

Model No.: GP-AL650AA

1. AC Input

Parameter	Min.	Nom.	Max.	
Vin	90 Vrms	100 – 240 Vrms	264 Vrms	
Vin Frequency	47 Hz	50 / 60 Hz	63 Hz	

2. Efficiency

86% typically at 50% ROL and 230 Vrms input voltage.

3. DC Output Regulation

o 20 output Regulation					
Output	Tolerance	Min.	Nom.	Max.	Unit
+5V	+/- 5%	+4.75	+5.00	+5.25	Volts
+3.3V	+/- 5%	+3.14	+3.30	+3.47	Volts
+12V1	+/- 5%	+11.40	+12.00	+12.60	Volts
+12V2	+/- 5%	+11.40	+12.00	+12.60	Volts
-12V	+/- 10%	-10.80	-12.00	-13.20	Volts
+5Vsb	+/- 5%	+4.75	+5.00	+5.25	Volts

4. DC Output Load

DC Output	+5V	+3.3V	+12V1	+12V2	-12V	+5Vsb
Nominal Output Voltage (V)	5	3.3	12	12	-12	5
Min. Current (A)	1.0	0.5	1.0	1.0	0	0
Max. Current (A)	22	30	25	20	0.6	3
Peak Current (A)			26	21		3.5
Max. Power (W)	110	100	300	240	7.2	15
Combined Max. Power (W)	18	30	50)4	7.2	15
Total Max. Output Power (W)	650					

5. Hold Up Time

16 mS @ 230 Vrms / 50 Hz, Full Load

6. Rise Time

2 ~ 20 mS

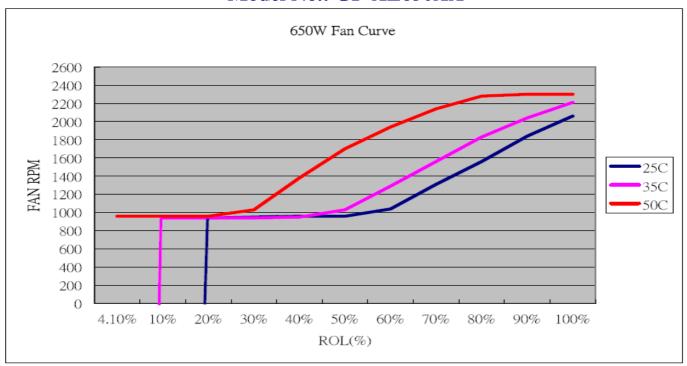
7. Acoustics Noise

0 ~ 25 dBA (Under 70% ROL and 35 °C ambient temperature)

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8. Protections

SCP, OVP, OCP, OPP, OTP

9. Over Voltage Protection

Output	Min.	Nom.	Max.	Unit
+3.3 Vdc	3.7	4.2	4.3	Volts
+5 Vdc	5.7	6.3	7.0	Volts
+12 Vdc	13.4	15.0	15.6	Volts
-12 Vdc	-14.0	-14.5	-15.5	Volts

10. Operating Temperature

 $0 \sim 50$ °C

11. Safety (Compliance With)

UL 60950 3rd Edition -CAN/CSA-C22.2-60950-00.

EN60 950 3rd Edition

IEC60 950 3rd Edition (CB Report to include all national deviations)

EU Low Voltage Directive (73/23/EEC) (CE Compliance)

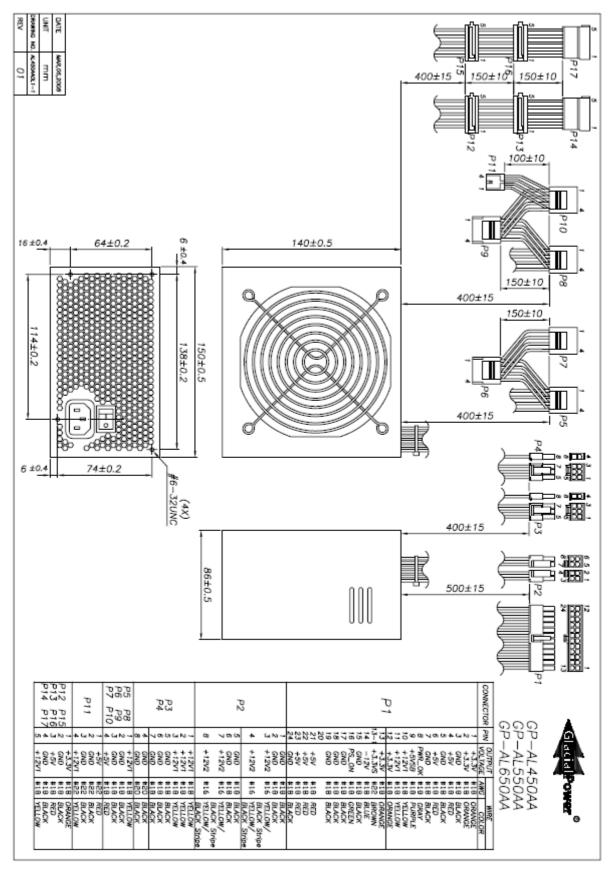
GB4943-90 CCIB (China)

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12. Mechanical Outline



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