



### ■ Features :

- Universal AC input / Full range
- 3 pole AC inlet IEC320-C14
- Built-in active PFC function, PF>0.95
- 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)

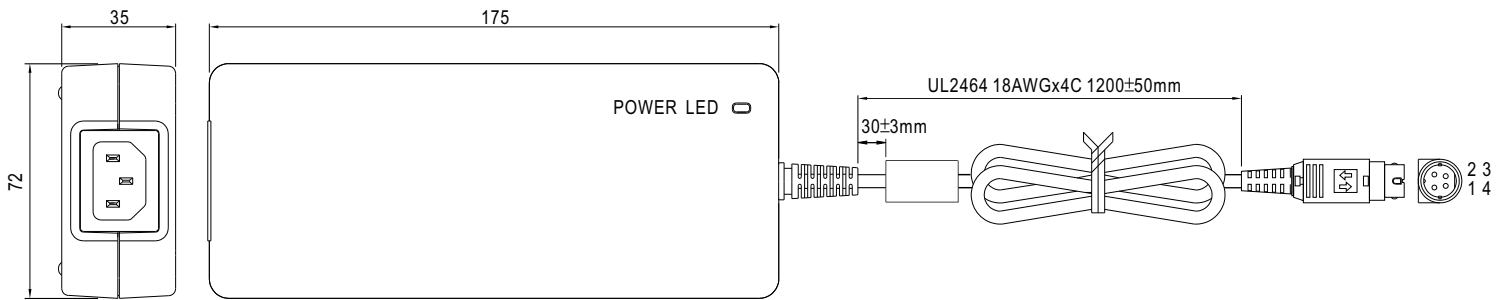


### SPECIFICATION

ORDER NO.	GS160A12-R7B	GS160A15-R7B	GS160A20-R7B	GS160A24-R7B	GS160A48-R7B	
OUTPUT	<b>SAFETY MODEL NO.</b>	GS160A12	GS160A15	GS160A20	GS160A24	GS160A48
	<b>DC VOLTAGE</b>	12V	15V	20V	24V	48V
	<b>RATED CURRENT</b>	11.5A	9.6A	8A	6.67A	3.34A
	<b>CURRENT RANGE</b>	0 ~ 11.5A	0 ~ 9.6A	0 ~ 8A	0 ~ 6.67A	0 ~ 3.34A
	<b>RATED POWER (max.)</b>	138W	144W	160W	160W	160W
	<b>RIPPLE &amp; NOISE (max.) Note.2</b>	80mVp-p	100mVp-p	150mVp-p	180mVp-p	240mVp-p
	<b>VOLTAGE TOLERANCE Note.3</b>	±5.0%	±5.0%	±4.0%	±3.0%	±3.0%
	<b>LINE REGULATION Note.4</b>	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	<b>LOAD REGULATION</b>	±5.0%	±5.0%	±4.0%	±3.0%	±3.0%
	<b>SETUP, RISE TIME Note.6</b>	2000ms, 20ms / 230VAC      2500ms, 20ms / 115VAC at full load				
<b>HOLD UP TIME (Typ.)</b>	20ms / 230VAC      20ms / 115VAC at full load					
INPUT	<b>VOLTAGE RANGE Note.7</b>	85 ~ 264VAC    120 ~ 370VDC				
	<b>FREQUENCY RANGE</b>	47 ~ 63Hz				
	<b>POWER FACTOR (Typ.)</b>	PF>0.95 / 230VAC		PF>0.98 / 115VAC at full load		
	<b>EFFICIENCY (Typ.)</b>	89%	90%	92%	92.5%	94%
	<b>AC CURRENT</b>	1.85A / 115VAC		1A / 230VAC		
	<b>INRUSH CURRENT (max.)</b>	120A / 230VAC				
	<b>LEAKAGE CURRENT(max.)</b>	0.75mA / 240VAC				
PROTECTION	<b>OVERLOAD</b>	105 ~ 135% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed				
	<b>OVER VOLTAGE</b>	105 ~ 135% rated output voltage Protection type : Shut down o/p voltage, re-power on to recover				
	<b>OVER TEMPERATURE</b>	90°C ±10°C (RTH2) detect on inside ambient temperature Protection type : Shut down o/p voltage, re-power on to recover				
ENVIRONMENT	<b>WORKING TEMP.</b>	-30 ~ +70°C (Refer to output load derating curve)				
	<b>WORKING HUMIDITY</b>	20% ~ 90% RH non-condensing				
	<b>STORAGE TEMP., HUMIDITY</b>	-20 ~ +85°C, 10 ~ 95% RH				
	<b>TEMP. COEFFICIENT</b>	±0.03% / °C (0~50°C)				
	<b>VIBRATION</b>	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes				
SAFETY & EMC (Note. 5)	<b>SAFETY STANDARDS</b>	UL60950-1, TUV EN60950-1, BSMI CNS14336, CCC GB4943 approved				
	<b>WITHSTAND VOLTAGE</b>	I/P-O/P: 3KVAC				
	<b>ISOLATION RESISTANCE</b>	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH				
	<b>EMI CONDUCTION &amp; RADIATION</b>	Compliance to EN55022(CISPR22) ,EN61204-3 class B, CNS13438 class B, GB9254-1 class B				
	<b>HARMONIC CURRENT</b>	Compliance to EN61000-3-2,3, GB17625.1				
	<b>EMS IMMUNITY</b>	Compliance to EN61000-4-2,3,4,5,6,8,11, light industry level, criteria A				
OTHERS	<b>MTBF</b>	290.3Khrs min. MIL-HDBK-217F(25°C)				
	<b>DIMENSION</b>	175*72*35mm (L*W*H)				
	<b>PACKING</b>	0.66Kg; 20pcs/ 14.2Kg/ 0.85CUFT				
CONNECTOR	<b>PLUG</b>	See page 2 ; Other type available by customer requested				
	<b>CABLE</b>	See page 2 ; Other type available by customer requested				
NOTE	<p>1. All parameters are specified at 230VAC input, rated load, 25°C 70% RH ambient.</p> <p>2. Ripple &amp; noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf &amp; 47uf capacitor.</p> <p>3. Tolerance: includes set up tolerance, line regulation, load regulation.</p> <p>4. Line regulation is measured from low line to high line at rated load.</p> <p>5. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.</p> <p>6. 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.</p> <p>7. Derating may be needed under low input voltage. Please check the derating curve for more details.</p>					

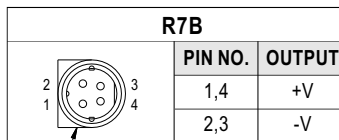
■ Mechanical Specification

Case No.997A Unit:mm



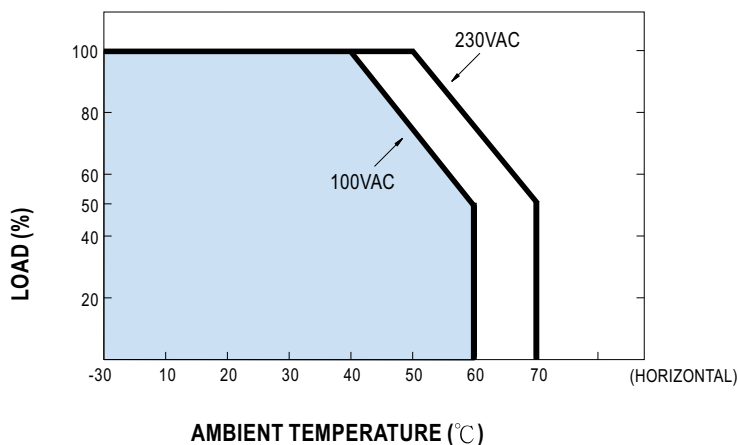
■ Plug Assignment

Standard plug: R7B



AC FG  
-V connected to AC FG

■ Derating Curve



■ Static Characteristics

