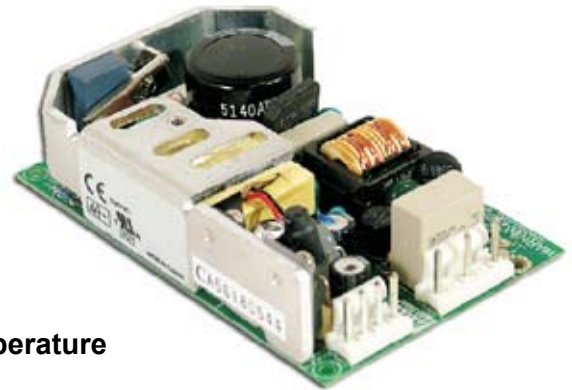


**FEATURES**

- Low Cost
- High Reliability
- 3 Year Warranty
- Low Leakage Current 0.3mA
- Universal AC Input / Full Range
- Fixed Switching Frequency at 100KHz
- Protections: Short Circuit /Overload /Over Voltage /Over Temperature



**SPECIFICATIONS: PSMPS30 Series**

All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted.  
We reserve the right to change specifications based on technological advances.

**INPUT SPECIFICATIONS**

Input Voltage	88 – 264VAC auto switch (127 – 370VDC)
Input Frequency	47 to 63Hz
AC Current (typical)	0.8A @ 115VAC / 0.5A @ 230VAC
Inrush Current	30A @ 230VAC cold start
Leakage Current	Less than 0.3mA @ 264VAC

**OUTPUT SPECIFICATIONS**

Output Voltage	See Table
Output Voltage Tolerance	±3% for all models except PSMPS-30-48 (±2%)
Output Power	See Table
Line Regulation	±1% max.
Load Regulation	±1% for all models except PSMPS-30-5 (±2%)
Output Current	See Table
Ripple & Noise (20MHz BW)	See Table
Setup, Rise Time	500ms and 30ms @ 230VAC and full load / 500ms and 30ms @ 115VAC and full load
Hold-Up Time	70ms @ 230VAC and full load / 12 ms @ 115VAC and full load.
Temperature Coefficient	±0.03%/°C (0~50°C)

**PROTECTION**

Over Voltage Protection	Protection Type: Shutdown output voltage, re-power on to recover
Overload Protection	Above 105% rated output power. Protection Type: Hiccup mode, recovers automatically after fault condition is removed.
Over Temperature Protection	Protection Type: Shutdown output voltage, recovers automatically after temperature goes down. Tj 135°C typically (U1) Detect on main control IC.

**GENERAL SPECIFICATIONS**

Switching Frequency (fixed)	100KHz
Efficiency	See Table
Isolation Voltage	4000VAC (Input to Output), 1500VAC (Input to FG), SHORT (Output to FG)
Isolation Resistance	100MΩ / 500VDC (Input to Output), 100MΩ / 500VDC (Input to FG)

**ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature	-10°C to +60°C (refer to derating curve)
Storage Temperature	-20°C to +85°C
Operating Humidity (non-condensing)	20% to 90% RH
Storage Humidity (non-condensing)	10% to 95% RH
Vibration	10~500Hz, 2G 10min./1cycle, Period for 60 minutes each along X, Y, and Z axes.
MTBF	547,000 hours min. (According to MIL-HDBK-217) at 25°C

**PHYSICAL SPECIFICATIONS**

Weight	150g
Dimensions	101.6(L) x 65.8(W) x 23.5(H) mm

**SAFETY & EMC**

Safety Standards	UL2601-1, TUV EN60601-1, IEC601-1 Approved
EMI Conduction & Radiation	Compliance to EN55011 (CISPR11) Class B
Harmonic Current	Compliance to EN61000-3-2,-3
EMS Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11, ENV50204, EN55024, EN60601-1-2, Medical level, criteria A

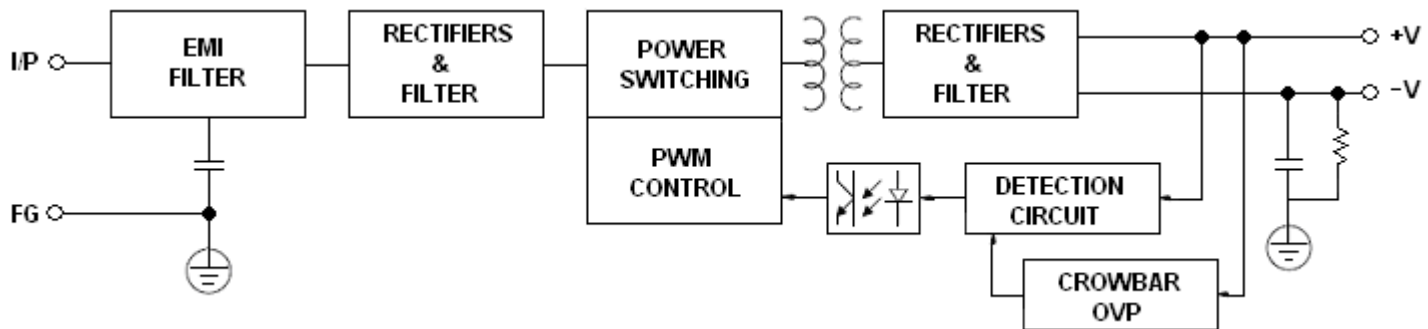
**OUTPUT VOLTAGE / CURRENT RATING CHART**

Model	Input Voltage	Output Voltage	Output Current	Ripple & Noise	Output Power	Efficiency
PSMPS-30-5	88~264VAC 120~370VDC	5 VDC	5A	80mV	25W	72%
PSMPS-30-12		12 VDC	2.5A	120mV	30W	75%
PSMPS-30-15		15 VDC	2A	150mV	30W	76%
PSMPS-30-24		24 VDC	1.2A	240mV	28.8W	77%
PSMPS-30-27		27 VDC	1.1A	240mV	29.7W	78%
PSMPS-30-48		48 VDC	0.6A	240mV	28.8W	78%

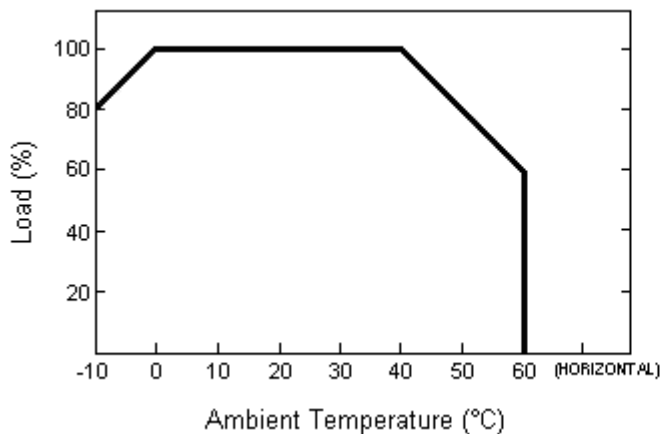
**NOTES**

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load, and 25°C ambient temperature.
2. Ripple & noise is measured at 20MHz bandwidth by using a 12" twisted pair-wire terminated with a 0.1µf and 47µF parallel capacitor.
3. Tolerance: includes set up tolerance, line regulation and load regulation.
4. The power supply is considered a component, which will be installed into final equipment. The final equipment must be re-confirmed that it still meets EMC directives.

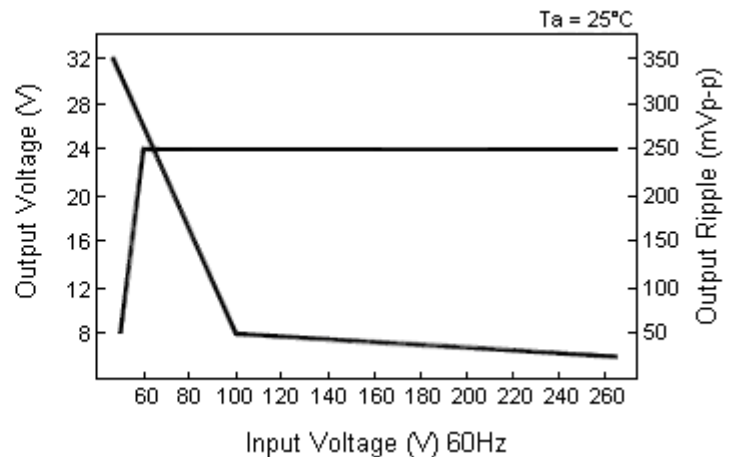
**BLOCK DIAGRAM**



**DERATING CURVE**

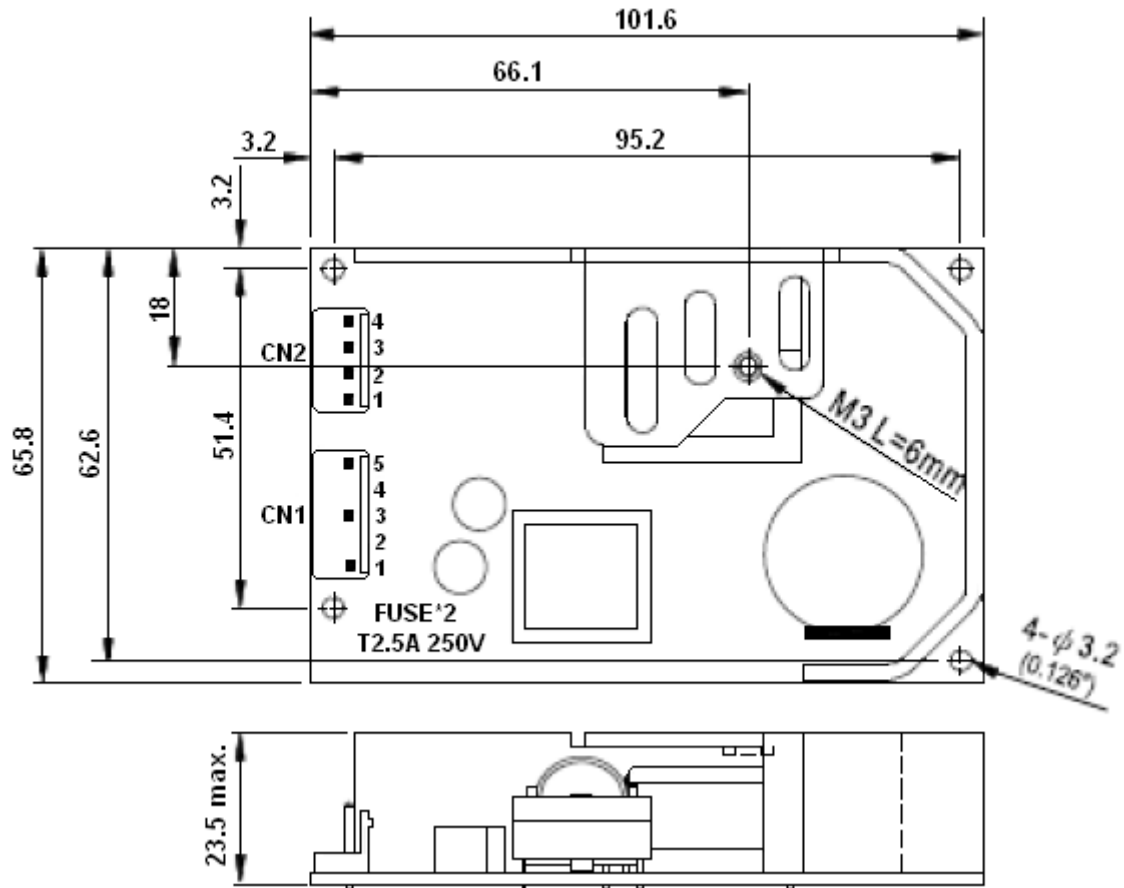


**STATIC CHARACTERISTICS**



**MECHANICAL DRAWING**

Unit: mm



**AC Input Connector (CN1): Molex 5277-02 or equivalent**

Pin. No	Assignment	Mating Housing	Terminal
1,2	-V	Molex 2139 or equivalent	Molex 2478 or equivalent
3,4	+V		

**DC Output Connector (CN2): Molex 41791-5 or equivalent**

Pin No.	Assignment	Mating Housing	Terminal
1	FG	Molex 2139 or equivalent	Molex 2478 or equivalent
2,4	No Pin		
3	AC/N		
5	AC/L		