

# 360W Electrical Requirements

## 1. Input Characteristics:

ITEM	CONDITION	SPECIFICATION
1.1 Rated Input Voltage		100Vac - 240Vac (Nominal) 90Vac - 265Vac (Maximum)
1.2 Input Voltage Range		90VAC to 265VAC
1.3 Input Frequency Range		47Hz to 63Hz
1.4 Input Voltage Harmonic Distortion	DC output with full loading at 240Vac DC output with full loading at 100Vac	$\geq 0.9$ $\geq 0.95$
1.5 Input Current	DC output with full loading at 90Vac DC output with full loading at 265Vac	4.5Amax 2.5Amax
1.6 Inrush Current	DC output with full loading at 115Vac and 25°C DC output with full loading at 230Vac and 25°C	45Amax 90Amax
1.7 Power Saving	It must be measured in power down condition (automatism inspect , no use the standby control singal )	$\leq 1.0W$ at 115Vac and no load $\leq 1.3W$ at 240Vac and no load
1.8 Efficiency	DC output with full Loading at nominal ac input Voltage range	$\geq 83\%$

## 2. Output Characteristics:

ITEM	CONDITION	SPECIFICATION
2.1 Output Rated Voltage (Vo)		+24V(main) +12V(aux)
2.2 Output Current	+24V(main) +12V(aux)	0A to 12.5A 0A to 5A
2.3 Output Voltage Setting	Measured at the output end of DC connector	24V $\pm$ 5%(main) 12V $\pm$ 5%(aux)
2.4 Output Voltage Ripple and Noise:	+24V(main) +12V(aux) (0.1uF Ceramic Cap. and 10uF Electrolytic Cap. Paralleled between the end of DC loading side and Measured Band-Width with DC-20MHz)	$\leq 200mVp-p$ $\leq 100mVp-p$
2.5 Output Over-shoot and under-shoot Voltage:		$\leq 8\%$ of Vo
2.6 Rise Time:	At 110Vac full load, DC output voltage rise from 0 volt and settle within regulation	$\leq 50mS$

2.7 Dynamic Load Change	I1=2.5A,I2=5A, ,I2=7.5A, ,I2=10A, ,I2=12.5A, Tset-max=10msec,S/R≥50mA/usec	24V ± 1V
	I1=2.5A,I2=5A,Tset-max=10msec,S/R≥50mA/u sec	12V ± 1V
2.8 Power Down	Power Saving (automatism inspect ,no use the standby control singal )	Both +24V/0A (main) and +12V/200mA(aux) output
2.9 LED Indication	No define	
<b>3. Protection Characteristics:</b>		
ITEM	CONDITION	SPECIFICATION
3.1 Short Circuit Protection (SCP):		+24V(main) with latch mode +12V(aux) with auto-recovery mode
3.2 Over-Voltage Protection (OVP):	+24V(main): 30Vmax +12V(aux): 18Vmax	+24V(main) with auto-recovery mode or latch mode +12V(aux) with latch mode
3.3 Over Current Protection (OCP):	+24V(main): 18Amax at 115/230Vac +12V(aux): 7.5Amax at 115/230Vac	+24V(main) with latch mode +12V(aux) with auto-recovery mode
<b>4. Environmental Characteristics:</b>		
ITEM	CONDITION	SPECIFICATION
4.1 Electric Fast Transients:	2KV on AC power line	
4.2 Lightning Surge:	2KV on differential mode	
4.4 Electron Static Discharge:	Air Discharge: ± 15KV min. Contact Discharge: ±8KV min.	
4.5 Cooling	Natural air cooling	
4.6 EMI:	FCC: PART 15J. CLASS B EMI Conducted Emission CISPR22: Pub22. CLASS B EMI Radiated Emission VCCI: Level 2	Test with system.
4.7 RF	Fr: 26MHz-1.0GHz,Field Strength: 3V/M	
4.8 Safety conforming:	UL 6500 2nd IEC 60065 IEC 60950	
4.9 Leakage Current:		≤ 0.75mA
4.10 Insulation Resistance:	At DC 500V ,1Sec	≥ 20MΩ
4.11 Dielectric Strength: (Hi-Pot)	1800Vac, 10mA, 1 sec between Primary to Secondary circuit and Chassis	

4.12 Grounding Test:	At ac 2~8V, 30A,2Sec	≤0.1Ω of AC inlet ground to Secondary GND
4.13 Temperature:	Operating Storage	0 to 40°C -40 to 70°C
4.14 Humidity	Operating Storage	20% ~ 80% 10% ~ 90%
4.15Altitude:	Operating Non Operation	Sea level to 10,000 Ft Sea level to 30,000 Ft

### 5.Reliability:

ITEM	CONDITION	SPECIFICATION
5.1 Life		5 years
5.2 MTBF	Continuous operation at 25°C	50,000 hours
5.3 Temperature Rise	At nominal AC input/DC output full Loading and Environment temperature 25+/-1°C	Internal components Less than Δ65°C
5.4 Burn-In	100% Burn-In with 80%~100% loading at Environment temperature 35~45°C	24 Hours
5.5 Vibration Test	No operation vibration	2G'S peak, 7~50Hz 4G'S peak, 50~500Hz
	Operation vibration	3 planes, 0.5G'S peak, 10~60Hz
5.6 Drop-test	No define	

### 6.Mechanical Characteristics:

ITEM	CONDITION	SPECIFICATION
6.1 Plastic Case:		None
6.2 Physical Size:		250.00mm(L) x160.00mm(W) x30.00mm(H)