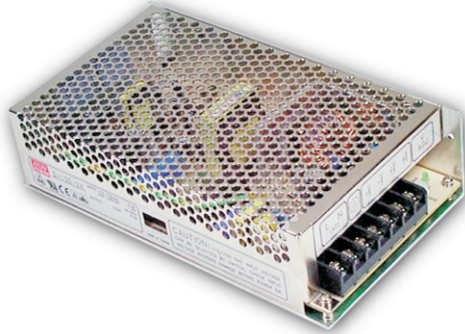




# 150W Single Output Switching Power Supply

# S-150 series

Authorized Distributor: Total Power International, Inc. Toll Free# 877-646-0900(US) Ph# 978-453-7272 www.total-power.com



### ■ Features :

- AC input range selectable by switch
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- 100% full load burn-in test
- Fixed switching frequency at 25KHz
- 2 years warranty

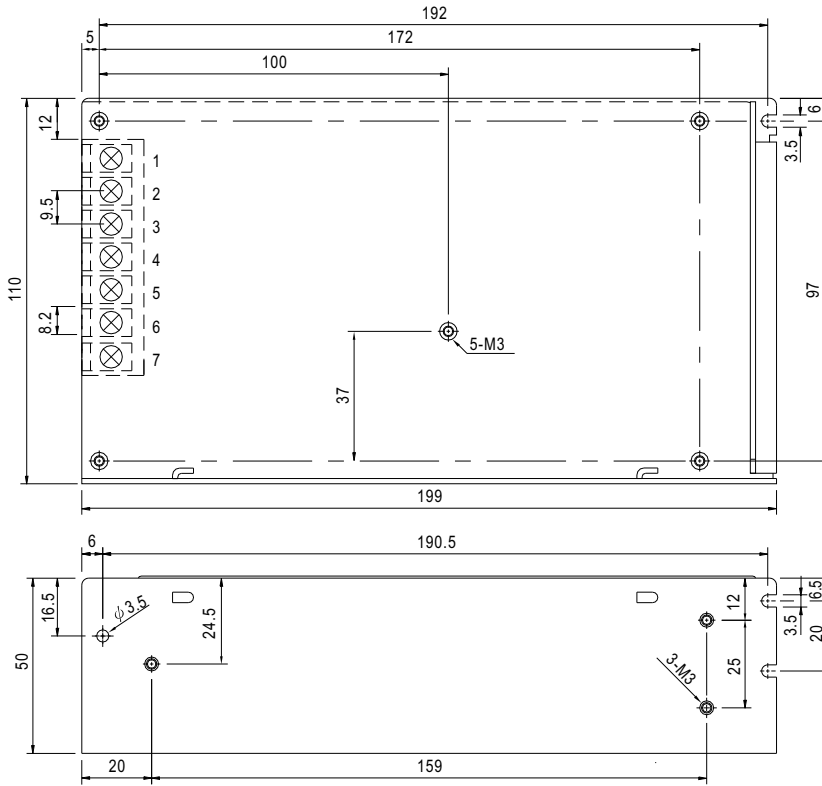


### SPECIFICATION

MODEL	S-150-5	S-150-7.5	S-150-9	S-150-12	S-150-13.5	S-150-15	S-150-24	S-150-27	S-150-48	
OUTPUT	DC VOLTAGE	5V	7.5V	9V	12V	13.5V	15V	24V	27V	48V
	RATED CURRENT	30A	20A	16.7A	12.5A	11.2A	10A	6.5A	5.6A	3.2A
	CURRENT RANGE	0 ~ 30A	0 ~ 20A	0 ~ 16.7A	0 ~ 12.5A	0 ~ 11.2A	0 ~ 10A	0 ~ 6.5A	0 ~ 5.6A	0 ~ 3.2A
	RATED POWER	150W	150W	150.3W	150W	151.2W	150W	156W	151.2W	153.6W
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	180mVp-p	180mVp-p	180mVp-p	180mVp-p	240mVp-p	240mVp-p	240mVp-p
	VOLTAGE ADJ. RANGE	4.5 ~ 5.5V	6 ~ 8.3V	8 ~ 10.4V	10.6 ~ 13.2V	12 ~ 15V	13.5 ~ 16.5V	21 ~ 28V	24 ~ 30V	43 ~ 53V
	VOLTAGE TOLERANCE Note.3	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.3%	±0.3%	±0.3%	±0.3%	±0.2%	±0.2%	±0.2%
	LOAD REGULATION	±0.5%	±0.5%	±0.3%	±0.3%	±0.3%	±0.3%	±0.2%	±0.2%	±0.2%
	SETUP, RISE TIME	100ms, 50ms at full load								
HOLD UP TIME (Typ.)	28ms at full load									
INPUT	VOLTAGE RANGE	88 ~ 132VAC/176 ~ 264VAC selected by switch 248 ~ 370VDC								
	FREQUENCY RANGE	47 ~ 63Hz								
	EFFICIENCY (Typ.)	78%	80%	80%	82%	83%	84%	85%	86%	87%
	AC CURRENT (Typ.)	3.2A/115VAC		1.6A/230VAC						
	INRUSH CURRENT (Typ.)	COLD START 35A								
	LEAKAGE CURRENT	<3.5mA / 240VAC								
PROTECTION	OVERLOAD Note.5	105 ~ 150% rated output power Protection type : Shut down o/p voltage, re-power on to recover								
	OVER VOLTAGE	5.75 ~ 6.75V	8.63 ~ 10.13V	10.35 ~ 12.2V	13.8 ~ 16.2V	15.53 ~ 18.2V	17.25 ~ 20.3V	30 ~ 34.8V	31.1 ~ 36.45V	55.2 ~ 64.8V
ENVIRONMENT	WORKING TEMP.	-10 ~ +60°C (Refer to output load derating curve)								
	WORKING HUMIDITY	20 ~ 90% RH non-condensing								
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH								
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)								
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes								
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL1012, UL60950-1, TUV EN60950-1 approved								
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC		I/P-FG:1.5KVAC		O/P-FG:0.5KVAC				
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH								
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B								
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3								
OTHERS	EMM IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, light industry level, criteria A								
	MTBF	286.7K hrs min. MIL-HDBK-217F (25°C)								
	DIMENSION	199*110*50mm (L*W*H)								
NOTE	PACKING	0.8Kg; 16pcs/13.8Kg/0.95CUFT								
	NOTE	<ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.</li> <li>5. If the power supply is short-circuited under no load, it will recover automatically when short-circuit is removed.</li> </ol>								

**Mechanical Specification**

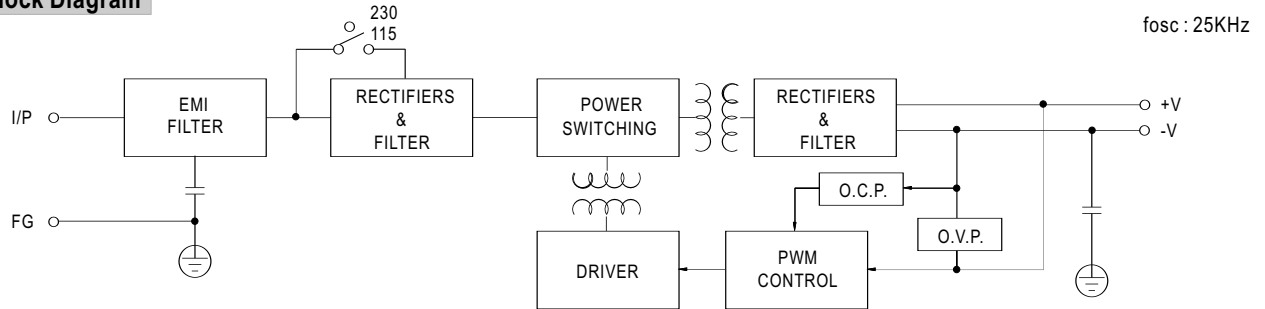
Case No. 906 Unit:mm



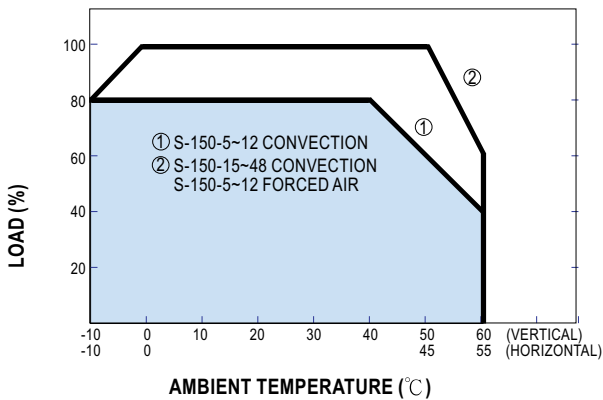
Terminal Pin No. Assignment

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4,5	DC OUTPUT -V
2	AC/N	6,7	DC OUTPUT +V
3	FG $\perp$		

**Block Diagram**



**Derating Curve**



**Static Characteristics (24V)**

