25W AC-DC Triple Output Industrial Adaptor

GP25B series

User's Manual

Video

UL62368-1 BS EN/EN62368-1 (Except for GP25B58F-R1B) TPTC004 IEC62368-1

ECO Household Automate Industrial Security Network Telecom

Features

- Universal AC input / Full range
- 2 pole AC inlet IEC320-C8, Class Ⅱ 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℃ working temperature
- LED indicator for power on
- Dual output available (optional)
- ± 16V /+48V also available for video system (optional, order NO. : GP25B58F-R1B)
- 3 years warranty

Applications

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

GTIN CODE

MW Search: https://www.meanwell.com/serviceGTIN.aspx

Description

GP25B 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 Ⅱ design and utilizing the standard inlet IEC320-C8, it is designed without 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℃ 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. GP25B is a multiple-output green adaptor with high safety, high reliability and high quality.

Model Encoding

GP25 B 13A -R1B

- DC plug type: R1B: Plug for standard model, power DIN 5 pin; Other options available by customer requested (see Page 4)
- Output voltage
- IEC320-C8 2pin AC input
- Rated wattage
- Series name

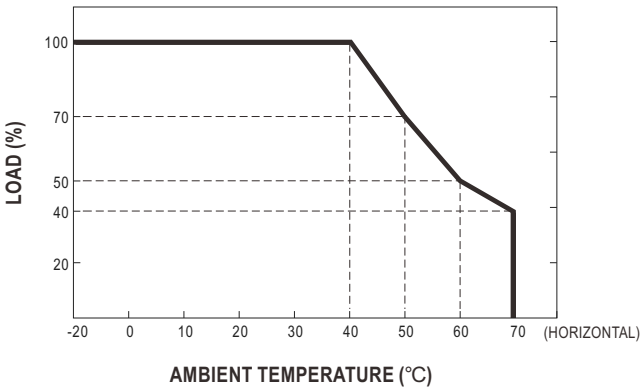
SPECIFICATION

ORDER NO.		GP25B13A-R1B			GP25B13D-R1B			GP25B14E-R1B			GP25B58F-R1B (option)		
OUTPUT	SAFETY MODEL NO.	GP25B13A			GP25B13D			GP25B14E			GP25B58F		
	DC VOLTAGE Note.2	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.) Note.3	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 Note.4	±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 Note.5	±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 Note.6	±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 Note.7	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℃ (Refer to "Derating Curve")											
	WORKING HUMIDITY	20% ~ 90% RH non-condensing											
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH non-condensing											
	TEMP. COEFFICIENT	±0.03% / ℃ (-20 ~ 40℃)											
	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, BS EN/EN62368-1(Except for GP25B58F-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℃/ 70% RH											
	EMC EMISSION	Parameter	Standard	Test Level / Note									
		Conducted emission	BS EN/EN55032(CISPR32),FCC PART 15 / CISPR22, CAN ICES-3(B)/NMB-3(B)	Class B									
		Radiated emission	BS EN/EN55032(CISPR32),FCC PART 15 / CISPR22, CAN ICES-3(B)/NMB-3(B)	Class B									
		Harmonic current	BS EN/EN61000-3-2	Class A									
		Voltage flicker	BS EN/EN61000-3-3	-------									
	EMC IMMUNITY	Parameter	Standard	Test Level /Note									
		ESD	BS EN/EN61000-4-2	Level 3, 8KV air; Level 2, 4KV contact									
		RF field susceptibility	BS EN/EN61000-4-3	Level 2, 3V/m									
		EFT bursts	BS EN/EN61000-4-4	Level 2, 1KV									
		Surge susceptibility	BS EN/EN61000-4-5	Level 3, 1KV/L-N									
		Conducted susceptibility	BS EN/EN61000-4-6	Level 2, 3V									
		Voltage dips , interruption	BS EN/EN61000-4-11	＞95% dip 0. 5 periods, 30% dip 25 periods, ＞95% interruptions 250 periods									
OTHERS	LIFE	3 years : 100% load 40℃, 8hours / day											
	MTBF	620K hrs min. MIL-HDBK-217F (25℃)											
	DIMENSION	107.5*67*36mm (L*W*H)											
	PACKING	0.3kg; 54pcs / 20kg / CARTON											
CONNECTOR	PLUG	See page 4											
	CABLE	See page 4											

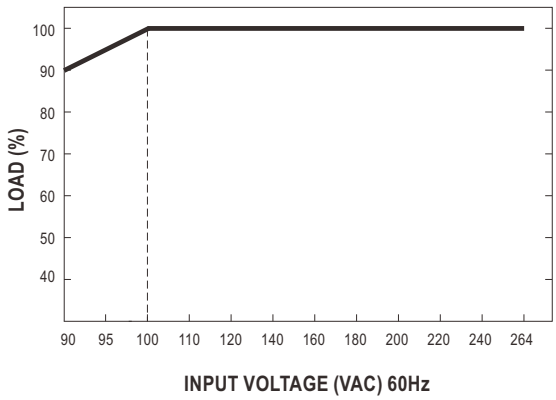
NOTE

1.All parameters are specified at 230VAC input, rated load, 25℃ 70% RH ambient.
2.DC voltage: The output voltage set at point measure by plug terminal & 50% load.
3.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1μf & 47μf capacitor.
4.Tolerence: 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.” (as available on http://www.meanwell.com)
※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx

■ Derating Curve

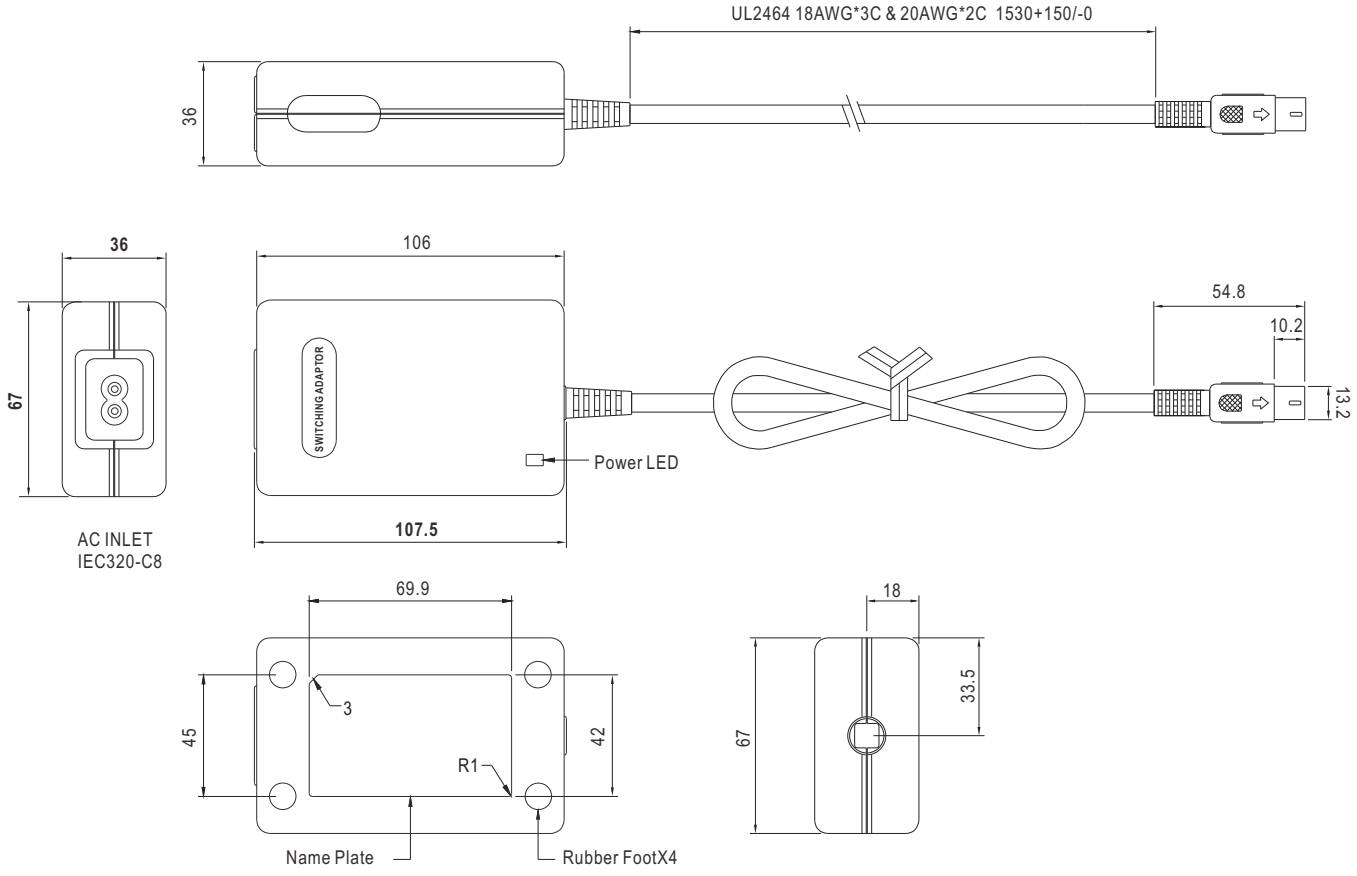


■ Static Characteristics



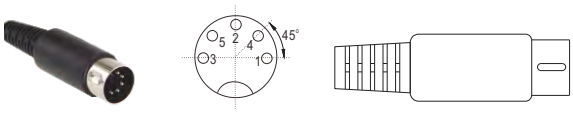
■ Mechanical Specification

Unit:mm

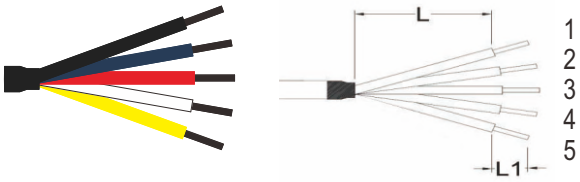


■ DC output plug

◎ 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

Length of Land L1 by request

(MW's standard length, L: 70 mm, L1: 10 mm)

■ Installation Manual

Please refer to : http://www.meanwell.com/manual.html