

**500W AC-DC Enclosed Power Supply (GRT-G500P SERIES)**



**■ Features :**

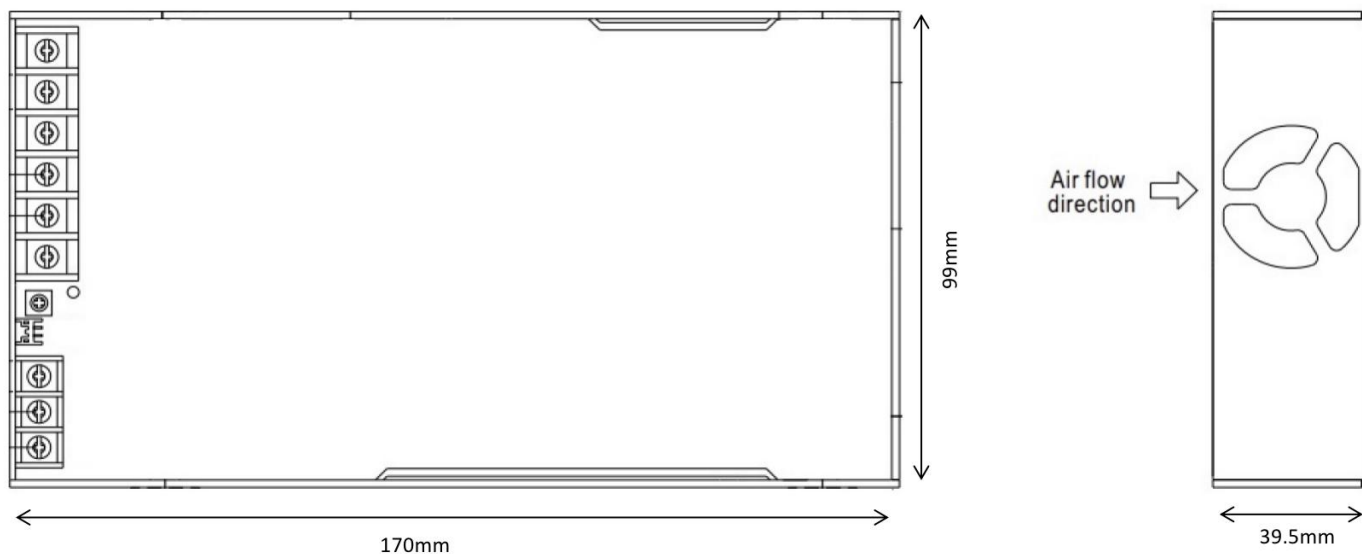
- Universal AC input / Full range(90~264VAC)
- Protections: Short circuit / Over current / Over voltage
- Built-in active PFC function
- Cooling by free air convection
- LED indicator for power on
- Fixed Output current level
- 100% full load burn-in test&High reliability
- Standby Power<0.5W,fully compliance with EU ERP& CoC version 5
- Suitable for all kinds of equipments
- 5 years warranty

**■ Specification**

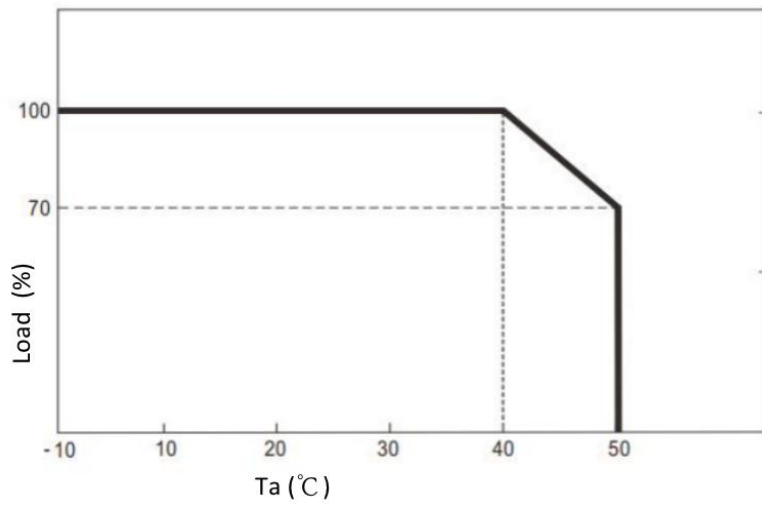
MODEL		GRT-G500P-5	GRT-G500P-12	GRT-G500P-24	GRT-G500P-36	GRT-G500P-48
OUTPUT	DC VOLTAGE	5V	12V	24V	36V	48V
	RATED CURRENT	100A	41.67A	20.83A	13.89A	10.41A
	RATED POWER	500W	500W	500W	500W	500W
	RIPPLE & NOISE (max.) Note.2	50mVp-p	150mVp-p	240mVp-p	240mVp-p	300mVp-p
	VOLTAGEADJ. RANGE	By built-in potentiometer, SVR				
		4.75 ~ 5.5V	12~14.4V	24~28.8V	36~43.2V	48~57.6V
	VOLTAGE TOLERANCE Note.3	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIME Note.4	1000ms, 50ms/230VAC 1000ms,50ms/115VAC at full load				
HOLD UP TIME (Typ.)	12ms/230VAC	12ms/115VAC				
INPUT	VOLTAGE RANGE Note.4	90 ~ 264VAC	250 ~ 370VDC			
	FREQUENCY RANGE	47 ~ 63Hz				
	POWER FACTOR (Typ.) Note.4	PF≥0.95/230VAC PF≥0.99/115VAC at full load				
	EFFICIENCY (Typ.)	94%		95%	95.5%	96%
	AC CURRENT (Typ.)	10.1A/115VAC	5.3A/230VAC			
	INRUSH CURRENT (Typ.)	Cold start 20A/115VAC 40A/230VAC				
LEAKAGE CURRENT	<0.75mA/ 240VAC					
PROTECTION	OVERLOAD	105~120% rated output power				
		Protection type: Constant current limiting with delay shutdown after 3 seconds, re-power on to recover				
	SHORT CIRCUIT	Protection type: Constant current limiting with delay shutdown after 3 seconds, re-power on to recover				
	OVER VOLTAGE	5.6 ~ 6.75V	14.5 ~ 16V	29 ~ 33V	43.5 ~ 49V	59 ~ 66V

		Protection type: Shut down O/P voltage, re-power on to recover			
	<b>OVER TEMPERATURE</b>	Protection type: Shut down O/P voltage, recovers automatically after temperature goes down			
<b>FUNCTION</b>	<b>OUTPUT VOLTAGE</b>	Adjustment of output voltage is allowable to 50 ~ 120% of nominal output			
	<b>OUTPUT CURRENT</b>	Adjustment of constant current level is allowable to 20 ~ 100% of rated			
<b>ENVIRONMENT</b>	<b>WORKING TEMP.</b>	-30 ~ +70°C (Refer to "Derating Curve")			
	<b>WORKING HUMIDITY</b>	20 ~ 90% RH non-condensing			
	<b>STORAGE TEMP., HUMIDITY</b>	-40 ~ +85°C, 10 ~ 95% RH non-condensing			
	<b>TEMP. COEFFICIENT</b>	±0.03%/°C (0 ~ 50°C)			
	<b>VIBRATION</b>	10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes			
<b>SAFETY &amp; EMC</b> (Note.6)	<b>SAFETY STANDARDS</b>	UL62368-1, TUV BS EN/EN62368-1, EAC TP TC 004 approved; design refer to BS EN/EN61558-1, BS EN/EN60335-1			
	<b>WITHSTAND VOLTAGE</b>	I/P-O/P: 3.75KVAC I/P-FG: 2KVAC O/P-FG: 1.25KVAC			
	<b>ISOLATION RESISTANCE</b>	I/P-O/P, I/P-FG,O/P-FG: 100M Ohms/500VDC/25°C / 70%RH			
	<b>EMC EMISSION</b>	<b>Parameter</b>	<b>Standard</b>	<b>Test Level / Note</b>	
		Conducted	BS EN/EN55032 (CISPR32)	Class B	
		Radiated	BS EN/EN55032 (CISPR32)	Class B	
		Harmonic Current	BS EN/EN61000-3-2	ClassA	
		Voltage Flicker	BS EN/EN61000-3-3	-----	
	<b>EMC IMMUNITY</b>	BS EN/EN55035, BS EN/EN61000-6-2			
		<b>Parameter</b>	<b>Standard</b>	<b>Test Level / Note</b>	
		ESD	BS EN/EN61000-4-2	Level 3, 8KV air ; Level 2, 4KV contact	
		Radiated	BS EN/EN61000-4-3	Level 3	
EFT / Burst		BS EN/EN61000-4-4	Level 3		
Surge		BS EN/EN61000-6-2	2KV/Line-Line 4KV/Line-Earth		
Conducted		BS EN/EN61000-4-6	Level 3		
Magnetic Field		BS EN/EN61000-4-8	Level 4		
Voltage Dips and Interruptions		BS EN/EN61000-4-11	>95% dip 0.5 periods, 30% dip 25 periods,>95% interruptions 250 periods		
<b>OTHERS</b>	<b>MTBF</b>	662.3K hrs min. Telcordia SR-332 (Bellcore) ; 69.8K hrs min. MIL-HDBK-217F (25°C)			
	<b>DIMENSION</b>	170*99*39.5mm (L*W*H)			
	<b>PACKING</b>	1.5kg ; 8pcs/14.9kg/0.74CUFT			
<b>NOTE</b>	<p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</p> <p>3. Tolerance: includes set up tolerance, line regulation and load regulation.</p> <p>4. Derating may be needed under low input voltages. Please check the derating curve and Static characteristics for more details.</p> <p>5. PV/PC functions when users do not use SVR.</p> <p>6. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on <a href="https://www.greatpwr.com">https://www.greatpwr.com</a>)</p>				

## ■ Dimension(mm)



■ **Derating Curve**



■ **Disclaimer**

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.