



- Features :
- Universal AC input / Full range
- 3 pole AC inlet IEC320-C14
- Built-in active PFC function, PF>0.91
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Fully enclosed plastic case
- Approvals: UL / CUL / TUV / BSMI / CCC / CB / FCC / CE
- Class I power ( with earth pin)
- LED indicator for power on
- No load power consumption<0.5W
- Meet EISA 2007(Energy Independence and Security Act)
- 2 years warranty

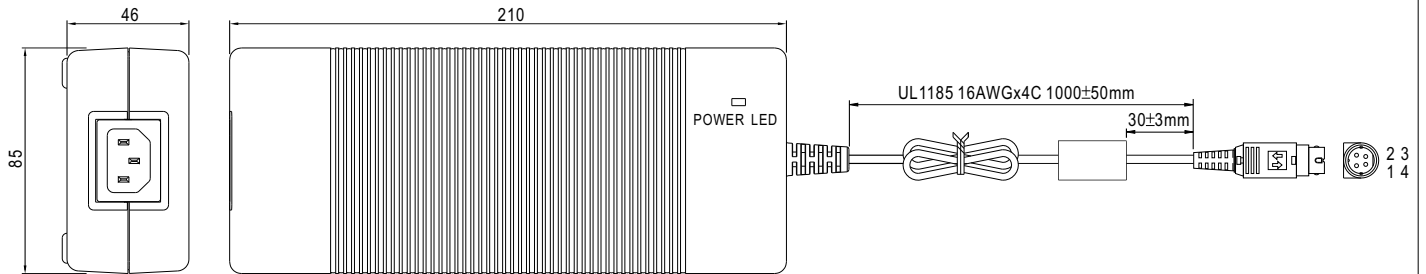


**SPECIFICATION**

ORDER NO.	GS220A12-R7B	GS220A15-R7B	GS220A20-R7B	GS220A24-R7B	GS220A48-R7B	
OUTPUT	SAFETY MODEL NO.	GS220A12	GS220A15	GS220A20	GS220A24	GS220A48
	DC VOLTAGE <small>Note.2</small>	12V	15V	20V	24V	48V
	RATED CURRENT	15A	13.4A	11A	9.2A	4.6A
	CURRENT RANGE	0 ~ 15A	0 ~ 13.4A	0 ~ 11A	0 ~ 9.2A	0 ~ 4.6A
	RATED POWER (max.)	180W	201W	220W	221W	221W
	RIPPLE & NOISE (max.) <small>Note.3</small>	80mVp-p	100mVp-p	150mVp-p	180mVp-p	240mVp-p
	VOLTAGE TOLERANCE <small>Note.4</small>	±5.0%	±5.0%	±4.0%	±3.0%	±2.0%
	LINE REGULATION <small>Note.5</small>	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LOAD REGULATION	±5.0%	±5.0%	±4.0%	±3.0%	±2.0%
	SETUP, RISE TIME <small>Note.7</small>	2000ms, 20ms / 230VAC    2000ms, 20ms / 115VAC at full load				
HOLD UP TIME (Typ.)	20ms / 230VAC    20ms / 115VAC at full load					
INPUT	VOLTAGE RANGE <small>Note.8</small>	90 ~ 264VAC    127 ~ 370VDC				
	FREQUENCY RANGE	47 ~ 63Hz				
	POWER FACTOR (Typ.)	PF>0.91 / 230VAC    PF>0.98 / 115VAC at full load				
	EFFICIENCY (Typ.)	90%	90%	92%	93.5%	94.5%
	AC CURRENT	4A / 115VAC    2A / 230VAC				
	INRUSH CURRENT (max.)	120A / 230VAC				
LEAKAGE CURRENT(max.)	1.5mA / 240VAC					
PROTECTION	OVERLOAD	105 ~ 135% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed				
	OVER VOLTAGE	105 ~ 135% rated output voltage Protection type : Shut down o/p voltage, re-power on to recover				
	OVER TEMPERATURE	95°C ±5°C (TSW1) detect on heatsink of power transistor Protection type : Shut down o/p voltage, recovers automatically after temperature goes down				
ENVIRONMENT	WORKING TEMP.	-30 ~ +60°C (Refer to output load derating curve)				
	WORKING HUMIDITY	20% ~ 90% RH non-condensing				
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH				
	TEMP. COEFFICIENT	±0.03% / °C (0~50°C)				
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes				
SAFETY & EMC (Note. 6)	SAFETY STANDARDS	UL60950-1, TUV EN60950-1, BSMI CNS14336, CCC GB4943 approved				
	WITHSTAND VOLTAGE	I/P-O/P: 3KVAC				
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH				
	EMI CONDUCTION & RADIATION	Compliance to EN55022 class B, FCC PART 15 class B / CISPR22 class B, CNS13438 class B, GB9254 class B				
	HARMONIC CURRENT	Compliance to EN61000-3-2,3, GB17625.1				
EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, light industry level, criteria A					
OTHERS	MTBF	191.3Khrs min. MIL-HDBK-217F(25°C)				
	DIMENSION	210*85*46mm (L*W*H)				
	PACKING	1.1Kg; 12pcs/14.2Kg/0.73CUFT				
CONNECTOR	PLUG	See page 2 ; Other type available by customer requested				
	CABLE	See page 2 ; Other type available by customer requested				
NOTE	<ol style="list-style-type: none"> <li>1. All parameters are specified at 230VAC input, rated load, 25°C 70% RH ambient.</li> <li>2. DC voltage: The output voltage set at point measure by plug terminal &amp; 50% load.</li> <li>3. Ripple &amp; noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf &amp; 47uf capacitor.</li> <li>4. Tolerance: includes set up tolerance, line regulation, load regulation.</li> <li>5. Line regulation is measured from low line to high line at rated load.</li> <li>6. The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the EMC directives.</li> <li>7. Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time.</li> <li>8. Derating may be needed under low input voltage. Please check the derating curve for more details.</li> </ol>					

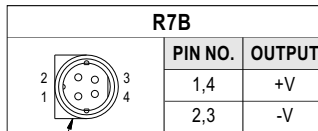
**Mechanical Specification**

Case No.961A Unit:mm



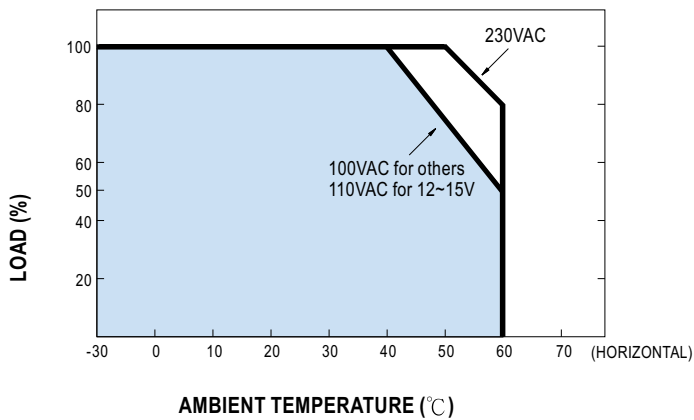
**Plug Assignment**

Standard plug: R7B (option)



-V connected to AC FG

**Derating Curve**



**Static Characteristics**

