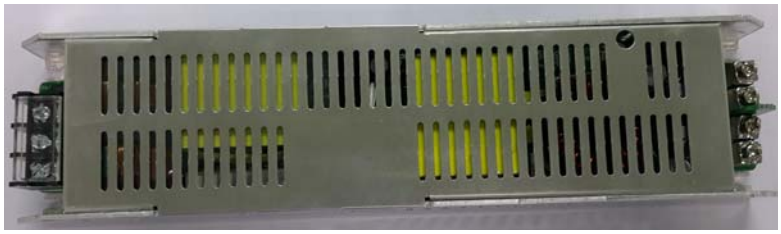


Features:

- AC input: 90VAC ~ 264VAC
- Built-in Active PFC, PF>0.95
- High efficiency, long life and high reliability
- Output protections: OLP/SCP/OTP
- Wide operating ambient temperature (-40℃~80℃)
- No fan suitable for quiet environment
- 100% full load burn-in test
- 1+1 and redundancy, current sharing function
- Conformal coating
- 3 years warranty

c UL us E232347 CE CB ROHS

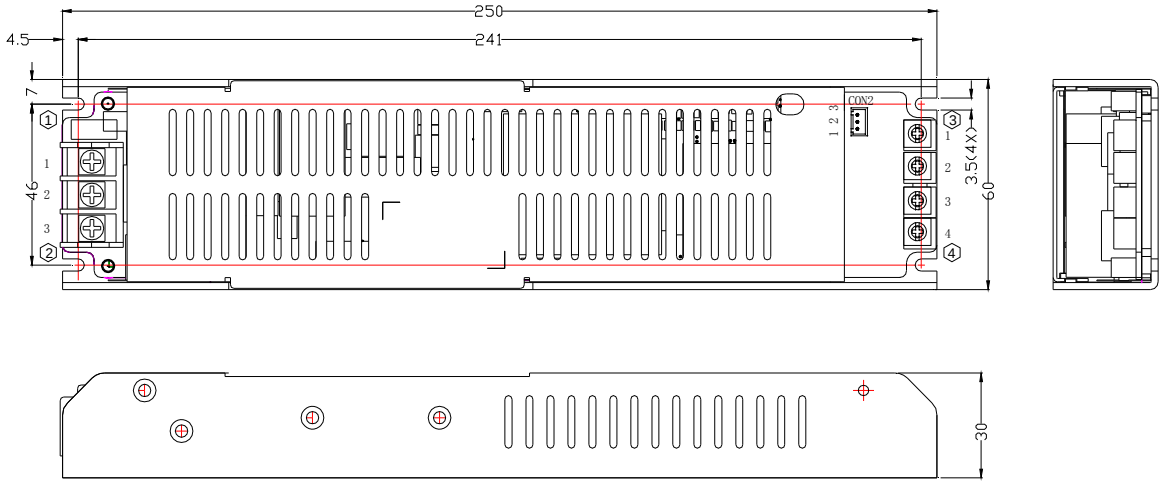
SPECIFICATION

MODEL			VAT-UP400S-5-60L-P
OUTPUT	DC Output		5V
	Output Pre set voltage		5.0-5.10V (220Vac input, load 0A)
	Rated Current		80A (PSU fixed on heat sink of square > 400*400*2mm aluminum plate)
	Current Range	Note 1	0~80A
	Ripple and Noise	25~80℃	≤150mV
		0-25C	≤200mV
	Voltage Adj. Range		4.15~5.10V
	Voltage Accuracy		±2.0%
	Line Regulation		±0.5%
	Load Regulation		±2.0%
	Set-up Time		≤2.5S (110VAC input, Full load)
	Hold up Time		≥8mS(220Vac input, 80% load)
	Temperature Coefficient		±0.03%/℃
	Current sharing unbalance		<10% (Current sharing bus voltage is 2.9-4V, single PS at 80A load)
	Overshoot and Undershoot		<5%
INPUT	Voltage Range		90Vac~264Vac
	Frequency Range		47Hz~63Hz
	Efficiency (Typical)		88%(220Vac input ,full load)
	AC Current (max.)		<5A
	Inrush Current (Typical)		<80A@220Vac Cold start
	Power factor		＞0.93(220Vac input ,full load); >0.95/(110Vac input ,full load)
PROTECTION	Over Power		425W~550W, Hiccup, auto recovery
	Over Current		85A~110A, Hiccup, auto recovery
	Shorted Circuit		Long-term mode, auto recovery
	Over Temperature		105℃±5℃(detect on Q1/D1 batten);shut down, auto recovery after the temperature goes down
ENVIRONMENT	Operating amb. Temp. & Hum.		-40℃~80℃; 20%~90%RH No condensing (refer to the derating curve)
	Storage Temp. & Hum.		-40℃~85℃; 10%~95%RH No condensing
SAFETY &EMC Note 3	Safety Standards		UL60950-1 2nd Ed; IEC 60950-1:2005(2nd Ed) ;EN60950-1:2006
	Withstand Voltage		Primary-Secondary:3.0KVac/10mA .Primary-PG:1.5KVac/10mA. Secondary-PG:0.5KVDC/10mA.
	Leakage Current		Input—output: ≤0.25mA Input—PG: ≤3.5mA （264Vac input, 63Hz）
	Isolation Resistance		10M ohms
	EMI Conduction & Radiation		Compliance to EN55022, EN55024, FCC PART 15 CLASS B
	Harmonic Current		Compliance to EN61000-3-2 CLASS D
	EMS Immunity		Compliance to EN61000-4-2,3,4,5,6,8,11;
OTHERS	MTBF (MIL-HDBK-217F)		More than 200,000Hrs (25℃, Full load)
	Dimension (L*W*H)		250*60*30mm

	Packing	TBD
	Cooling method	Free air convection

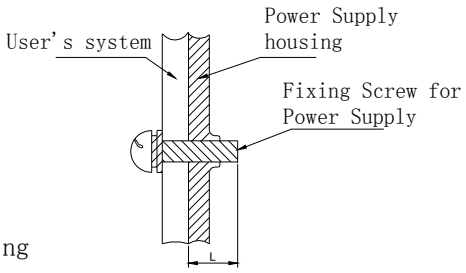
PG SIGNAL	Power indicator terminal voltage	1. Power supply is normal, the signal voltage: 3.0V ~ 3.5V (current 0~1mA) 2. Power supply is abnormal, the signal voltage: 0V ~ 0.7V, (pull-up resistor is greater than 10k Ω) 3. Control card to detect POWER GOOD signal port, in order to prevent interference misoperation, Recommended MCU or FPGA detection port to add the 0.01uF decoupling capacitor.
NOTE	1. All parameters NOT specially mentioned are measured at rated input, rated load and 25℃ of ambient temperature. 2. Measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 uF & 100uF parallel capacitor. 3. he SPS is considered a component which will be installed into final equipment. We cannot guarantee that the final equipment will meet EMC directives, Final product manufactures must be re-confirm that their product meets EMC directives.	

■ Mechanical Specification



Mounting Position	Mounting Type	Mounting Position Number	Screw Type	Lmax	Mounting Torque(max)
Bottom Mounting	Fixing by screws	① — ④	M3	4mm	6.5Kgf.cm (max)

Remark:For safety purpose, the screw length inside the PSU housing should follow above table. (Refer the drawing on right side.)



Instructions:

1, Dimension unit: mm
2, The unmarked tolerance of overall dimension is ±1mm
3, Choose the best mounting type of the module

1, Instructions for the AC input connectors

Part number	Function	Connector	Wire spec.	Max. torque
1	L	95 Terminal Row	22-12AWG	7.5Kgf.cm (max)
2	N			
3	⏚			

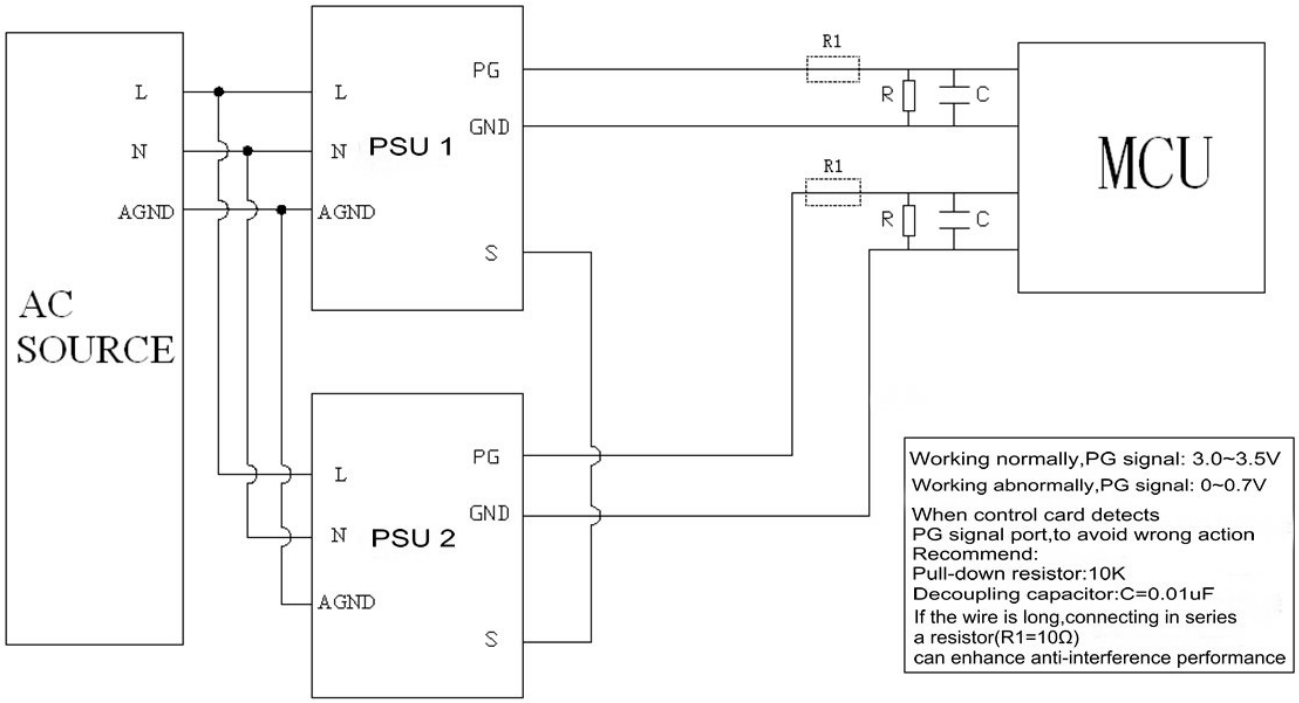
2, Instructions for DC output connectors

Part number	Function	Connector	Wire spec.	Max. torque
1/2	V-	Terminal	14-26AWG	7.5Kgf.cm (max)
3/4	V+			

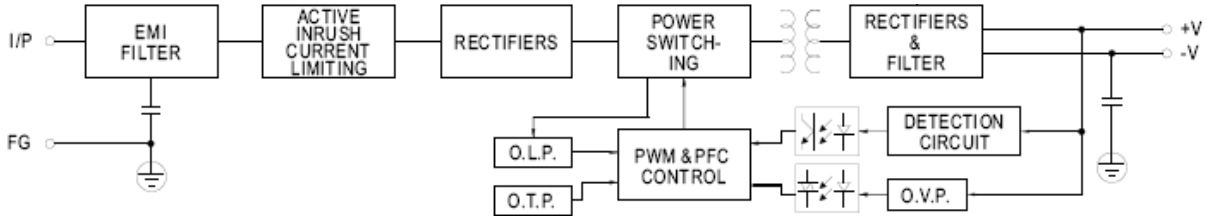
3, Instructions for the singal terminal

Part number	Function	Connector
1	SHARE BUS	AW2001-WV/3P
2	GND	
3	POWER GOOD	

■ Signal terminal instruction



■ Block Diagram



■ Derating Curve (PSU fixed to the heat sink of customer's system. Pls use 80% load to keep high reliability)

(The heat sink square > 400*400*2mm aluminum plate)