

# ONE OUTPUT 250W



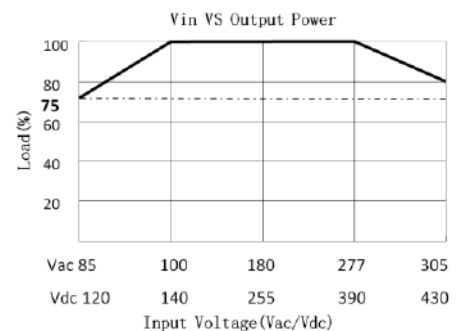
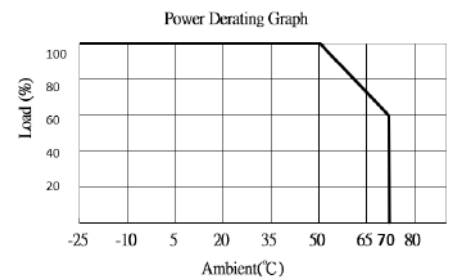
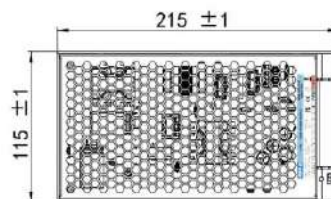
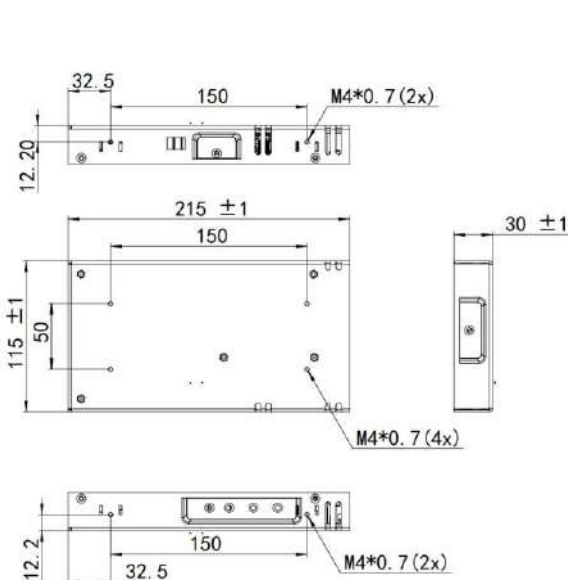
## MAIN FEATURES

- Small Compact Size
- Built-in Active PFC >0.95
- Regulated Output Range: 12VDC - 48VDC
- Input Range: 85VAC - 305VAC/47 - 63Hz Or 120VDC - 430VDC
- Very Low Standby Power Consumption  $\leq 0.3W$
- Better Energetic Efficiency : Meet Requirements Of Energy Star And EC Code Of Conduct

- Safety: Compliance With All Requirements of IEC/EN61558-2-16 , IEC/EN60335-1, IEC/EN62368-1, UL62368-1, CSA22.2No.62368-1-14 CE, UKCA Mark
- EMC : Conducted And Radiated Emissions Conform To EN55032, FCC Part 15, CLASS B, IEC/EN61000-3-2 CLASS A, EN61000-3-3 without any additional components.
- Immunity Conform To: EN61000-4-2, IEC/EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11

Part Number	Output Power (W)	Output Voltage (VDC)	Rated Output Current (A)	Output Voltage Range-ADJ(Vdc)	Max.Operating Ambient (°C)	Min. Part Efficiency(%)	Input Range
51603	250	12	20.8	11.40 ~ 13.80	70	91	85 ~ 305VAC (120-430VDC)
51604	250	15	16.7	14.25 ~ 18.50	70	91	
51605	250	18	13.9	17.50 ~ 20.50	70	91	
51606	250	24	10.4	22.80 ~ 28.80	70	92	
51607	250	36	6.9	34.20 ~ 39.60	70	92	
51608	250	48	5.2	43.20 ~ 52.80	70	92	

## DIMENSIONS



Model: 250 Watt		Specification
AC Input Characteristics	Rated AC input Voltage	100~277 VAC or 140VDC-390VDC
	AC Input Voltage Range	85~ 305Vac or 120VDC-430VDC
	AC Input Frequency Range	47Hz~63Hz
	Rated AC Input Frequency	50/60Hz
	Input Current	3.0A Max.
	Standby Power	0.3W Max. (Meet Requirements Of Energy Star And EC Code Of Conduct)
	Leakage Current	< 0.75mA/305VAC
DC Output Characteristics	Output Voltage Accuracy	± 2 % (Output Voltage ADJ Range See table)
	Output Voltage Line Regulation	± 0.5 %
	Output Voltage Load Regulation	± 1 %
	Ripple & Noise	Max. 180mVp-p@ Rated AC input, at nominal line (The measuring will be terminated with a 47uF ALE-Cap and a 0.1uF Ceramic-Cap. An oscilloscope set at 20MHz bandwidth)
	Dynamic Response	The output voltage shall not exceed ±10% rated output voltage @ 50%←→100% Load change, 1A/uS, 1KHz 50% duty cycle
	Hold Up Time	5mS min@ 100Vac ~277Vac, DC output with full load
	Turn On Delay	3S max. @ 85Vac~305Vac input and DC output with full load
	Rise Time	50ms max. @ 85Vac~305Vac input and DC output with full load
	Overshoot	The output voltage shall not exceed +10% rated output voltage @ Power on and 85Vac~305Vac input, and DC with full load
	Undershoot	The output voltage shall not exceed -10% rated output voltage @ Power off and 85Vac~305Vac input and DC output with full load
Protection Characteristics	Over Current Protection	The power supply shall automatic protect. The power supply shall auto-recover normal operation after the deformation is removed. No excessive heat, odour, no safety hazard
	Output Short Circuit Protection	The power supply shall withstand a continuous output short without damage in 24 hours; The short may be applied before power on, or after power on; The power supply shall resume normal operation after the short is removed, no excessive heat, odour, no safety hazard
	Over temperature protection	The power supply is built thermal protection function and can be shutdown(hiccup mode) when NTC thermistor's body temperature reach approx.110°C; The power supply shall auto-recovery normal operation, it is subject to the shut-down is long enough to allow the thermal detection is down to auto reset.
	Over voltage protection	Production type: shut down O/P voltage and re-power on to recover.
Environmental	Operation Temperature	-25°C ~+70 °C (Refer to DERATING GRAPH)
	Operation Humidity	10~ 90% RH(No Condensing) @ DC output with full load
	Storage Temperature	+5°C to +35°C
	Storage Humidity	< 75%RH
	Cooling Method	Ordinary or thermostat
Safety & EMC Requirement	Dielectric Strength	Input to Output : 3750VAC 5mA, 3 sec. Input to GND: 2000VAC 10mA, 3 sec. Output to GND: 1250VAC 10mA, 3 sec
	Insulation Resistance	100MΩ max @500Vdc
	Radiation/ Conduction	Meeting EN55032,FCC part 15, Class B
	Harmonic Current Disturbance	Meeting IEC/EN61000-3-2:2019, Class C
	Voltage Fluctuation And Flicker	Meeting EN61000-3-3:2013
	Electrostatic Discharge	Meeting EN61000-4-2:2009 Contact Discharge ±6KV,Air Discharge ±8KV
	RF Field Strength Susceptibility	Meeting IEC/EN61000-4-3:2019
	Electrical Fast Transient	Meeting EN61000-4-4:2012, ±4KV
	Lightning Surge	Meets EN61000-4-5:2014,±6KV common mode,±4KV diff.mode
	Conducted Susceptibility	Meeting EN61000-4-6 : 2014
	Voltage Dips And Interruptions	Meeting EN61000-4-11 : 2004
Safety Standards	Compliance with all requirements of : UL62368-1, CSA22.2No.62368-1-14, IEC/EN60335-1,IEC/EN61558-2-16, IEC/EN62368-1, CE, UKCA Mark	
Reliability Requirement	MTBF	>200K Hours @230VAC input at 50deg.C and DC output with full load >450K Hours @230VAC input at 25deg.C and DC output with full load Calculated in accordance with MIL-HDBK-217-F2
	Burn-In Test	The unit shall be burned in for 2~ 5hours under 230Vac input and DC with full load at an ambient temperature of 30~45 degrees C
Net Weight	About 295 grams per product unit	
Guarantee	This product is in accordance with the European RoHS & REACH directives	