

500, 750, 1000 WATTS POWER FACTOR CORRECTED SINGLE OUTPUT, FORCED CURRENT SHARING

SPF-500 SPF-750 SPF-1000



Featuring:

- Forced current sharing for N +1 redundancy
- Universal AC input
- 0.99 typical power factor
- Low ripple and noise
- DC power good and AC power fail signals
- True remote inhibit
- · Monotonic turn-on and turn-off

When you need a single-output power supply, but want all the proven industry leading features of our NMX series, the SPF power supplies can't be beat. They incorporate Condor's high performance, power factor correction, low cost and reliable technology. The SPF series gives you all this and more in low-profile, compact packages that cost no more than common single-output switchers without power factor correction.

STANDARD SPF SERIES

500 WATTS 90-264 VAC INPUT-11" x 5" x 2.5"

MODEL	OUTPUT RATING	PWR OUT
SPF-500-12	+12V @ 42A	500
SPF-500-15	+15V @ 34A	500
SPF-500-24	+24V @ 21A	500
SPF-500-28	+28V @ 18A	500
SPF-500-48	+48V @ 10.4A	500

750 WATTS 90-264 VAC INPUT-12.92" x 5" x 2.5"

MODEL	OUTPUT RATING	PWR OUT
SPF-750-12	+12V @ 62A	750
SPF-750-15	+15V @ 50A	750
SPF-750-24	+24V @ 31A	750
SPF-750-28	+28V @ 27A	750
SPF-750-48	+48V @ 16A	750

1000 WATTS 90-264 VAC INPUT-12" x 8" x 3.38"

MODEL	OUTPUT RATING	PWR OUT
SPF-1000-24	+24V @ 42A	1000
SPF-1000-28	+28V @ 36A	1000
SPF-1000-48	+48V @ 21A	1000

500 WATTS 11" x 5" x 2.5" **SPF-500**

750 WATTS 12.92" x 5" x 2.5" SPF-750

1000 WATTS 12" x 8" x 3.38" **SPF-1000**



SPF-750 4.7 lbs - 2.1 kgs

SPF-1000 10.4 lbs - 4.7 kgs



SPECIFICATIONS: ALL MODELS

INPUT

AC Input: 90-264 Vac continuous range, 47 to 63 Hz. 750 W units fused for 15 A. 1000 W units fused for 20 A.

Power Factor: 0.99 typical at full load. Meets EN61000-3-2.

- Inrush: Cold start AC current is less than 50 A at 115 Vac and 100 A at 230 Vac for 500 W and 750 W models; 90 A at 115 Vac and 180 A at 230 Vac for 1000 W models. Limited by thermistor
- Brownout Protection: Continuous range units hold regulation to 85 Vac.
- Holdup Time: 20 ms minimum after removal of power at full load. (See page 89.)

Efficiency: 75% typical.

AC Power Fail: Provides TTL "0" 5 ms before output voltage goes out of regulation band upon loss of power.

OUTPUT

Adjustability: User adjustable ±5% minimum.

Line & Load Reg: ±1% over AC input range and 0 to 100% load change. Ripple & Noise: Less than 1% p-p or 100 mV, whichever is greater.

Remote Sense: Compensates for 250 mV total line drop. Open sense lead protection. (See Redundancy, below.) Temperature Coefficient: 0.02% per degree C.

Stability: 0.1% over 8 hours after 30 minutes warm-up. **Transient Response:** Output voltage returns to within 1% in less than 500 µs for a 50% load change. Peak transient does not exceed 5%.

Overload Protection: All outputs are protected against overload and short circuit. Automatic recovery upon removal of fault.

- Overvoltage Protection: Protects load against power supply induced overvoltage. Trip point is factory set so that output voltage cannot exceed 136% of nominal.
- Remote Inhibit: Contact closure to the negative sense line or a TTL level "0" turns off DC output.
- DC Power Good (5V Outputs): Provides a TTL "1" open collector when output is above 4.6 V nominal.
- Redundancy: External OR-ing diodes and forced current sharing provide "N+1" capability. Remote sense (+S) compensates for additional 0.6 V diode voltage drop. When the current sharing terminal is connected between units, current sharing remains within 10% of the unit's full output current rating
- Reverse Voltage: Protected against reverse voltage up to supply current rating.

ENVIRONMENTAL

Thermal Protection: Shuts down power supply if overheated. Automatic recovery Temperature Range: 0° to 50°C at full ratings.

Safety Agencies: Most models are approved to UL1950; CSA 22.2 #234; IEC 950 and TÜV EN60950, Class 1 SELV., CE 72/23/EEC/93/68EEC (low voltage directive)

Conducted RFI: Meets FCC Part 15, Subpart J, Class A; EN55022 Class B; CISPR 22 Class B. Output Isolation: Isolated from ground 50 Vdc.

Cooling: Self cooled by internal ball-bearing fans

OPTIONS:

Consult factory for available options.

AC INPUT (90-264 VAC Continuous Range)

FUNCTION	115 VAC*	230 VAC	CONNECTOR
TB1- (L)	Line	Line 1	Barriar strip #6-32 scrows
TB1- (N)	Neutral	Line 2	3/8" centers
TB1- (⊕)	Safety Ground	Safety Ground	

DC OUTPUT

FUNCTION	MODEL	LOCATION	CONNECTOR	
	All SPF-500 models	Terminal +V	Bus Bars #8-32	
Output		Terminal -V	screws 2PL	
	All SPF-750 models	Terminal +V	Bus bars #1/4-20	
Voltage		Terminal -V	screws 2PL	
	SPF-1000-24, 28, and 48	Terminal +V	Bus bars #10-32 screws 2PL	
		Terminal -V		
	SPF-1000-12, and 15	Terminal +V	Bus bars #5/16-18 screws 2PL	
		Terminal -V		

STATUS AND CONTROL

FUNCTION	SPF-500	SPF-750	SPF-1000	CONNECTOR
Remote Sense	J1-2 (+S)	J1-5 (+S)	J3-7 (+S)	AMP MTA type
	J1-1 (-S)	J1-4 (–S)	J3-8 (–S)	#640456-6 (J1 - 500 W)
Power Good	J1-7	J1-3	J3-5	or
Inhibit	J1-5	J1-2	J3-4	#640656-3 (J2 - 500W)
Current Share	J1-6	J1-6	J3-6	#640656-6 (J1 - 750W)
AC Power Fail	J1-8	J1-1	J3-3	or
Aux. Fan Voltage	J2-1 (+12V)	N/A	J3-1 (+12V)	#640456-8 (J3 - 1000W)
	J2-2 (Rtn)	N/A	J3-2 (RTN)	pin headers (locking)
Signal Ground	J1-10	N/A	N/A	