GWS500

PA590-01-01G SPECIFICATIONS

	ITEMS / MODEL			GWS500-12	GWS500-24	GWS500-36	GWS500-48
1	Nominal Output Voltage		V	12	24	36	48
2	Maximum Output Current		A	42	21	14	10.5
3	Peak Output Current	(*12)	A	-	25	16.7	-
4	Maximum Output Power		W	504	504	504	504
5	Peak Output Power	(*12)	W	-	600	600	-
6	Standby Input Power	(*13)	W	0.5			
7	Standby Output		-	5V @ 300mA			
8	Efficiency (Typ) (230VAC)	(*1)	%	89	90	90	90
9	Input Voltage Range	(*2)	V	85 ~ 264VAC (47-63Hz) or 120 ~ 373VDC (Withstand 300VAC Surge for 5 seconds)			
10	Input Current (Typ) (115 / 230VAC)	(*1)	A	5.5 / 2.7			
11	Inrush Current (Typ)	(*3)	A	20A/40A at 115VAC, 40A/40A at 230Vac, Ta= 25°C (First Inrush / Second Inrush)			
12	PFHC		-	Designed To Meet IEC61000-3-2 Class A & Class C (Load : 35% ~ 100%)			
13	Power Factor (Typ) (115/230VAC)	(*1)	-	0.98 / 0.95			
14	Output Voltage Range (By Trim Pot)		V	10.8~13.2	22~28.8	32~40	42~57.6
15	Output Voltage Range (By Programmable Voltage)		V	7.2~13.2	14.4~28.8	21.6~40	38.4~57.6
16	Ripple & Noise	(*1,4)	mV	150	150	200	300
17	Line Regulation	(*5,6)	mV	48	96	144	192
18	Load Regulation	(*5,7)	mV	96	192	288	384
19	Temperature Coefficient		-	Less than 0.02% / °C			
20	Over Current Protection	(*8)	-	Hiccup	Constant Current Limit		
				> 105% rated output power Or > 101% of peak output power			
21	Over Voltage Protection	(*9)	V	13.8~16.2	30.3~35.5	41.4~48.6	60~69.6
22	Over Temperature Protection			Yes. Shutdown output and manual reset (CNT or Re-power on)			
23	Hold-up Time (Typ)	(*1)	ms	16			
24	Leakage Current (Typ)	(*10)	-	0.75mA At 230VAC			
25	Remote Sensing		-	Yes			
26	Remote ON/OFF control		-	Possible (Active Low)			
27	Monitoring Signal		-	DCOK (Open Collector Output - Active Low)			
28	Programmable Voltage		-	Possible			
29	Series Operation		-	Possible			
30	Operating Temperature	*11,15)	-	-25°C ~ +70°C (Refer To Output Derating Curve). Guarantee Start Up At -40°C			
31	Operating Humidity		-	30 to 90%RH (No Dewdrop)			
32	Operating Altitude		m	3000			
33	Storage Temperature		-	-30°C ~ +85°C			
34	Storage Humidity		-	10 to 95%RH (No Dewdrop)			
35	Cooling		-	Forced Air By Blower Fans			
36	Withstand Voltage		-	Input - Output : 4.25kVDC (20mA), Input - FG :2.25kVDC (20mA) Output - FG : 500VDC (100mA) For 1min.			
37	Isolation Resistance		-	Input - FG, Input - Output And Output - FG: More Than 100MΩ (500VDC) At 25°C And 70%RH			
38	Vibration		-	At No Operating, 10 - 55Hz (Sweep For 1min) 19.6m/s2 Constant, X, Y, Z 1 Hour Each.			
39	Shock		-	Less Than 196.1m/s2			
40	Safety		-	Approved by IEC/EN/UL/CSA 62368-1, IEC/UL/CSA/EN 60950-1 (Expiry date for EN60950-1: 20 Dec 2020), CE			
41	EMI		-	Designed to meet EN55032-B, CISPR32-B			
42	Immunity		-	Designed to meet EN61000-4-2 (Level 2,3), -3 (Level 3), -4 (Level 3), -5 (Level 3), -6 (Level 3), -8 (Level 4), -11			
43	Weight (Typ.)		g	1020			
44	Size (L x W x H)		mm	218 x 105 x 41 (Refer To Outline Drawing)			

* Read instruction manual carefully , before using the power supply unit.

=NOTES=

*1. At maximum output power, nominal input voltage, Ta = 25°C.
*2. For cases where conformance to various safety specs (UL, CSA, EN) are required, to be described as 100 - 240VAC, 50 / 60Hz on name plate.
*3. Not applicable for the in-rush current to Noise Filter for less than 0.2mS.
*4. Ripple & noise are measured at 20MHz by using a 300mm twisted pair of load wires terminated with a 0.1μF Film Capacitor and a 47μF Electrolytic Capacitor.
*5. Measure line & load regulation at output terminal.
*6. 85 - 264VAC, constant load.
*7. No load - Full load, constant input voltage.
*8. Current limit with automatic recovery. Avoid to operate at overload or dead short for more than 30 seconds.
*9. OVP circuit will shutdown output, manual reset (CNT reset or re-power on).
*10. Measured by each measuring method of UL and EN (at 60Hz), Ta = 25°C.
*11. Refer to Output Derating Curve (PA590-01-02) for details of output derating versus ambient temperature.
*12. Operating period at peak output current is less than 10sec., duty ≤ 0.35
*13. Standby input power refers to the power consumption during remote off and 5V is at no load condition
*14. All parameters NOT specifically mentioned are measured at 230VAC input, rated load and Ta = 25°C.
*15. For cases where conformance to various safety specs (UL, CSA, EN), operating temperature is -25 ~ +50°C.

GWS500

PA590-01-02

DERATING CURVE :

***COOLING : FORCED AIR COOLING**

Ta (°C)	LOAD (%)	STANDARD MOUNTING
-25 ~ +50 70	100 50