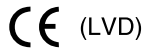




[ 2 YEAR WARRANTY ]



## DPF950 SERIES

Dual output

- 950W front end
- EN61000-3-2 compliant
- 12.75 x 8.0 x 4.93 inch (including panel)
- Hot-pluggable, N+1 redundancy
- Full set of status signals
- EN55022, EN55011 conducted emissions level B
- UL, VDE, CSA and BABT safety approvals

The DPF950 is a 950W universal input AC/DC front end power supply in a fully enclosed hot pluggable case with built-in fan, front panel with handle, IEC input connector, on/off switch and DIN output signal connector. Providing dual 48V and 5V outputs with a full set of status signals, the DPF950 is designed as a slot-in front end for distributed power systems. The DPF950 provides 950W of output power and is fully compliant with EN61000-3-2. Standard features include current sharing and full protection against overvoltage, overload and short circuit. Remote or local system monitoring is possible via a full set of status signals that include fan fail, DC good, remote inhibit and current monitoring. The DPF950, with full international safety approval and the CE mark, meets conducted emissions EN55022 level B. The DPF950 is designed for use as a front end in medium power communication applications adopting distributed power architecture. The DPF950 can be used in conjunction with our complete range of 3 to 200W DC/DC converters to fully configure a distributed power system.

### SPECIFICATION All specifications are typical at nominal input, full load at 25°C unless otherwise stated

OUTPUT SPECIFICATIONS		
Voltage set point		-46.5V ±0.50V
Total regulation (Full load to no load)	Main output Auxiliary output	±5.0% ±2.5%
Rise time	At turn-on	3.0s, max.
Transient response	Main output 50% to 100% step at 1.0A/μs	3V max. dev., 1ms recovery to 1.0%
Ripple and noise 0Hz to 30MHz (Note 5)	Main output Auxiliary output	480mV pk-pk, 50mV pk-pk
Overvoltage protection	latching	-55V to - 60V
Output power limit		950W
Short circuit protection	Cyclic operation	Auto recovery
Current sharing	3V droop, 1/3 Load to full load	±10% sharing above 5A load
INPUT SPECIFICATIONS		
Input voltage range		90 to 264VAC
Input frequency range		47Hz to 63Hz
Input surge current	220VAC, cold start @ 25°C	36A typ.
Input surge	300VAC	20ms
Safety ground leakage current	120VAC, 60Hz 230VAC, 50Hz	0.2mA 0.4mA
Input current	90VAC, 950W	14A rms max.
Input fuse	UL, IEC approved	250VAC, 20A
Power factor	110VAC 220VAC	0.99 0.98

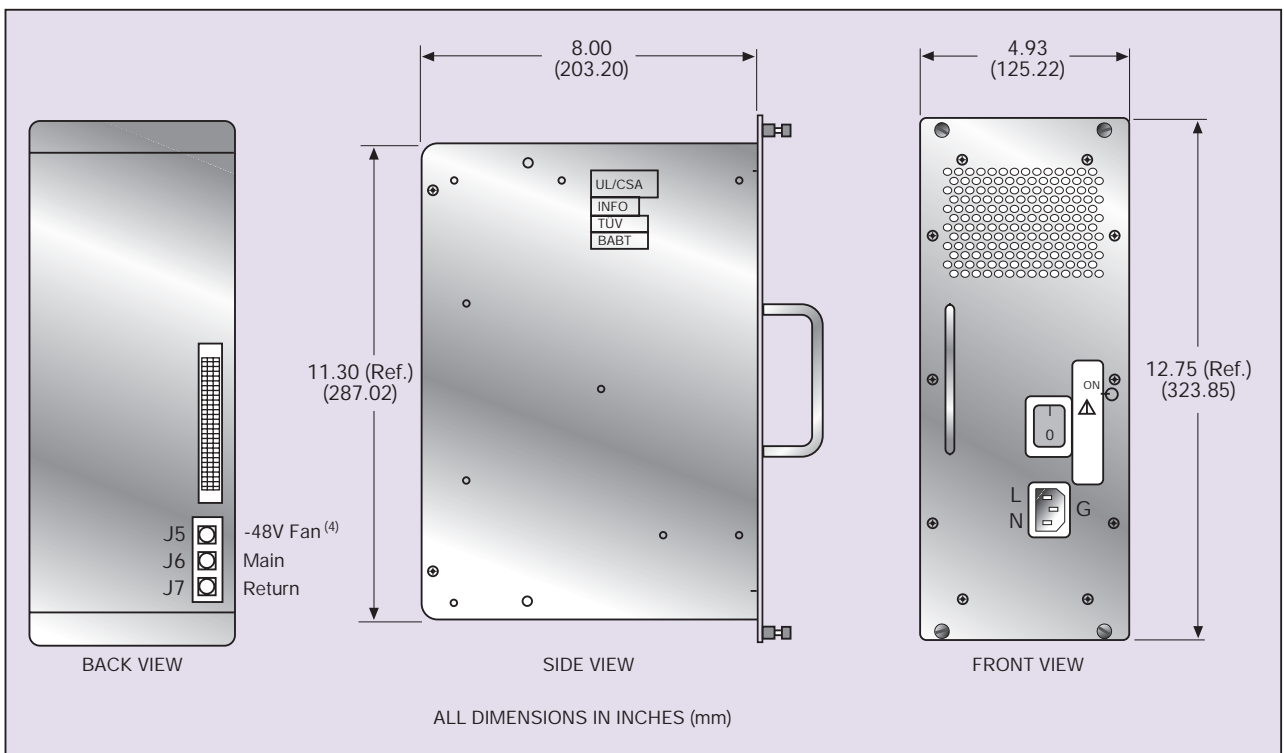
EMC CHARACTERISTICS		
Radiated noise	EN55022/11, FCC part 15	Level A
Conducted noise	EN55022/11 FCC part 15	Level B Level A
Harmonic current emm.	EN61000-3-2	Compliant
Electrical fast transients/bursts	EN61000-4-4	Level 3
Surge susceptibility	EN61000-4-5	Level 3
GENERAL SPECIFICATIONS		
Hold-up time	120VAC, 60Hz FL	20ms @ 950W
Efficiency	90Vin, >66% rated load	78% min.
Isolation voltage	Input/output Input/chassis	3000VAC 1500VAC
Switching frequency		50kHz
Approvals and standards	VDE0805, EN60950, IEC950 UL1950, BABT CSA C22.2 No. 950	
Weight		6.4kg (14lbs)
MTBF	MIL-HDBK-217F @ 25°C	100,000 hours
ENVIRONMENTAL SPECIFICATIONS		
Thermal performance	Operating ambient, FL Non-operating 50°C to 70°C ambient, convection cooled	0°C to +50°C -40°C to +70°C Derate to 50% load
Cooling		Built-in fan
Relative humidity	Non-condensing	5% to 85% RH
Altitude	Operating Non-operating	10,000 feet max. 40,000 feet max.
Vibration	5Hz to 500Hz	2.4G rms peak
Shock	MIL-STD-810E	516.4 Part IV

# 950 Watt AC/DC PFC front-end for distributed power architectures

OUTPUT VOLTAGE	OUTPUT CURRENT		RIPPLE <sup>(5)</sup>	TOTAL REGULATION	MODEL NUMBER
	MIN	MAX			
-46.5V <sup>(3,4)</sup>	0A	19.02A	480mV	±5.0%	DPF950-9617
+5V	0.2A	15A	50mV	±2.5%	

**Notes**

- 1 Fan fail and power good are open-collector signals.
- 2 All signals are referenced to earth ground, as is the 5V output.
- 3 The main output is floating.
- 4 The -48V fan is derived from the main output, but is diode isolated. Total power from the two cannot exceed 875W.
- 5 0Hz to 30MHz, measured differentially with a 0.1µF ceramic capacitor connected across each output.



OUTPUT PIN CONNECTIONS			
PIN NUMBER	FUNCTION	PIN NUMBER <sup>(1,2)</sup>	FUNCTION
Pins A18-24	+5V	Pins C26-32	Ground
Pins B18-24	+5V	Pin C13	Fan Fail
Pins C18-24	+5V	Pin C14	Power Good L
Pins A26-32	Ground	Pin C16	Remote Inhibit
Pins B26-32	Ground	Pin A11	Current Monitor

**Mating connectors**

**Signals (+5V output)**

96-pin female DIN connector

**Main output**

3 ICON connectors (ELCON P/N: 259-28-0010)

**Input**

IEC

**International Safety Standard Approvals**

VDE0805/EN60950/IEC950 File No. 10401-3336-1079

UL1950 File No. E136005

CSA C22.2 No. 950 File No. LR41062C

Certificate No. 604452

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