



**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

**Applications**

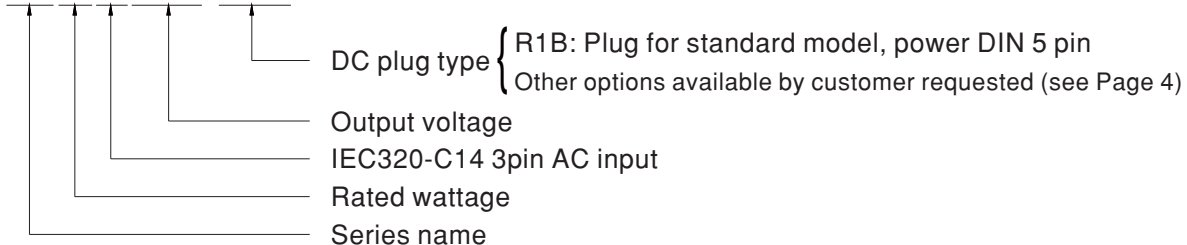
- Consumer electronic devices
- Telecommunication devices
- Office facilities
- Industrial equipments

**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

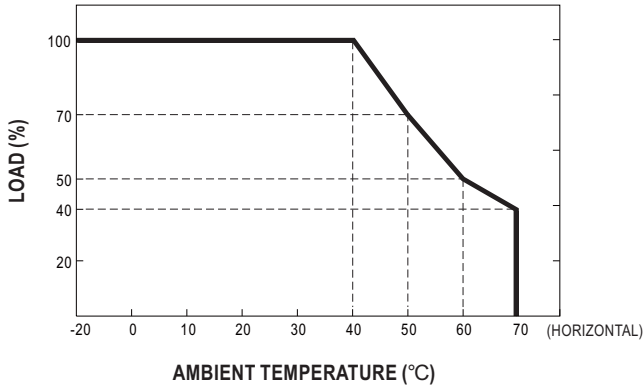




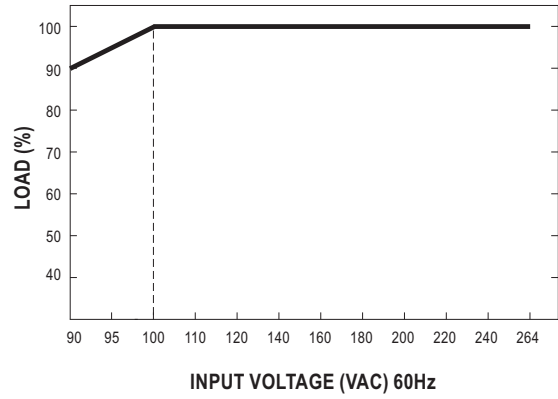
**SPECIFICATION**

ORDER NO.	GP50A13A-R1B	GP50A13D-R1B	GP50A14E-R1B	GP50A58F-R1B (option)	
<b>OUTPUT</b>	<b>SAFETY MODEL NO.</b>	GP50A13A	GP50A13D	GP50A14E	GP50A58F
	<b>DC VOLTAGE</b> Note.2	5V 12V -5V	5V 12V -12V	5V 15V -15V	16V 48V -16V
	<b>RATED SET CURRENT</b>	4A 2A 0.5A	4A 2A 0.5A	4A 1.5A 0.5A	2A 0.15A 2A
	<b>CURRENT RANGE</b>	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
	<b>RATED POWER</b>	46.5W	50W	50W	71.2W
	<b>RIPPLE &amp; NOISE (max.)</b> 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
	<b>VOLTAGE TOLERANCE</b> 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%
	<b>LINE REGULATION</b> 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%
	<b>LOAD REGULATION</b> 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%
	<b>SETUP, RISE, HOLD UP TIME</b>	1500ms, 50ms, 20ms / 230VAC 2500ms, 50ms, 16ms / 115VAC at full load			
<b>INPUT</b>	<b>VOLTAGE RANGE</b> Note.7	90 ~ 264VAC 135 ~ 370VDC			
	<b>FREQUENCY RANGE</b>	47 ~ 63Hz			
	<b>EFFICIENCY (Typ.)</b>	83.5%	84%	84.5%	86%
	<b>AC CURRENT</b>	1.6A / 100VAC 0.8A / 230VAC			
	<b>INRUSH CURRENT (max.)</b>	Cold start 35A/115VAC 65A / 230VAC			
	<b>LEAKAGE CURRENT (max.)</b>	0.75mA / 240VAC			
<b>PROTECTION</b>	<b>OVERLOAD</b>	120 ~ 200% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed			
	<b>OVER VOLTAGE</b>	Protection type : Clamp by zener diode, output short			
<b>ENVIRONMENT</b>	<b>WORKING TEMP.</b>	-20 ~ +70°C (Refer to "Derating Curve")			
	<b>WORKING HUMIDITY</b>	20% ~ 90% RH non-condensing			
	<b>STORAGE TEMP., HUMIDITY</b>	-20 ~ +85°C, 10 ~ 95% RH non-condensing			
	<b>TEMP. COEFFICIENT</b>	±0.03% / °C (0 ~ 40°C)			
	<b>VIBRATION</b>	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes			
<b>SAFETY &amp; EMC (Note. 8)</b>	<b>SAFETY STANDARDS</b>	IEC62368-1, UL62368-1, CSA22.2, BS EN/EN62368-1(Except for GP50A58F-R1B), EAC TP TC 004 approved			
	<b>WITHSTAND VOLTAGE</b>	I/P-O/P:4242VDC, I/P-FG:2121VDC			
	<b>ISOLATION RESISTANCE</b>	I/P-O/P,I/P-FG:100M Ohms / 500VDC / 25°C / 70% RH			
	<b>EMC EMISSION</b>	<b>Parameter</b>	<b>Standard</b>	<b>Test Level / Note</b>	
		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	-----	
	<b>EMC IMMUNITY</b>	<b>Parameter</b>	<b>Standard</b>	<b>Test Level / Note</b>	
		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		
<b>OTHERS</b>	<b>LIFE</b>	3 years : 100% load 40°C, 8hours/day			
	<b>MTBF</b>	280K hrs min. MIL-HDBK-217F (25°C)			
	<b>DIMENSION</b>	146*75.5*43mm (L*W*H)			
	<b>PACKING</b>	0.55kg; 36pcs / 21kg / CARTON			
<b>CONNECTOR</b>	<b>PLUG</b>	See page 4			
	<b>CABLE</b>	See page 4			
<b>NOTE</b>	<p>1.All parameters are specified at 230VAC input, rated load, 25°C 70% RH ambient.</p> <p>2.DC voltage: The output voltage set at point measure by plug terminal &amp; 50% load.</p> <p>3.Ripple &amp; noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1µf &amp; 47µf capacitor.</p> <p>4.Tolerance: includes set up tolerance, line regulation, load regulation.</p> <p>5.Line regulation is measured from low line to high line at rated load.</p> <p>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%.</p> <p>7.Derating may be needed under low input voltages. Please check the static characteristics for more details.</p> <p>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 <a href="http://www.meanwell.com">http://www.meanwell.com</a>)</p> <p>※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a></p>				

■ Derating Curve

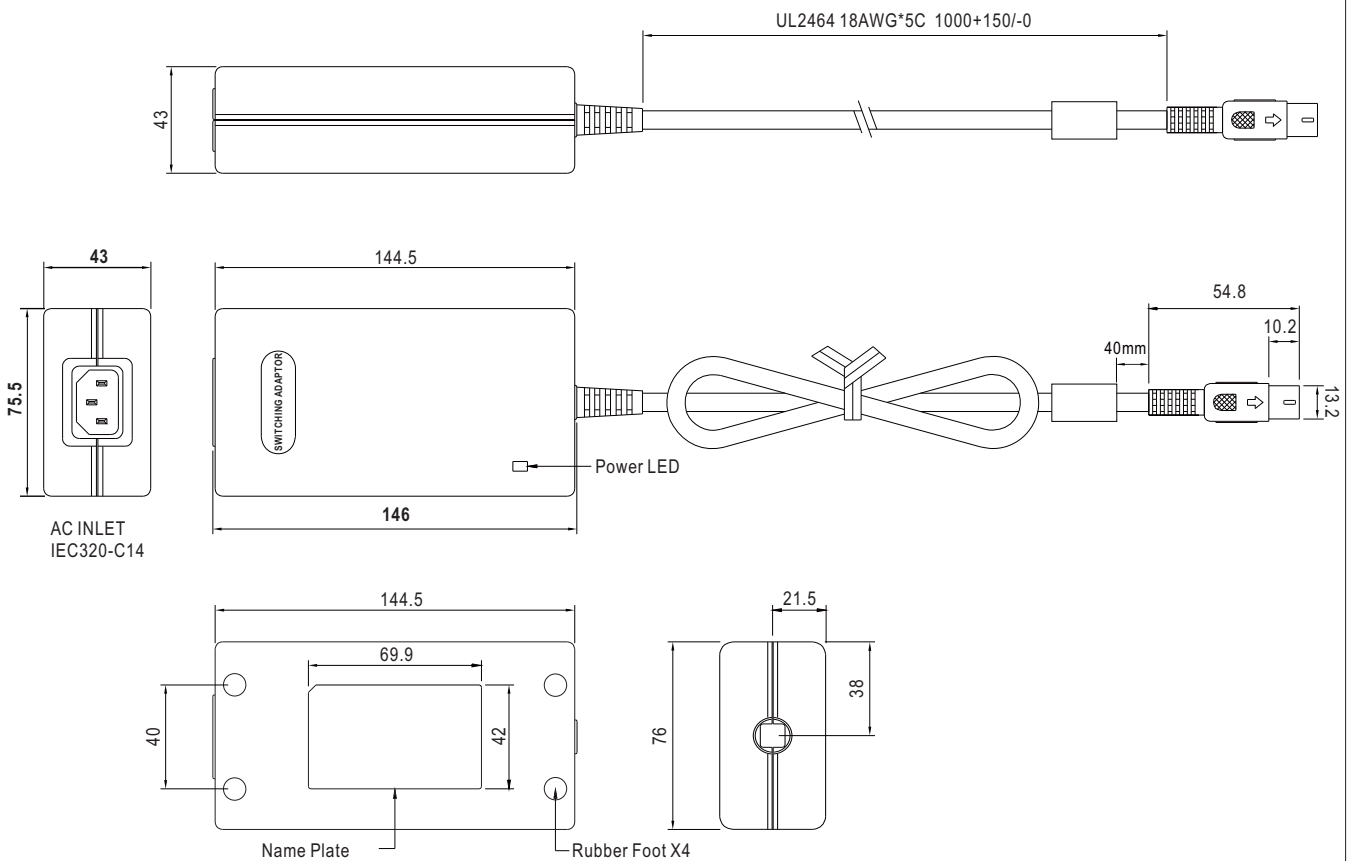


■ Static Characteristics



■ 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
<p>Length of Land L1 by request (MW's standard length, L: <u>70</u> mm, L1: <u>10</u> mm)</p>	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>