



E-Star Power Development Co., Ltd. (E-STAR)  
 1F., No.40, Juren Ln., Sec. 2, Sanmin Rd., Banciao Dist., New Taipei City  
 22069, Taiwan (R.O.C.)  
 Phone : 886-2-2957 5580 Fax : 886-2-2957 7473

**25W Desktop Triple power supply < GP25A**



■ **Features**

- Universal AC input / Full range
- 3 pole AC inlet IEC320-C14, Class I power unit
- No load power consumption < 0.3W
- **Energy efficiency level VI**
- Comply with EISA 2007/DoE
- Protections: Short circuit / Overload / Over voltage
- Fully enclosed plastic case
- -20 ~ +70°C working temperature
- LED indicator for power on
- Dual output available (optional)
- ± 16V /+48V also available for video system (optional, order NO. : GP25A58F-R1B)
- 3 years warranty

■ **Applications**

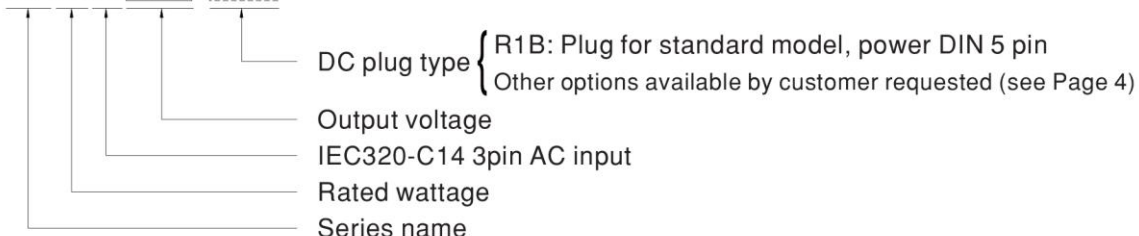
- Consumer electronic devices
- Telecommunication devices
- Office facilities
- Industrial equipments

■ **Description**

GP25A is a 25W triple-output desktop type green adaptor series, complying with the mandatory energy saving standard USA EISA 2007/DoE (Level VI). Adopting Class I design and utilizing the standard inlet IEC320-C14, it is designed with FG and uses the 94V-0 flame retardant plastic enclosure, which can effectively prevent electric shock hazards. This series operates from 90~264VAC and offers three models with the output voltage sets +5V/+12V/-5V, +5V/+12V/-12V, +5V/+15V/-15V and can option +16V/+48V/-16V. Its supreme advantages includes the less-than-0.3W no load power consumption, the capability of working under -20~+70°C ambient temperature, complete protection functions and three-year warranty and the compliance to the international safety certification such as CB, TUV, UL, CE and FCC. GP25A is a multiple-output green adaptor with high safety, high reliability and high quality.

■ **Model Encoding**

**GP25 A 13A -R1B**





**25W Desktop Triple power supply < GP25A**

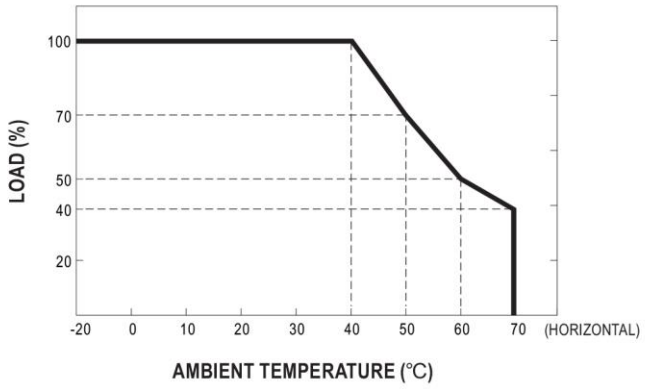
**SPECIFICATION**

ORDER NO.	GP25A13A-R1B			GP25A13D-R1B			GP25A14E-R1B			GP25A58F-R1B (option)			
OUTPUT	SAFETY MODEL NO.	GP25A13A			GP25A13D			GP25A14E			GP25A58F		
	DC VOLTAGE <small>Note.2</small>	5V	12V	-5V	5V	12V	-12V	5V	15V	-15V	16V	48V	-16V
	RATED SET CURRENT	2.5A	1.2A	0.3A	2.5A	1A	0.3A	2.5A	0.8A	0.3A	1.05A	0.087A	1.05A
	CURRENT RANGE	0.5 ~ 2.5A	0.2 ~ 1.2A	0.1 ~ 0.3A	0.5 ~ 2.5A	0.2 ~ 1A	0.1 ~ 0.3A	0.5 ~ 2.5A	0.1 ~ 0.8A	0.1 ~ 0.3A	0.2 ~ 1.05A	17mA ~ 87mA	0.2 ~ 1.05A
	RATED POWER	28.5W			28W			29W			37.77W		
	RIPPLE & NOISE (max.) <small>Note.3</small>	50mVp-p	100mVp-p	50mVp-p	60mVp-p	120mVp-p	50mVp-p	100mVp-p	150mVp-p	50mVp-p	200mVp-p	200mVp-p	200mVp-p
	VOLTAGE TOLERANCE <small>Note.4</small>	±5.0%	-5.0 ~ +10%	±3.0%	±5.0%	-5.0 ~ +5.0%	±3.0%	±5.0%	-5.0 ~ +15%	±3.0%	±5.0%	±5.0%	-5.0 ~ +10%
	LINE REGULATION <small>Note.5</small>	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LOAD REGULATION <small>Note.6</small>	±5.0%	±5.0%	±3.0%	±5.0%	±5.0%	±3.0%	±5.0%	±5.0%	±3.0%	±5.0%	±5.0%	±5.0%
SETUP, RISE, HOLD UP TIME	800ms, 50ms, 20ms / 230VAC			1200ms, 50ms, 16ms / 115VAC at full load									
INPUT	VOLTAGE RANGE <small>Note.7</small>	90 ~ 264VAC 135 ~ 370VDC											
	FREQUENCY RANGE	47 ~ 63Hz											
	EFFICIENCY (Typ.)	80%			80%			80.5%			85%		
	AC CURRENT	0.8A / 100VAC		0.4A / 230VAC									
	INRUSH CURRENT (max.)	Cold start 30A / 115VAC			60A / 230VAC								
	LEAKAGE CURRENT (max.)	0.75mA / 240VAC											
PROTECTION	OVERLOAD	110 ~ 160% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed											
	OVER VOLTAGE	Protection type : Clamp by zener diode(5V only), output short											
ENVIRONMENT	WORKING TEMP.	-20 ~ +70°C (Refer to "Derating Curve")											
	WORKING HUMIDITY	20% ~ 90% RH non-condensing											
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH non-condensing											
	TEMP. COEFFICIENT	±0.03% / °C (-20 ~ 40°C)											
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes											
SAFETY & EMC (Note. 8)	SAFETY STANDARDS	IEC62368-1, UL62368-1, CSA22.2, EN62368-1(Except for GP25A58F-R1B), EAC TP TC 004 approved											
	WITHSTAND VOLTAGE	I/P-O/P:4242VDC, I/P-FG:2121VDC											
	ISOLATION RESISTANCE	I/P-O/P,I/P-FG:100M Ohms / 500VDC / 25°C / 70% RH											
	EMC EMISSION	Parameter	Standard					Test Level / Note					
		Conducted emission	EN55032(CISPR32),FCC PART 15 / CISPR22, CAN ICES-3(B)/NMB-3(B)					Class B					
		Radiated emission	EN55032(CISPR32),FCC PART 15 / CISPR22, CAN ICES-3(B)/NMB-3(B)					Class B					
		Harmonic current	EN61000-3-2					Class A					
	EMC IMMUNITY	Parameter	Standard					Test Level /Note					
		ESD	EN61000-4-2					Level 3, 8KV air; Level 2, 4KV contact					
		RF field susceptibility	EN61000-4-3					Level 2, 3V/m					
EFT bursts		EN61000-4-4					Level 2, 1KV						
Surge susceptibility		EN61000-4-5					Level 3, 1KV/L-N, 2KV/L,N-PE						
Conducted susceptibility		EN61000-4-6					Level 2, 3V						
Voltage dips, interruption		EN61000-4-11					> 95% dip 0. 5 periods, 30% dip 25 periods, > 95% interruptions 250 periods						
OTHERS	LIFE	3 years : 100% load 40°C, 8hours / day											
	MTBF	620K hrs min. MIL-HDBK-217F (25°C)											
	DIMENSION	107.5*67*36mm (L*W*H)											
	PACKING	0.3kg; 54pcs / 20kg / CARTON											
CONNECTOR	PLUG	See page 4											
	CABLE	See page 4											
NOTE	<p>1.All parameters are specified at 230VAC input, rated load, 25°C 70% RH ambient.          2.DC voltage: The output voltage set at point measure by plug terminal &amp; 50% load.          3.Ripple &amp; noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1µf &amp; 47µf capacitor.          4.Tolerance: includes set up tolerance, line regulation, load regulation.          5.Line regulation is measured from low line to high line at rated load.          6.When measured between the light load (20% of rated load) and full load, the load regulation is within ±5% whereas the cross regulation is within ±15%.          7.Derating may be needed under low input voltages. Please check the static characteristics for more details.          8.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. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."</p>												

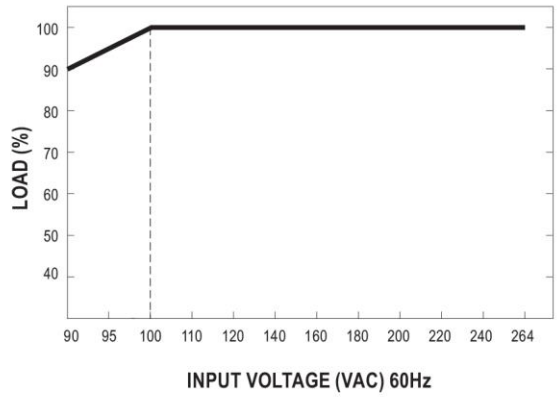


**25W Desktop Triple power supply < GP25A**

■ Derating Curve

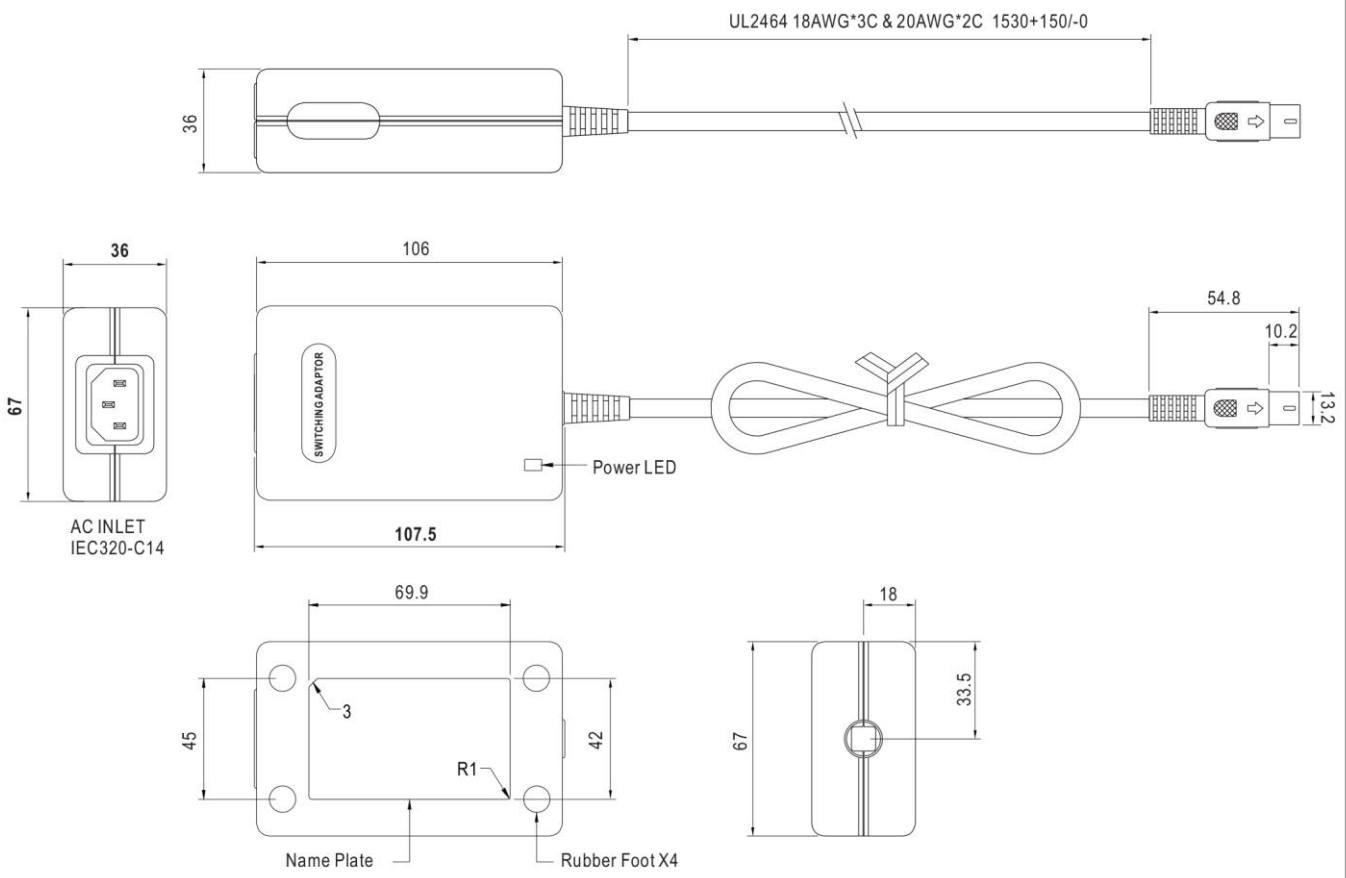


■ Static Characteristics



■ Mechanical Specification

Unit:mm





**25W Desktop Triple power supply < GP25A**

■ DC output plug

◎ Standard plug: R1B

DIN 5 Pin (male)	Type No.	Pin Assignment	
		PIN No.	Output
	R1B	1	COM
		2	COM
		3	+5VDC
		4	-Vout
		5	+Vout

◎ Optional DC plug:

Stripped and tinned leads	Type No.	Pin Assignment	
		PIN No.	Output
	by customer	1(Black)	COM
		2(Blue)	COM
		3(Red)	+5VDC
		4(White)	-Vout
		5(Yellow)	+Vout
		FG(Drain Wire)	FG