



■ Features :

- Universal AC input / Full range
- 3 pole AC inlet IEC320-C14
- Low leakage current <230 $\mu$ A
- Class I power ( with earth pin)
- Full output 3~48V safety approval
- Protections: Short circuit / Overload / Over voltage / Over temp.
- Fully enclosed plastic case
- Medical safety approved (MOPP level)
- Fix switching frequency and regulation
- Topology: Top switch circuit
- LED indicator for power on
- Approvals: UL / CUL / TUV / CB / FCC / CE
- 2 years warranty

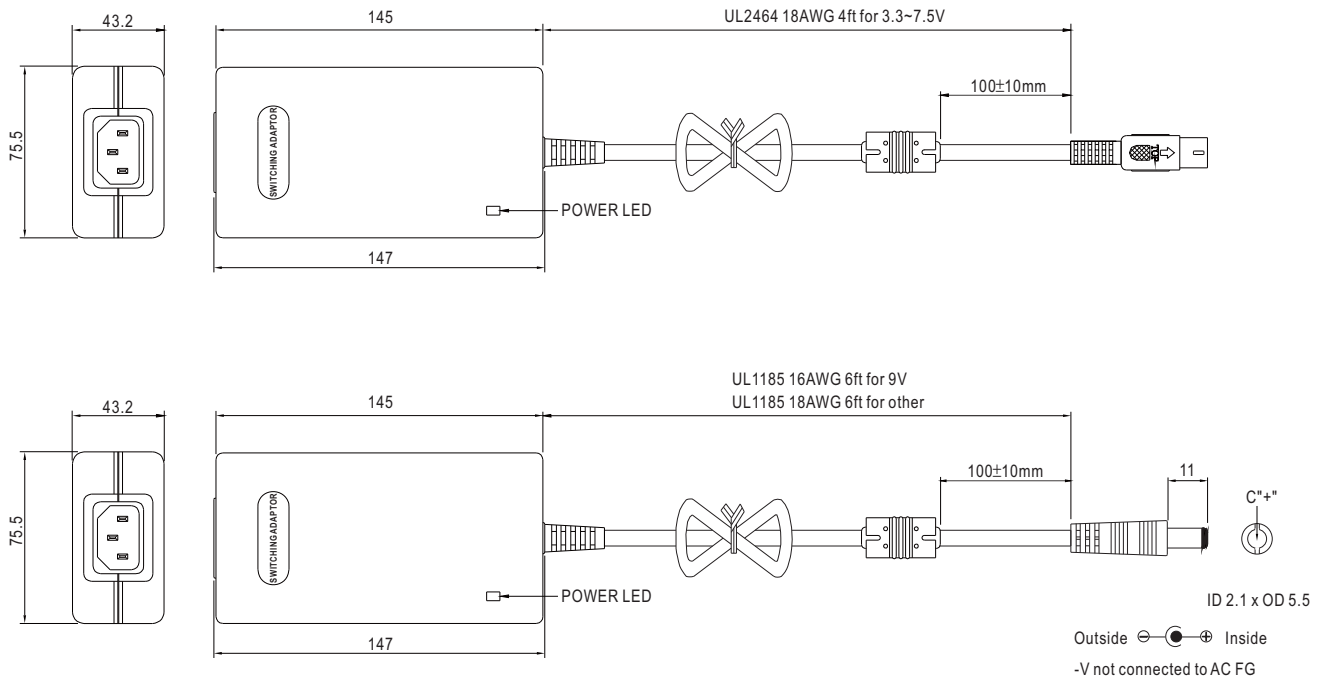


**SPECIFICATION**

ORDER NO.	MES50A-0R1B	MES50A-1R1B	MES50A-1-1R1B	MES50A-2P1J	MES50A-3P1J	MES50A-4P1J	MES50A-5P1J	MES50A-6P1J	MES50A-7P1J	MES50A-8P1J		
OUTPUT	SAFETY MODEL NO.	MES50A-0	MES50A-1	MES50A-1-1	MES50A-2	MES50A-3	MES50A-4	MES50A-5	MES50A-6	MES50A-7	MES50A-8	
	DC VOLTAGE <span style="float:right">Note.2</span>	3.3V	5V	7.5V	9V	12V	15V	18V	24V	28V	48V	
	RATED CURRENT	7.5A	7.5A	5.33A	5.0A	4.16A	3.33A	2.77A	2.08A	1.78A	1.04A	
	CURRENT RANGE	0 ~ 7.5A	0 ~ 7.5A	0 ~ 5.33A	0 ~ 5.0A	0 ~ 4.16A	0 ~ 3.33A	0 ~ 2.77A	0 ~ 2.08A	0 ~ 1.78A	0 ~ 1.04A	
	RATED POWER	24.75W	37.5W	40W	45W	50W	50W	50W	50W	50W	50W	
	RIPPLE & NOISE (max.) <span style="float:right">Note.3</span>	50mVp-p	50mVp-p	75mVp-p	90mVp-p	100mVp-p	100mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p	
	VOLTAGE ADJ. RANGE	Fixed										
	VOLTAGE TOLERANCE <span style="float:right">Note.4</span>	±10%	±6.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±2.0%	±2.0%	±2.0%	
	LINE REGULATION <span style="float:right">Note.5</span>	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	
	LOAD REGULATION <span style="float:right">Note.6</span>	±10%	±6.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±2.0%	±2.0%	±2.0%	
SETUP, RISE, HOLD UP TIME	300ms, 50ms, 16ms at full load											
INPUT	VOLTAGE RANGE	90 ~ 264VAC 135~370VDC										
	FREQUENCY RANGE	47~63Hz										
	EFFICIENCY (Typ.)	60%	67%	70%	72%	74%	75%	78%	78%	80%	80%	
	AC CURRENT	1.5A / 100VAC										
	INRUSH CURRENT (max.)	90A / 230VAC										
LEAKAGE CURRENT (max.) <span style="float:right">Note.7</span>	Earth leakage current < 230 $\mu$ A/264VAC , Touch current < 60 $\mu$ A/264VAC											
PROTECTION	OVERLOAD	112 ~ 250% rated output power					150 ~ 350% rated output power					
		Protection type : Hiccup mode, recovers automatically after fault condition is removed										
	OVER VOLTAGE	110 ~ 150% rated output voltage										
	Protection type : Hiccup mode, recovers automatically after fault condition is removed											
OVER TEMPERATURE	Tj 135 $^{\circ}$ C typically (IC1) detect on main control IC											
	Protection type : Shut down o/p voltage, recovers automatically after temperature goes down											
ENVIRONMENT	WORKING TEMP.	0 ~ +65 $^{\circ}$ C (Refer to "Derating Curve")										
	WORKING HUMIDITY	20% ~ 90% RH non-condensing										
	STORAGE TEMP., HUMIDITY	-20 ~ +85 $^{\circ}$ C, 10 ~ 95% RH										
	TEMP. COEFFICIENT	±0.03% / $^{\circ}$ C ( 0 ~ 50 $^{\circ}$ C)										
VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes											
SAFETY & EMC (Note. 8)	SAFETY STANDARDS	ANSI/AAMI ES60601-1, TUV EN60601-1, IEC60601-1 approved										
	WITHSTAND VOLTAGE	I/P-O/P: 5656VDC , I/P-FG: 2828VDC										
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG:100M Ohms / 500VDC / 25 $^{\circ}$ C / 70% RH										
	EMC EMISSION	Compliance to EN55011(CISPR11) class B, EN61000-3-2,3, FCC part 15 CLASS B & part 18										
EMC IMMUNITY	Compliance to EN60601-1-2 (EN61000-4-2,3,4,5,6,8,11), light industry level, criteria A											
OTHERS	MTBF	-----										
	DIMENSION	147*75.5*43.2mm (L*W*H)										
	PACKING	0.55Kg ; 36pcs / 21Kg / CARTON										
CONNECTOR	PLUG	See page 2, Other type available by customer requested										
	CABLE	See page 2, Other type available by customer requested										
NOTE	<p>1.All parameters are specified at 230VAC input, rated load, 25<math>^{\circ}</math>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 0.1uf &amp; 47uf 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.Load regulation is measured from 0% to 100% rated load.</p> <p>7.Touch current was measured from primary input to DC output.</p> <p>8.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.</p>											

## Mechanical Specification

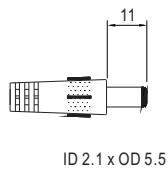
Unit:mm



## Plug Assignment

Standard plug: Others P1J (option)

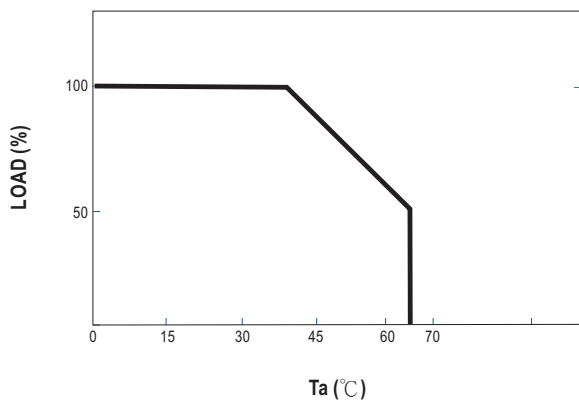
P1J	
P/N	OUTPUT
CENTER	+



Standard plug: 3.3V,5V,7.5V R1B (option)

PIN NO	OUTPUT
1	COM
2	COM
3	+Vout
4	COM
5	+Vout

## Derating Curve



## Static Characteristics

