



- Universal AC input / Full range
- Built-in active PFC function, PF>0.91
- No load power consumption<0.5W
- Energy star(CEC) level IV compliant
- Meet energy star (CEC) draft V2.0 level V
- Meet EISA 2007(Energy Independence and Security Act)
- 3 pole AC inlet IEC320-C14
- Class I power ( with earth pin)
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Pass LPS
- Fully enclosed plastic case
- · LED indicator for power on
- Approvals: UL / CUL / TUV / BSMI / CCC / CB / FCC / CE
- 2 years warranty











## **SPECIFICATION**

ORDER NO.		GS90A12-P1M	GS90A15-P1M	GS90A19-P1M	GS90A24-P1M	GS90A48-P1M	
	SAFETY MODEL NO.	GS90A12	GS90A15	GS90A19	GS90A24	GS90A48	
ОИТРИТ	DC VOLTAGE Note.2	12V	15V	19V	24V	48V	
	RATED CURRENT	6.67A	6A	4.74A	3.75A	1.87A	
	CURRENT RANGE	0 ~ 6.67A	0 ~ 6A	0 ~ 4.74A	0 ~ 3.75A	0 ~ 1.87A	
	RATED POWER (max.)	80W	90W	90W	90W	90W	
	RIPPLE & NOISE (max.) Note.3	80mVp-p	100mVp-p	150mVp-p	180mVp-p	240mVp-p	
	VOLTAGE TOLERANCE Note.4	±5.0%	±5.0%	±4.0%	±3.0%	±2.0%	
	LINE REGULATION Note.5	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	
	LOAD REGULATION Note.6	±5.0%	±5.0%	±4.0%	±3.0%	±2.0%	
	SETUP, RISE TIME Note.8	1000ms, 20ms / 230VAC	1000ms, 20ms /	115VAC at full load		<u> </u>	
	HOLD UP TIME (Typ.)	20ms / 230VAC 20ms / 115VAC at full load					
INPUT	VOLTAGE RANGE Note.9	90 ~ 264VAC 135 ~ 370VDC					
	FREQUENCY RANGE	47 ~ 63Hz					
	POWER FACTOR (Typ.)	PF>0.91 / 230VAC PF>0.95 / 115VAC at full load					
	EFFICIENCY (Typ.)	88%	89%	89%	89.5%	91%	
	AC CURRENT	2A / 115VAC 1A / 230VAC					
	INRUSH CURRENT (max.)	70A / 230VAC					
	LEAKAGE CURRENT(max.)	1mA/240VAC					
PROTECTION	OVERLOAD	110 ~ 150% 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	RTH30 > 100°C					
		Protection type : Shut down o/p voltage, re-power on to recover					
ENVIRONMENT	WORKING TEMP.	0 ~ +50°C (Refer to output load 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 STANDARDS	UL60950-1, TUV EN60950-1, BSMI CNS14336, CCC GB4943 approved					
	WITHSTAND VOLTAGE	I/P-O/P: 3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC					
SAFETY &	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH					
EMC (Note. 7)	EMI CONDUCTION & RADIATION	Compliance to EN55022 class B, FCC PART 15 / 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	348.7Khrs min. MIL-HDBK-217F(25°C)					
	DIMENSION	145*60*32mm (L*W*H)					
	PACKING	0.45Kq; 30pcs/14.5Kq/0.85CUFT					
	PLUG	Standard type P1M: $2.5\phi * 5.5\phi * 11$ mm, tuning fork type, center positive for stock; Other type available by customer requeste					
	CABLE	See page 2 : Other type available by customer requested					
NOTE	2.DC voltage: The output volt 3.Ripple & noise are measure	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.					

- 5. Line regulation is measured from low line to high line at rated load.
- 6.Load regulation is measured from 10% to 100% rated load
- 7. 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.
- 8. 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.
- 9. Derating may be needed under low input voltages. Pleas check the derating curve for more details.

ID 2.5 x OD 5.5



## ■ Mechanical Specification Case No. 978A Unit:mm UL1185 14AWG 1000±50mm for 12V ~ 15V UL1185 16AWG 1200±50mm for 19 ~ 48V 145 145 C\*+\*\*

## ■ Plug Assignment

Standard plug: P1M (option)

P1M					
P/N	ОИТРИТ				
CENTER	+				

