



UNIVERSAL INPUT

FSP150 SERIES

150 WATT

SWITCHING POWER

SUPPLIES

GENERAL SPECIFICATIONS

Construction	94V-1 rated polyphenylene-oxide case
Connectors / Terminals	IEC 320/C14 inlet. Options for DC Out.
Efficiency	88% min , at 110 VAC or 240 VAC
Turn on delay time	5 Sec max
Power Factor	0.95 typical
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

FEATURES

- ◆ Wide range input 90 to 260VAC
- ◆ Standby consumption < 1W
- ◆ 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 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 150 watts of continuous DC output power. Construction is a 94V-1 rated polyphenylene-oxide case with an IEC 320/C14 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	2A rms @ 115VAC 1A rms @ 230VAC
Inrush Current (at 25°C cold start)	No damage @ 115VAC or 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

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	3 mSec min @ 100 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)	UL60950-1 3rd, CSA C22.2 No 60950-1 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.



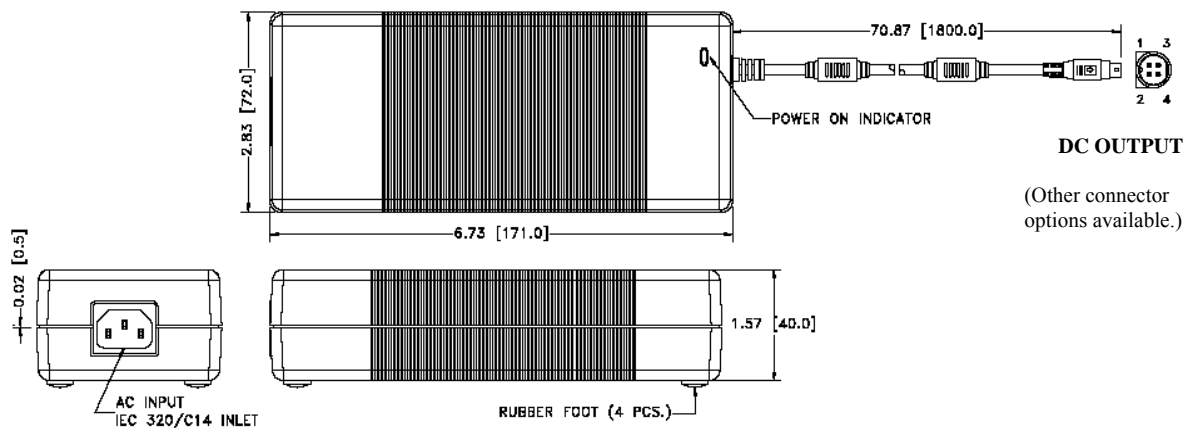
OUTPUT VOLTAGE / CURRENT RATINGS

MODEL	Vnom.	I _{max.}	I _{min.}	Tol.	Max Output Power
FSP150-AHA	12V	12.5A	0A	5%	150W
FSP150-AGA	15V	10.0A	0A	5%	150W
FSP150-AAA	19V	7.89A	0A	5%	150W
FSP150-ACA	20V	7.50A	0A	5%	150W
FSP150-ABA	24V	6.25A	0A	5%	150W

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: 1.76 lb, 800 grams approx.
4. DC output connector options are available. Contact Sales for details.
5. The length of output cable for 12V model is 37.4 (950.0)

PIN ASSIGNMENTS

MODEL \ PIN	1	2	3	4	SHELL OF CONNECTOR
All Models FSP150-xxx	Output (+V)	Output (+V)	Return	Return	Return