

DPS2000 Series

2000 Watt 48VDC Front End Power Supply with 12.5VSB / 4A

Features:

- Front End Switcher for use in Distributed Power Systems
- SSI Compliant (Server System Infrastructure)
- Hot-Swap N+1 Redundant Operation
- I2C Bus, EEPROM built-in
- Fan speed control for low noise and improved reliability
- Class B Emissions
- Front Panel LED Status Indicators
- Optional Reverse Airflow

FEATURES	BENEFITS
Low Cost Approach to Bulk Power	Eliminates the need for preload on system backplane
60% More Power than Traditional SSI Supplies	Provides system load balancing and increased reliability
No Minimum Load Required	Eliminates the need for preload on system backplane
Active Current Share	Provides system load balancing and increased reliability
SSI Compliant	Supports architecture for file server/workstations/datacom
I ² C Bus Communication	Supports power supply remote access





KEY MARKETS & APPLICATIONS

- Networking Equipment
- Distributed Power Architectures
- File Servers
- Workstations
- Industrial Applications

SPECIFICATIONS	2000 Watt 48VDC Front End Power Supply with 12.5VSB / 4A			
Input Voltage Range	90-264VAC, 47-63Hz			
Input Inrush Protection	MOV's Gas Tube (Inrush current < 35A)			
EMI	Conforms to CISPR22 Level A and FCC20780 Part 15, Class A			
Power Factor	0.99 at full load and nominal line	0.99 at full load and nominal line		
Efficiency	87% typical at 180 VAC (measured at full load)			
Hold-up Time	20ms at Full Load and 115 VAC input operation			
Output Channel	V1	V2 (12VSB)		
Output Configuration	+48V @ 40 A	+12.5V @ 4A		
Line Regulation	± 0.10 VDC	± 0.05 VDC		
Load Regulation	± 0.55 VDC	±0.27 VDC		
Output Ripple & Noise	250mv (p-p) 120mv (p-p)			
Transient Response	±1.45V @ 50% Load step ±0.50V @ 50% Load step			
Current Limit Protection	26.4- 36A	4.1- 6.5A		
Over-Voltage Protection	51.5- 55.5V	13.4-14.2V		
Under-Voltage Protection	39.6- 42V (sensed at the anode side) 10.0 - 10.43 (sensed at the anode side)			
Output Power	2000W @ High-line (180-264VAC) & 1000W @ Low-line (90-180VAC)			
Operating Temperature	0-50°C Full Load, derates above 50°C. Thermal Shutdown of 95°C at PFC heat sink and 100°C at Rectifier heat sink.			
Analog Status & Control	Single Wire Current Share, Remote Sense, Remote on/off, AC OK. DC OK, PS Present, PS Kill, AC Range and			
Signals	PS Kill, Predictive Failure, Power Supply Present, Power Supply Alert			
I ² C Status & Control Signals	Alert, 48V Fail, 12V Fail, Temperature Monitor, Voltage Monitor, Fan Monitor, Current Monitor, Temperature Monitor, PSM Interface, PSM Write, PSM Reset, PSMProtocols, PSM Read, Interrupt Status Register, Monitor Cycle Time, Hours in Operation Clock			
LED Indicators	AC OK, DC OK, Power Supply Failure, Current Limit, Predictive Failure			
Cooling	Two Internal Thermally Controlled Fans			
Shock & Vibration	MIL STD-810F			
Dimension	12.80 x 2.74 x 4.86" / 325.1 x 69.6 x 123.4mm			
Weight	7.0 lbs / 3.18 kg			
Safety Approvals	UL/cUL60950, EN60950, CE Mark (LVD) TUV			

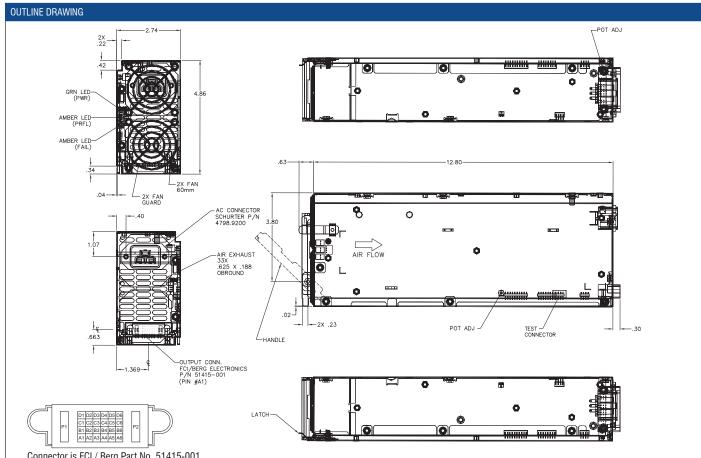
Specifications listed assume 25°C Ambient Operating Temperature and Full Load Operation unless otherwise specified. This product is qualified for use in OEM equipment and is not appropriate for stand-alone operation. The information contained within this specification is believed to be true and correct at the time of publication, however, Cherokee International accepts no responsibility for consequences arising from printing errors or inaccuracies. The information and specifications contained herein are subject to change without notice.







2000 Watt 48VDC Front End Power Supply with 12.5VSB / 4A



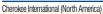
•		_				- 004
Connector is	FGI /	Bera	Part	NO.	514	เอ-บบ เ

	1	2	3	4	5	6
D	12VSB	RETURN	48LS	AC RANGE	SCL	A0
С	12VSB	RETURN	ACOK #	PRFL	REVERSED	A1
В	12VSB	RETURN	PSON #	PSKILL	SDA	A2
Α	FANP	PS ALERT	PRESENT #	PWORK	FAIL	FANC

LED INDICATOR CHART				
Power Supply Condition	PWR (Green)	PRFL (Amber)	FAIL (Amber)	
No AC power to all PSU	OFF	OFF	OFF	
No AC power to this PSU only	OFF	OFF	ON	
AC present / Standby output ON	Blinking	OFF	OFF	
Power supply DC outputs ON and OK	ON	OFF	OFF	
Power Supply Failure	OFF	OFF	ON	
Current Limit of 48VDC ouput	ON	OFF	Blinking	
Predictive Failure	ON	Blinking / Latched	OFF	

SIGNAL	DESCRIPTION
48LS	48V LOAD SHARE BUS
12VSB	12V STANDBY OUTPUT
RETURN	12V STANDBY RETURN
PSON #	POWER ENABLE INPUT
PRESENT #	POWER SUPPLY PRESENT
FANC	FAN CONTROL SIGNAL
PS ALERT	POWER ALERT TO SYSTEM
PWOK	POWER OK OUTPUT
ACOK #	AC OK OUTPUT
PSKILL	SUPPLY FAST SHUTDOWN
FAIL	FAILURE SIGNAL
PRFL	PREDICTIVE FAILURE
SCL	CLOCK SIGNAL
AC RANGE	AC OPERATING RANGE
SDA	DATA SIGNAL
A0	ADDRESS BIT 0
A1	ADDRESS BIT 1
A2	ADDRESS BIT 2
FANP	FAN PWR INPUT PIN
FANC	FAN CONTROL SIGNAL

Specifications listed assume 25°C Ambient Operating Temperature and Full Load Operation unless otherwise specified. This product is qualified for use in OEM equipment and is not appropriate for stand-alone operation. The information contained within this specification is believed to be true and correct at the time of publication, however, Cherokee International accepts no responsibility for consequences arising from printing errors or inaccuracies. The information and specifications contained herein are subject to change without notice.



2841 Dow Avenue P: (714) 544-6665 Tustin, CA 92780 USA F: (714) 838-4742 sales@cherokeepwr.com Revision: 0808

Boulevard de l'Europe, 131 P: +32.10.438.510 B-1301 Wavre, Belgium F: +32.10.438.213 sales.europe@cherokeepwr.com

Cherokee International (China) Power Supply Ltd. 1353 Chenqiao Road, Shanghai Sengpu Industrial Park Shanghai, 201401 China P: 021 6710 8910 sales.china@cherokeepwr.com

