24 ~ 50W AC-DC Single Output and Medical Type Desktop **MES50A series**



■ Features :

- Universal AC input / Full range
- 3 pole AC inlet IEC320-C14
- Low leakage current <230μA
- 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 / CB / FCC / CE
- 2 years warranty

SPECIFICATION

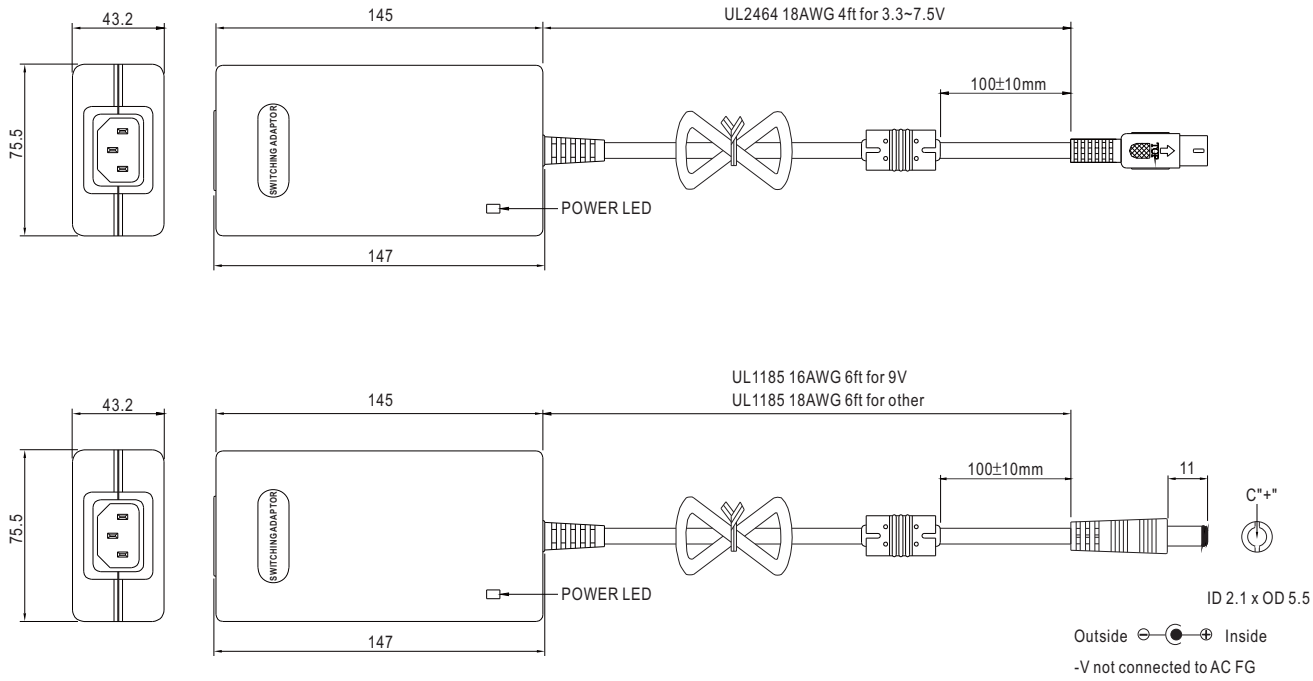
ORDER NO.		MES50A-0R1B	MES50A-1R1B	MES50A-1-1R1B	MES50A-2P1J	MES50A-3P1J	MES50A-4P1J	MES50A-5P1J	MES50A-6P1J	MES50A-7P1J	MES50A-8P1J
OUTPUT	SAFETY MODEL NO.	MES50A-0	MES50A-1	MES50A-1-1	MES50A-2	MES50A-3	MES50A-4	MES50A-5	MES50A-6	MES50A-7	MES50A-8
	DC VOLTAGE Note.2	3.3V	5V	7.5V	9V	12V	15V	18V	24V	28V	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.) Note.3	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 Note.4	±10%	±6.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±2.0%	±2.0%	±2.0%
	LINE REGULATION Note.5	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LOAD REGULATION Note.6	±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.) Note.7	Earth leakage current < 230μA/264VAC , Touch current < 60μA/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℃ 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℃ (Refer to "Derating Curve")									
	WORKING HUMIDITY	20% ~ 90% RH non-condensing									
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH									
	TEMP. COEFFICIENT	±0.03% / ℃ (0 ~ 50℃)									
	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, 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℃/ 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

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 0.1uf & 47uf 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.Load regulation is measured from 0% to 100% rated load.
7.Touch current was measured from primary input to DC output.
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.

■ Mechanical Specification

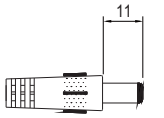
Unit:mm



■ Plug Assignment

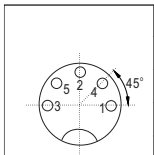
Standard plug: Others P1J (option)

P1J	
P/N	OUTPUT
CENTER	+



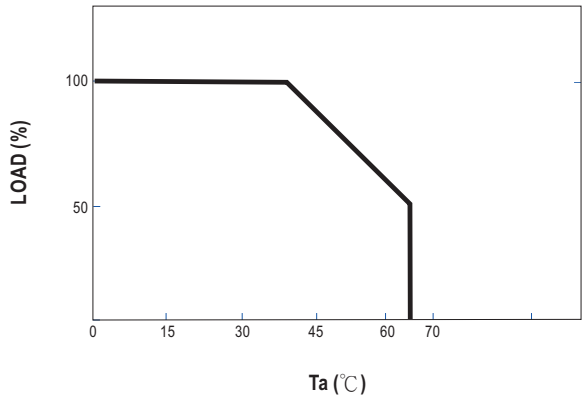
ID 2.1 x OD 5.5

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

