.

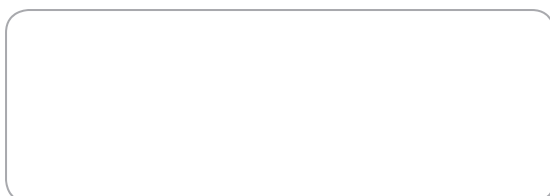
Features

- Rugged industrial quality
- Up to 2250W per 19" shelf
- Up to 450W per plug-in module
- Full electronic protection
- Convection cooled
- Field-proven design topology
- Plug-in or stand-alone package
- Hot swappable, N+1 redundant
- Telecom quality
- 2 years parts and labour warranty

Specifications (Specifications Subject to Change Without Notice)

Input Voltage range	Universal 95 ... 264VAC, 47 - 63Hz Consult factory for other inputs
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	Min. 10ms at any input for 5% drop of output voltage
Output Voltage/Current (per plug-in module)	24V/18A or 48V/9A standard. Consult factory for other voltages
Redundancy Diode	Installed on plug-in modules
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
Output Overload Protection	Rectangular current limiting with short-circuit protection (no hiccup) Thermal shutdown in case of insufficient cooling (self resetting)
Efficiency	Typically 80% at full load Output voltage dependent
EMI	EN 55022 Class A minimum
Output Ripple/Noise	Better than 1% of output voltage peak to peak or 0.2% RMS of the output voltage (20MHZ BW)
Operating Temperature Range	0 to+50°C for full specification, Extended temp. range available
Temperature Drift	0.03% per °C over operating temperature range
Cooling	Natural air convection
Environmental Protection	Basic ruggedizing Ruggedizing and conformal coating as option
Humidity	5 – 95% non-condensing
MTBF	135,000 hours @ 45°C Demonstrated MTBF is significantly higher
Indicators	Green "Output ON" LED on the front panel of each plug-in module
Alarm Output	Module Fail Alarm, Opto-coupler on the plug-in module (C-E opens on alarm), Form C on the shelf
Connections	H15 Connector on plug-in module Terminal blocks on the shelf
Dimensions	Plug-in module: 4U x 16HP x 304mm Shelf: 4U x 19" x 381mm
Standards	Designed to meet EN 60950 and corresponding UL and CSA standards
RoHS Compliance	Fully compliant
Warranty	2 years

Available from:



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