



### UNIVERSAL INPUT

## FEATURES

- ♦ Wide range input 90 to 260VAC
- ♦ No load consumption < 0.5W
- ♦ Low safety ground leakage current
- ♦ Low ripple and noise
- ♦ Fast transient response
- ♦ Overcurrent, Short-circuit, Overvoltage, and Thermal protections
- ♦ 100% burn-in at full rated load
- ♦ Meets CEC and Energy Star efficiency level IV (except -12 model)
- ♦ Meets EN55022, FCC Class B, VCCI, EN61000 Class A,D
- ♦ Compliant with RoHS requirements

## DESCRIPTION

This series of switching power supplies are specially designed for portable applications. They are capable of delivering up to 120 watts of continuous DC output power. Construction is a 94V-1 rated polyphenylene-oxide case with an IEC 320/C6 inlet to mate with interchangeable cord for world-wide use. All models meet CISPR 22 and FCC class B emission limits and comply with UL, CSA, IEC and CE requirements.

## INPUT SPECIFICATIONS

Input Voltage	90 to 260 VAC
Input Frequency	47 to 63 Hz
Input Current	2.0A rms @ 115VAC 1.0A rms @ 230VAC
Inrush Current (at 25°C cold start)	60 amps @ 115VAC 120 amps @ 230VAC
Leakage Current (Touch current)	150µA max @ 115VAC 60Hz 250µA max @ 230VAC 50Hz

## ENVIRONMENTAL

Operating Temperature	0 °C to +40 °C.
Storage Temperature	-20 °C to +80 °C
Operating Humidity	10% to 95% RH, non-condensing

# FSP120 SERIES

## 96-120 WATT

## SWITCHING POWER

## SUPPLIES

## GENERAL SPECIFICATIONS

Construction	94V-1 rated polyphenylene-oxide case
Connectors / Terminals	IEC 320/C6 inlet. Options for DC Out.
Efficiency	86% min all models except -12, -13; 80% min for models -12, -13
Turn on delay time	2 Sec max
Power Factor	0.96 typical at 115VAC
Dielectric Isolation	3000VAC from input to output 1500VAC from input to ground
MTBF (per MIL-HDBK-217F)	100,000 hours minimum at full load at 25 °C ambient

## OUTPUT SPECIFICATIONS

Total Output Power	Refer to Rating Chart for each model
Output Voltage / Current, Adjustability, Peak Current	Refer to Rating Chart for each model
Minimum Load	No minimum load required
Hold Up Time	15 mSec min @ 110 VAC
Line Regulation	±0.5% max at full load
Ripple and Noise	350mV peak to peak max
Overvoltage Protection	Setting at 110-140% of Vnom output voltage
Overcurrent / Short Circuit Protection	Continuous protection with automatic recovery
Transient Response	Maximum excursion of 4% or better on all models, recovering to 1% of final value within 500 uS after a 25% step load change.

## EMC and SAFETY (1)

EMC Performance Standard	EN60601-1-2: 2001
	EN61000-3-2, -3-3, -4-2, -4-3, -4-4, -4-5, -4-6, -4-8, -4-11
EN55022, FCC-15, VCCI	Class-B Conducted, Radiated
Safety Standards (certified to)	UL60950 3rd, CSA C22.2 No 60950 3rd, EN60950: 2000 (Nemko)

(1) Products are rated for commercial environments and are not to be used nor are warranted in aerospace or life-support medical applications.



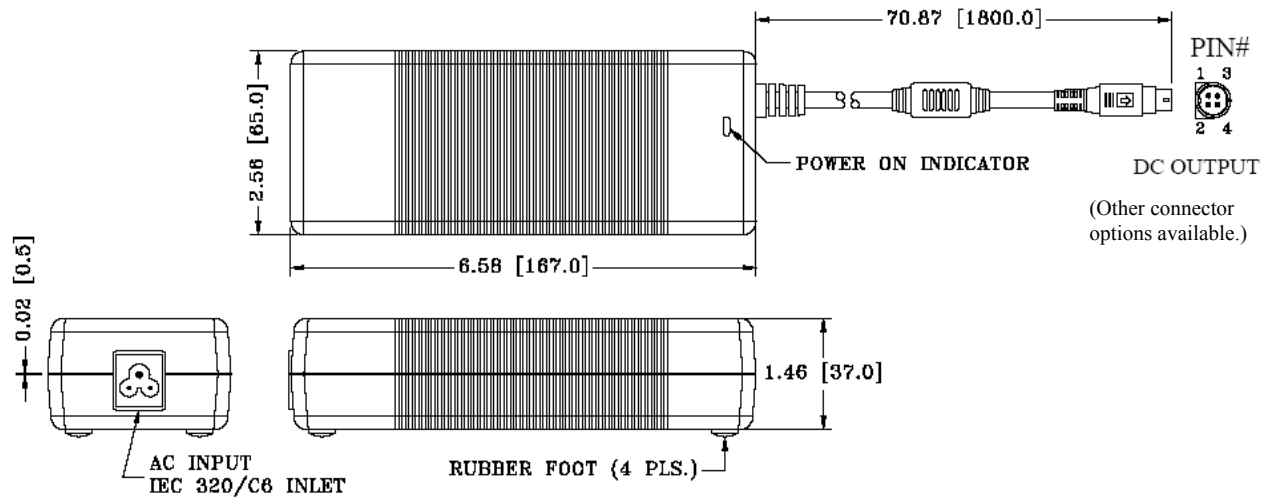
## OUTPUT VOLTAGE / CURRENT RATINGS

MODEL	Vnom.	Imax.	Imin.	Tol.	Max Output Power
FSP96-AHB	12V	8.0A	0A	5%	96W
FSP105-AGB	15V	7.0A	0A	5%	105W
FSP120-AKB	18V	6.67A	0A	5%	120W
FSP120-AAB	19V	6.32A	0A	5%	120W
FSP120-ABB	20V	6.0A	0A	5%	120W
FSP120-ACB	24V	5.0A	0A	5%	120W
FSP120-ADB	30V	4.0A	0A	5%	120W
FSP120-AEB	36V	3.34A	0A	5%	120W
FSP120-AFB	48V	2.5A	0A	5%	120W

### NOTE:

Ripple and noise: Measured peak-to-peak with 20MHz bandwidth and 10uF tantalum capacitor in parallel with a 0.1uF ceramic capacitor at rated line voltage and load ranges.

## MECHANICAL SPECIFICATIONS (mm / inches)



### NOTES

1. Dimensions shown in inch [mm]
2. Tolerance 0.02 [0.5] maximum
3. Weight: 1.37 lb, 621 grams approx.
4. DC output connector options are available. Contact Sales for details.

## PIN ASSIGNMENTS

MODEL	PIN	1	2	3	4	SHELL OF CONNECTOR
All Models FSP120-xxx		Return	Output (+V)	Return	Output (+V)	Return