

# Model: GP-ES320P Series 320 Watts single output

#### **Features**

- 5V Use Patented Synchronous Rectification.
- Ball-Bearing Fan Speed Control by Thermal Detection.
- Built-in Constant Current Limiting Design.
- Active PFC with P.F.>0.95.
- Full Load Operation from -20°C ~50°C.
- Protections: Over Load/Over Voltage/Short Circuit/Over Temperature.
- High Efficiency up to 89%.
- Universal AC Input: 90~264VAC.
- Remote ON/OFF Control (Optional).

### **Approvals**



#### <u>Size</u>

215 \* 115 \* 50 mm (L\*W\*H)



## **Specifications**

Model No.		GP- ES320P-05	GP- ES320P-12	GP- ES320P-15	GP- ES320P-24	GP-ES320P-48
	DC Voltage	5V	12V	15V	24V	48V
	Rated Current	0-55A	0-25A	0-20A	0-13A	0-6.7A
	Rated Power	275W	300W	300W	312W	321.6W
	Ripple & Noise (Max.)	100mV	120mV	150mV	150mV	240mV
	Efficiency (Typ.)	81%	86%	86%	87%	89%
Output	Voltage Adjustment Range	4.5-5.5V	10-13V	13.5-17V	20-27V	41-52V
	Voltage Tolerance	± 2%	± 1%	± 1%	± 1%	± 1%
	Rise Time	<50ms at full load.				
	Set up time (Max.)	1000ms/230VAC, 2500ms/115VAC				
	Hold Time (Typ.)	>16ms at full load.				
	Voltage Range	90VAC ~ 264VAC or 127~370VDC.				
	Frequency Range	47 ~ 63 Hz.				
Input	Power Factor Correction	> 0.95/230VAC, 0.98/115VAC.				
	AC Current	2.5A at 115VAC / 1.3A at 230VAC 4.5A at 115VAC / 2.3A at 230VAC				
	Inrush Current	20A at 115VAC/ 40A at 230VAC (COLD START).				
	Leakage Current	<1mA / 240VAC.				
	Over Load	Over 105~135% output rating and by constant current mode.  Recovers automatically after fault condition has been removed.				
	Over Temperature	Key part detect over $85^{\circ}$ C ± $5^{\circ}$ C and by shutdown output voltage, re-power on to restart.				
Protections	Short Circuit	By constant current mode.  Recovers automatically after fault condition has been removed.				
	Over Voltage	5.75-6.75V	14-16V	17.3-21V	29-33.6V	57-67V
		Shutdown output voltage, re-power on to restart.				
Function	Remote Control	CON2: 4~10VDC power OFF, 0~0.8VDC power ON.				







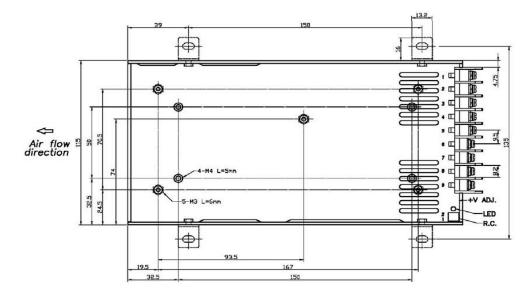


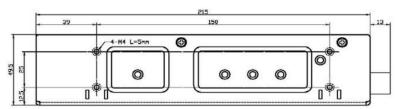




Environment	Operation Temp.	-20°C ~50°C full load, 50°C ~65°C (Refer to output load derating curve).	
	Operation Humidity	20% ~ 90% RH non-condensing.	
	Storage Temp.	-40 ~ +80°C.	
	Storage Humidity	10% ~ 90% RH.	
	Vibration	10~500 Hz, 2G 10 min./1 cycle, 60 min. each along X, Y, Z axes.	
Safety & EMC	Withstand Voltage	I/P - O/P: 3K VAC, I/P - FG: 1.5K VAC, O/P - FG: 0.5K VAC.	
	Isolation Resistance	100M ohms / 500VDC at 25°C : I/P-O/P, I/P-FG, O/P-FG.	
	EMI Conduction & Radiation	Compliance to EN55022 class B,CISPR22 class B.	
	Harmonic Current	Compliance to EN61000-3-2,-3.	
	EMS Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11 Light industry level, criteria A.	
0.1	MTBF	210K hour's min. MIL-HDBK-217F (25°C).	
Others	Dimension(L x W x H)	215 x 115 x 50mm; 1050g/pcs	
Note	1. All specifications measured at 230VAC and 25°C ambient.		
	2. Ripple & noise are measured at 20MHZ bandwidth oscilloscope and with 0.1uf & 47uf parallel capacitor.		
	3. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed		
	that it still meets EMC directives.		

# **Mechanical Specification**









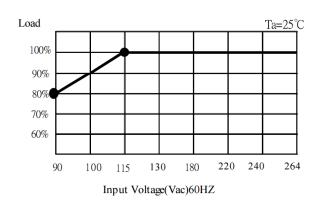


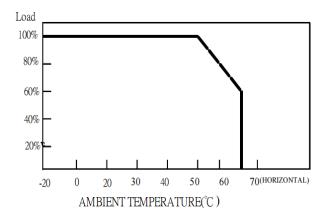






## **Derating Curve**





#### Terminal Pin Number Assignment:

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4~6	DC OUTPUT -V
2	AC/N	7~9	DC OUTPUT +V
3	FG ⊕		

## Remote ON/OFF (CON2): JWT A2001H02-2P or Equivalent (optional)

	, ,	<u> </u>	
Pin No.	Assignment	Mating Housing	Terminal
1	RC+	JWT A2001WR2-2P	JWT A2001TOP-2L
2	RC-	or Equivalent	or Equivalent









