



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, VCC, 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.



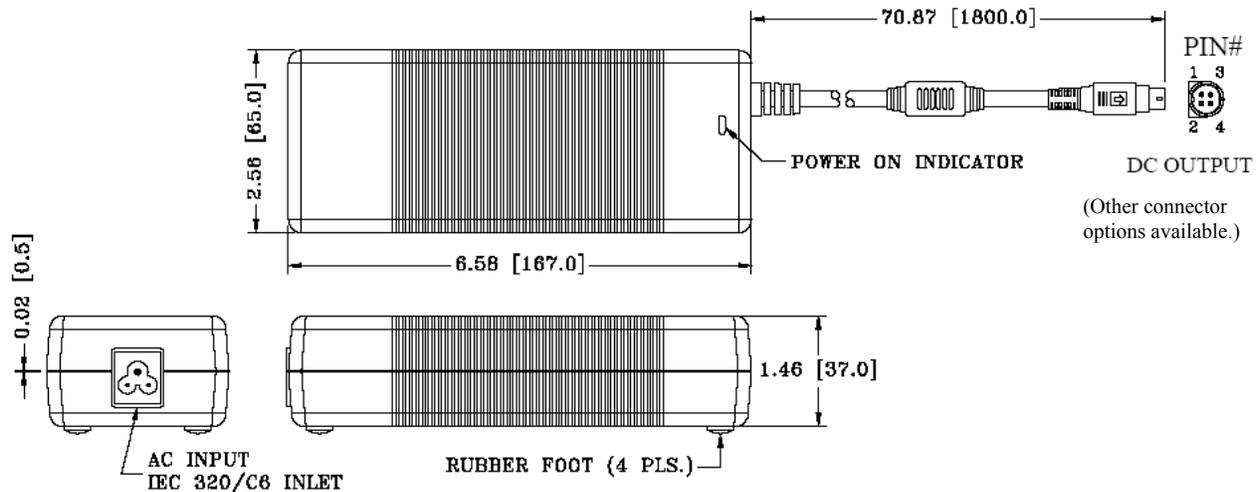
OUTPUT VOLTAGE / CURRENT RATINGS

MODEL	Vnom.	I _{max.}	I _{min.}	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