



User's Manual



Video



Features

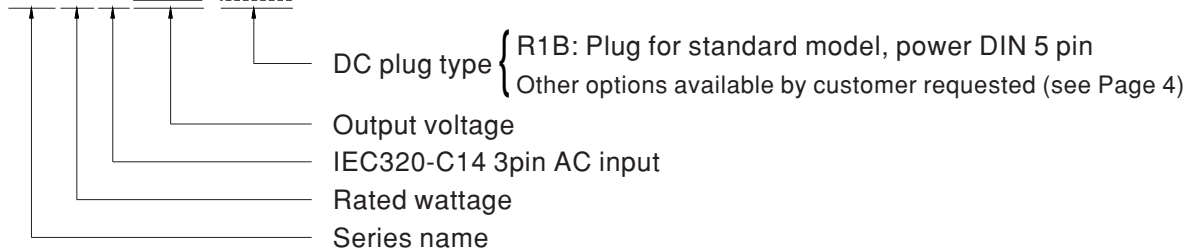
- Universal AC input / Full range
- 3 pole AC inlet IEC320-C14, Class I power unit
- No load power consumption < 0.3W
- **Energy efficiency level VI**
- Comply with EISA 2007/DoE
- Protections: Short circuit / Overload / Over voltage
- Fully enclosed plastic case
- -20 ~ +70°C working temperature
- LED indicator for power on
- Dual output available (optional)
- ± 16V / +48V also available for video system (optional, order NO. : GP50A58F-R1B)
- 3 years warranty

Description

GP50A is a 50W 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. GP50A is a multiple-output green adaptor with high safety, high reliability and high quality.

Model Encoding

GP50 A 13A -R1B

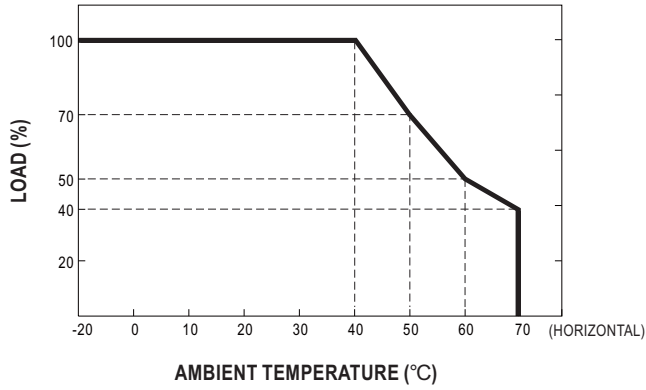




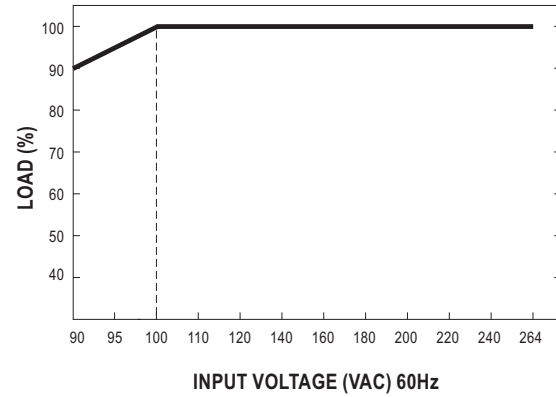
SPECIFICATION

ORDER NO.		GP50A13A-R1B			GP50A13D-R1B			GP50A14E-R1B			GP50A58F-R1B (option)			
OUTPUT	SAFETY MODEL NO.	GP50A13A			GP50A13D			GP50A14E			GP50A58F			
	DC VOLTAGE Note.2	5V	12V	-5V	5V	12V	-12V	5V	15V	-15V	16V	48V	-16V	
	RATED SET CURRENT	4A	2A	0.5A	4A	2A	0.5A	4A	1.5A	0.5A	2A	0.15A	2A	
	CURRENT RANGE	0 ~ 4.0A	0.3 ~ 2.0A	0.1 ~ 0.5A	0 ~ 4.0A	0.3 ~2.0A	0.1 ~0.5A	0 ~ 4.0A	0.3 ~ 1.5A	0.1 ~0.5A	0.4 ~ 2.0A	30mA ~ 150mA	0.4 ~2.0A	
	RATED POWER	46.5W			50W			50W			71.2W			
	RIPPLE & NOISE (max.) Note.3	50mVp-p	100mVp-p	100mVp-p	50mVp-p	150mVp-p	100mVp-p	50mVp-p	150mVp-p	150mVp-p	180mVp-p	180mVp-p	180mVp-p	
	VOLTAGE TOLERANCE Note.4	±5.0%	±3.0%	-5% ~ +10%	±5.0%	±3.0%	-5% ~ +8%	±5.0%	±3.0%	-5% ~ +15%	±5.0%	-5% ~ +10%	-5% ~ +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%	±3.0%	±5.0%	±5.0%	±3.0%	±5.0%	±5.0%	±3.0%	±5.0%	±5.0%	±5.0%	±5.0%	
SETUP, RISE, HOLD UP TIME	1500ms, 50ms, 20ms / 230VAC			2500ms, 50ms, 16ms / 115VAC at full load										
INPUT	VOLTAGE RANGE Note.7	90 ~ 264VAC 135~ 370VDC												
	FREQUENCY RANGE	47 ~ 63Hz												
	EFFICIENCY (Typ.)	83.5%			84%			84.5%			86%			
	AC CURRENT	1.6A / 100VAC 0.8A / 230VAC												
	INRUSH CURRENT (max.)	Cold start 35A/115VAC 65A / 230VAC												
	LEAKAGE CURRENT (max.)	0.75mA / 240VAC												
PROTECTION	OVERLOAD	120 ~ 200% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed												
	OVER VOLTAGE	Protection type : Clamp by zener diode, 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% / °C (0 ~ 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 GP50A58F-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, 2KV/L,N-PE					
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	280K hrs min. MIL-HDBK-217F (25℃)												
	DIMENSION	146*75.5*43mm (L*W*H)												
	PACKING	0.55kg; 36pcs / 21kg / 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.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." (as available on http://www.meanwell.com) ※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx												

Derating Curve

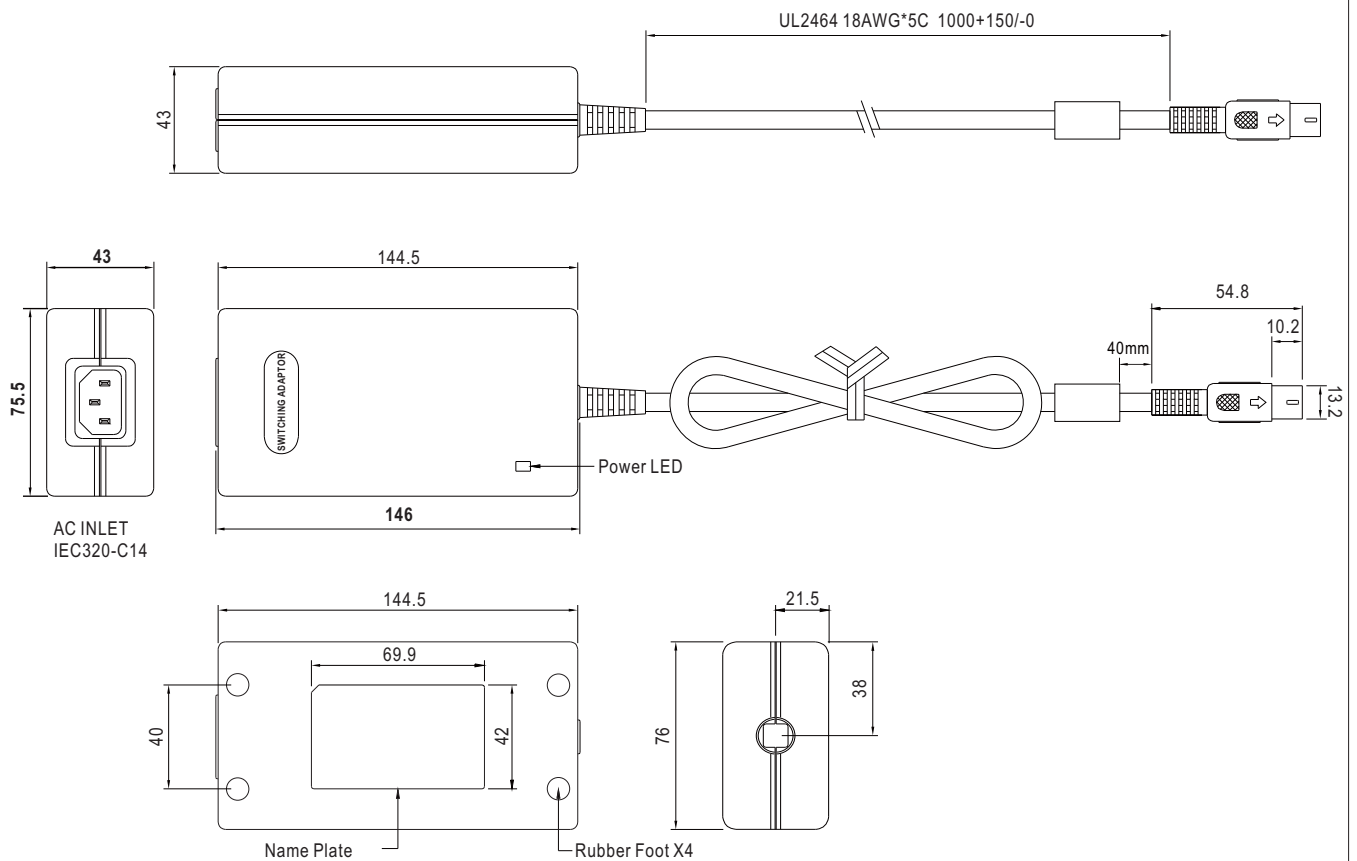


Static Characteristics



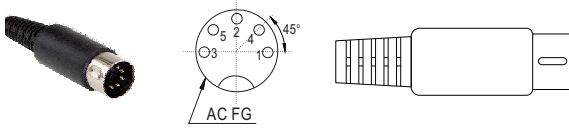
Mechanical Specification

Unit:mm

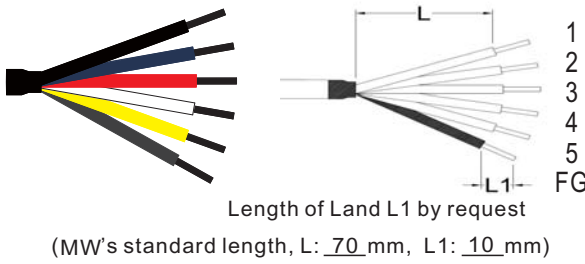


■ DC output plug

☉ 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
		FG(Drain Wire)	FG

■ Installation Manual

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

Mouser Electronics

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MEAN WELL:

[GP50A13A-R1B](#) [GP50A14E-R1B](#) [GP50A13D-R1B](#)