

## 220W AC-DC Single Output Desktop

## GS220 series PH# (978) 453-7272 www.total-power.com

Authorized Distributor: Total Power International, Inc.

Toll Free: 877-646-0900(US)

- 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
  - ENERGY STAR compliant
  - Meet EISA 2007(Energy Independence and Security Act)
  - 2 years warranty



## SPECIFICATION

ORDER NO.		GS220A12-R7B	GS220A15-R7B	GS220A20-R7B	GS220A24-R7B	GS220A48-R7B
	SAFETY MODEL NO.	GS220A12	GS220A15	GS220A20	GS220A24	GS220A48
OUTPUT	DC VOLTAGE Note.2		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.) Note.3		100mVp-p	150mVp-p	180mVp-p	240mVp-p
	VOLTAGE TOLERANCE Note.4		±5.0%	±4.0%	±3.0%	±2.0%
		±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LOAD REGULATION	±5.0%	±5.0%	±4.0%	±3.0%	±2.0%
		2000ms, 20ms / 230VAC			1.0 %	<u> </u>
		2000ms, 20ms / 230VAC 2000ms, 20ms / 115VAC at full load 20ms / 230VAC 20ms / 115VAC at full load				
INPUT	HOLD UP TIME (Typ.) VOLTAGE RANGE Note.8	90 ~ 264VAC 127 ~ 370VDC				
	FREQUENCY RANGE	47 ~ 63Hz				
	POWER FACTOR (Typ.)		PF>0.98 / 115VAC at full	laad		
		90%	90%	92%	93.5%	94.5%
	EFFICIENCY (Typ.) AC CURRENT			9270	95.5%	94.5%
	INRUSH CURRENT (max.)	4A/115VAC 2A/230VAC				
	LEAKAGE CURRENT(max.)	120A/230VAC				
PROTECTION	LEARAGE CORRENT(IIIdx.)	1.5mA / 240VAC				
	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	$95^{\circ}C \pm 5^{\circ}C$ (TSW1) detect on heatsink of power transistor				
		Protection type : Shut down o/p voltage, recovers automatically after temperature goes down				
ENVIRONMENT	WORKING TEMP.	-10 ~ +60°C (Refer to output load derating curve)				
		20% ~ 90% RH non-condensing				
	STORAGE TEMP., HUMIDITY	-20 ~ +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				
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH				
	EMI CONDUCTION & RADIATION					
	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> <li>DC voltage: The output vol</li> <li>Ripple &amp; noise are measured.</li> <li>Tolerance: includes set up</li> <li>Line regulation is measured.</li> <li>The power supply is considered.</li> <li>EMC directives.</li> <li>Length of set up time is measured.</li> </ol>	d at 230VAC input, rated load, 25 °C 70% RH ambient. tage set at point measure by plug terminal & 50% load. ed at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor. tolerance, line regulation, load regulation. d from low line to high line at rated load. dered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the easured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time. nder low input voltage. Please check the derating curve for more details.				



-10

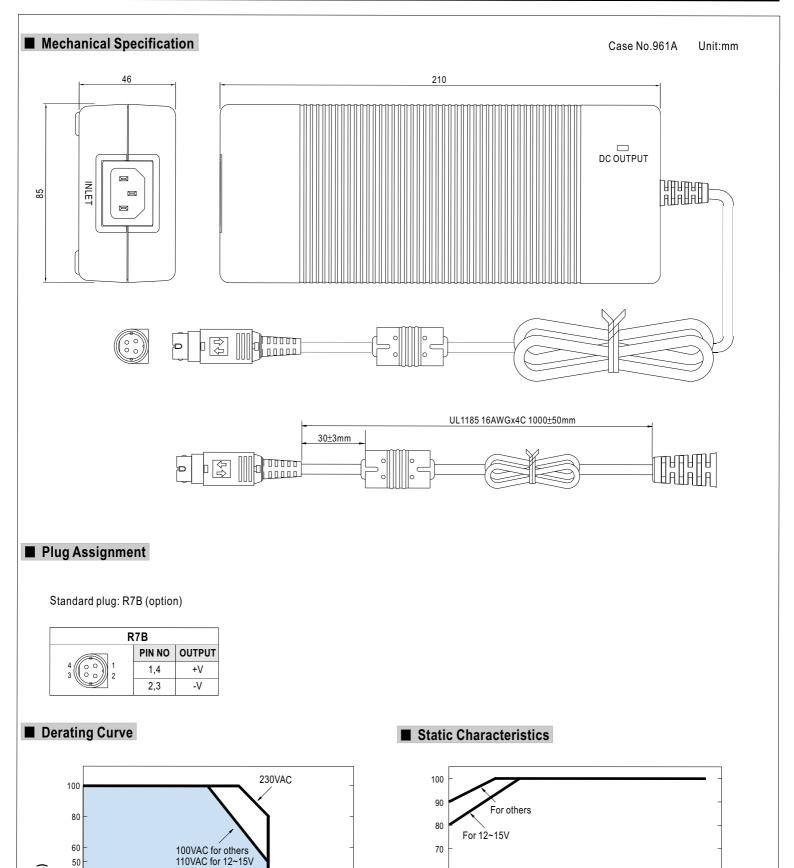
AMBIENT TEMPERATURE (°C)

LOAD (%)

## **GS220** series

240 264

**INPUT VOLTAGE (VAC) 60Hz** 



Authorized Distributor: Total Power International, Inc. Toll Free: 877-646-0900(US) PH# (978) 453-7272 www.total-power.com

(HORIZONTAL)

LOAD (%)