

MODEL NO.ENO-2306

This specification describes the requirements of **60watts** Max switching power supply, Full voltage range.

☞ 1.0 INPUT REQUIREMENTS

1.1 AC input requirements

The input voltage, current, and frequency requirements for continuous operation are stated below.

Table 1 AC Input Line Requirements

Parameter	Min	Nom.	Max	Unit
Input voltage	90	100-240	264	VACrms
Vin Frequency	63	60---50	47	Hz
Input current		1.2--0.6		Arms

1.2 Inrush current

100Amps Maximum(for 230Vac).

50Amps Maximum(for 115Vac)(at cold start).

☞ 2.0 OUTPUT REQUIREMENTS

2.1 Static load:

Output	Voltage	Minimum load	Nominal load
60W	+12V	0A	5.0A

2.2 Output voltage:

The output voltage shall be statically regulated for all combinations of load, line and environment including cross regulation as shown.

Output	Voltage	Range	Tolerance
60W	+12V	11.4V~12.6V	±5%

2.3 Ripple and Noise

Output	Voltage	Maximum peak to peak ripple & Noise
	+12V	120mVp-p

2.4 Efficiency

The 12Vout Power supply efficiency minimum **88%** at normal AC voltage and full load .

☞ 3.0 PROTECTION REQUIREMENT

3.1 Over voltage protection

The power supply shall aut recovery all output when +12V output voltage reaches to its over-voltage protection trigger point .

Output Voltage	OVP Trip Voltage
+12V	+14.8V

3.2 Over Current protection

When the output current exceeds **110%~180%** Load, the power supply can be protected.

The power supply shall be self - recovering when fault condition remove.

3.3 Over load protection

No damage to the power supply shall be sustained when operating any output under any line condition, into an over load condition for an indefinite period of time.

The power supply shall be self - recovering when fault condition remove.

3.4 Short circuit protection

No damage to the power supply shall be sustained when operating any output under any line condition, into a short circuit condition for an indefinite period of time.

The power supply shall be self - recovering when fault condition remove.

☞ 4.0 POWER SUPPLY SEQUENCING

Hold up time

When the power loss its input power, it shall maintain **9ms** in regulation limit at normal voltage.(AC : 115V)

☞ 5.0 ENVIRONMENT**5.1 Operation**

Temperature	0 to 40 °C
Relative Humidity	10 to 85%,on-condensing

5.2 Shipping and Storage

Temperature	-20 to 90°C
Relative Humidity	5 to 95%,non-condensing

5.3 Altitude

Operating	10,000FT max.
Storage	50,000FT max.

5.4 When the power supply is placed room temperature 25°C for 1hr at full load, case surface temperature must not exceed 65°C.

☞ 6.0 SAFETY

6.1 CCC test report to meet the GB4943.

6.2 The power supply must be meet UL94V-0.

☞ 7.0 ELECTROMAGNETIC COMPATIBILITY (EMC)

7.1 IEC 801-2 ESD (IEC 1004-4-2)

7.2 IEC 801-3 Radiated electrical field requirement (IEC 1004-4-3)

7.3 IEC 801-4 BURST (IEC 1004-4-4)

7.4 IEC 801-5 Surge Voltages

7.5 EN55022 Class B Radio interference (CISPR 22) EMI VCCI Class B level

7.6 EN55022 Class B Radio interference (CISPR 23) EMI VCCI Class B level

8.0 MTBF (MEAN-TIME-BETWEEN FAILURES) CALCULATION

The demonstrated MTBF shall be **130,000** hours of continuous operation at 25°C, Full load. 80% confidence limit and nominal line. The MTBF of the power supply shall be calculated in accordance with MIL-STD-217F.

9.0 MECHANICAL REQUIREMENTS

Physical Dimension : **L114.3mm x W50.5mm x H28mm Max**

