

## 160W AC-DC Single Output Desktop

# GS160 series



#### Features :

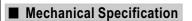
- Universal AC input / Full range
- 3 pole AC inlet IEC320-C14
- Built-in active PFC function, PF>0.95
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Fully enclosed plastic case
- Approvals: UL / CUL / PSE / TUV / BSMI / CCC / CB / FCC / CE
- Class I power (with earth pin)
- LED indicator for power on
- No load power consumption<0.5W
- ErP step2 compliant
- NRCan compliant
- Meet EISA 2007 (Energy Independence and Security Act)
- 2 years warranty

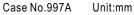


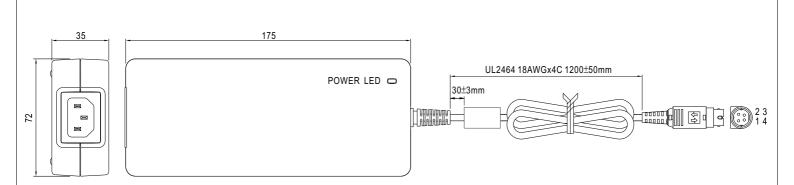
ORDER NO.		GS160A12-R7B	GS160A15-R7B	GS160A20-R7B	GS160A24-R7B	GS160A48-R7B
	SAFETY MODEL NO.	GS160A12	GS160A15	GS160A20	GS160A24	GS160A48
OUTPUT	DC VOLTAGE	12V	15V	20V	24V	48V
	RATED CURRENT	11.5A	9.6A	8A	6.67A	3.34A
	CURRENT RANGE	0 ~ 11.5A	0~9.6A	0~8A	0~6.67A	0~3.34A
	RATED POWER (max.)	138W	144W	160W	160W	160W
	RIPPLE & NOISE (max.) Note.2	80mVp-p	100mVp-p	150mVp-p	180mVp-p	240mVp-p
	VOLTAGE TOLERANCE Note.3	±5.0%	±5.0%	±4.0%	±3.0%	±3.0%
	LINE REGULATION Note.4	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LOAD REGULATION	±5.0%	±5.0%	±4.0%	±3.0%	±3.0%
	SETUP, RISE TIME Note.6	2000ms, 20ms / 230VAC	2500ms, 20ms / 1	15VAC at full load		
	HOLD UP TIME (Typ.)	20ms / 230VAC 20ms / 115VAC at full load				
INPUT	VOLTAGE RANGE Note.7	85 ~ 264VAC 120 ~ 370VDC				
	FREQUENCY RANGE	47 ~ 63Hz				
	POWER FACTOR (Typ.)	PF>0.95 / 230VAC F	PF>0.98 / 115VAC at ful	ll load		
	EFFICIENCY (Typ.)	89%	90%	92%	92.5%	94%
	AC CURRENT	1.85A / 115VAC 1A /	230VAC			
	INRUSH CURRENT (max.)	120A / 230VAC				
	LEAKAGE CURRENT(max.)	0.75mA / 240VAC				
PROTECTION		105 ~ 135% rated output power				
	OVERLOAD	Protection type : Hiccup mode, recovers automatically after fault condition is removed				
		105 ~ 135% rated output voltage				
	OVER VOLTAGE	Protection type : Shut down o/p voltage, re-power on to recover				
		$90^{\circ}C \pm 10^{\circ}C$ (RTH2) detect on inside ambient temperature				
	OVER TEMPERATURE	Protection type : Shut down o/p voltage, re-power on to recover				
ENVIRONMENT	WORKING TEMP.	-30 ~ +70°C (Refer to "Derating Curve")				
	WORKING HUMIDITY	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. 5)	SAFETY STANDARDS	UL60950-1, TUV EN60950-1, BSMI CNS14336, CCC GB4943, J60950-1(except for 48V) approved				
	WITHSTAND VOLTAGE	I/P-O/P: 3KVAC				
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH				
	EMC EMISSION	Compliance to EN55022(CISPR22) ,EN61204-3 class B, CNS13438 class B, GB9254-1 class B, EN61000-3-2,3, GB17625.1				
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, light industry level, criteria A				
OTHERS	MTBF	290.3Khrs min. MIL-HDBK-217F(25°C)				
	DIMENSION	175*72*35mm (L*W*H)				
	PACKING	0.66Kg; 20pcs/ 14.2Kg/ 0.85CUFT				
CONNECTOR	PLUG	See page 2 ; Other type available by customer requested				
	CABLE	See page 2 ; Other type available by customer requested				
NOTE	<ol> <li>Ripple &amp; noise are measured</li> <li>Tolerance: includes set up t</li> <li>Line regulation is measured</li> <li>The power supply is consider EMC directives.</li> <li>Length of set up time is measured</li> </ol>	d at 230VAC input, rated load, 25°C 70% RH ambient. 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. lered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets easured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time. under low input voltage. Please check the derating curve for more details.				



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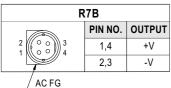






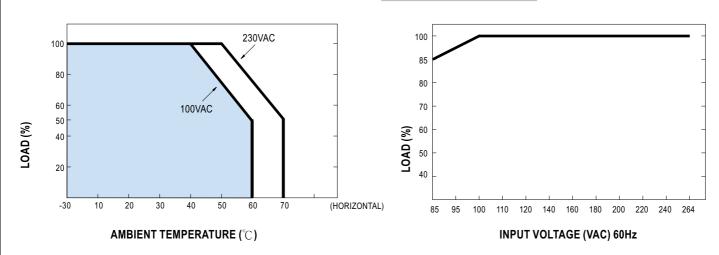
### Plug Assignment

#### Standard plug: R7B



-V connected to AC FG

## Derating Curve



Static Characteristics