

### 100W Desk Top Switching Power Supplies For Medical Equipment. Description:

The MPU100 series of AC/DC switching mode power supplies provide 100 Watts of continuous output power . All supplies are UL94V-1 min compliant. They are suited for use in hospital instrument and many other applications. All models meet FCC Part-18 class B and CISPR-11 EN55011 class B emission Limits and are designed to comply with UL/c-UL(UL 60601-1:2<sup>nd</sup> Edition) ,TUV/T-mark (EN 60601-1:2<sup>nd</sup> Edition) and new CE requirements. All units are 100% burned in and tested.



#### Features:

- Wide Operating Voltage 90 to 260 VAC,47 to 63 Hz
- IEC-320-C14 Input Inlet
- Single to Triple Output
- Optional Output Connector (See appendix)
- Input Surge Current, Over Voltage And Over Load protection
- Output Voltage Protection
- Ultra-low leakage current (under 0.1mA)
- Active Power Factor Correction
- Class I
- ON/OFF SWITCH (Optional)
- 3 year warranty

#### Safety Approvals :



Agree to apply for the PSE if order on hand

#### Electrical Characteristics:

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Vin	Safety Approvals Input Voltage Range		100		240	VAC
	Operate Voltage Range		90		260	VAC
fin	Input Frequency		47		63	Hz
PF	Power Factor Correction	Io=Full load, Vin=230 VAC	0.95		1	
Po	Output Power Range	Vin=90 to 260 VAC	0		100	W
Vo	Output Voltage Range		See rating chart			V
Io	Output Current Range		See rating chart			A
Iil	Input Current (Low Line)	Io=Full load, Vin=115 VAC			1.25	A
Iih	Input Current (High Line)	Io=Full load, Vin=230 VAC			0.5	A
Irl	Low Line Inrush Current	Io=Full load, 25°C ,Cool start, Vin=115VAC		12	15	A
Irh	High Line Inrush Current	Io=Full load, 25°C ,Cool start, Vin= 230VAC		26	30	A
Eff	Efficiency	Io=Full Load, Vin=230VAC	75	83	88	%
REG-i	Line Regulation	Io=Full Load		0.5	1	%
REG-o	Load Regulation	Vin=230VAC		3	7	%
OVP	Over Voltage Protection		112		132	%
OCP	Over Current Protection		110		150	%
Ttr	Time of Transient Response	Io=Full Load to Half Load, Vin=100VAC			4	mS
Thold	Hold-Up Time	Io=Full Load, Vin=110VAC	16			mS
Ts	Start Up Time	Io=Full Load, Vin=100VAC	0.3	1.5	2	S
* Vp-p	Ripple & Noise (Peak to Peak)	Full Load, Vin=90VAC		0.5	1	%
Ilk	Safety Ground Leakage Current	Io= Full Load, Vin = 240 VAC/60Hz			0.1	mA
TC	Temperature Coefficient	All output	-0.04		0.04	%/°C

\* Note: The Ripple & Noise which is under 3.3VDC at 2% max

#### Environmental :

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Toper	Operating Temperature		0	50	70	°C
Tstg	Storage Temperature		-40		85	°C
Ho	Operating Humidity		0		95	%
Hr	Storage Humidity		0		75	%
MTBF	Operating Temperature at 25°C, Calculated per MIL-HDBK-217F		0.1M			Hrs
Pd	Derate linearly from 100% load at 50°C to 50% load at 70°C					

#### Safety Specifications:

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Vps	Dielectric Withstanding Voltage for Primary to secondary	Primary to secondary	5656			VDC
Vpg	Dielectric Withstanding Voltage for Primary to Ground	Primary to ground	2828			VDC
Ris	Isolation Resistance	Test Voltage = 500VDC	50			MΩ
CISPR	EMI requirements for CISPR-11	Vin=220VAC	B			CLASS
FCC	EMI requirements for FCC PART-18	Vin=110VAC	B			CLASS

### 100W Desk Top Switching Power Supplies For Medical Equipment.

#### Output Voltage And Current Rating Chart (Single Output) :

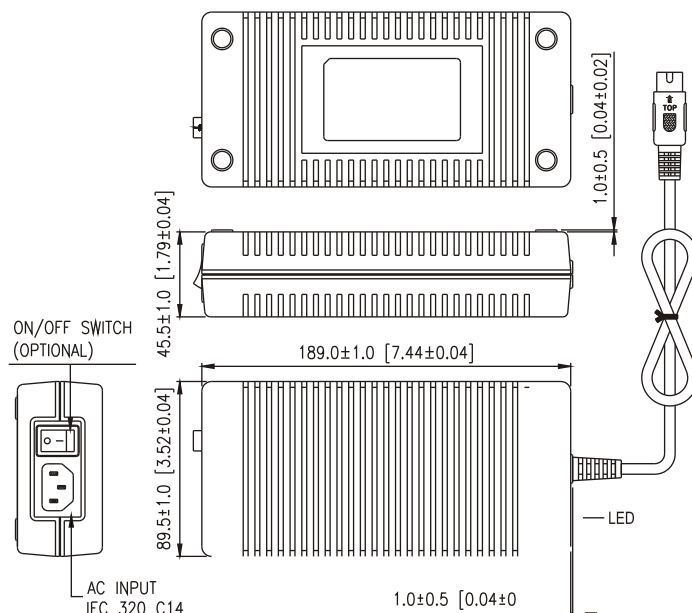
Model Number	Output Voltage	Output Current	Total Regulation	Maximum Output Power
MPU100-102	5 ~ 6 VDC	14.00 ~ 11.66 A	5%	70W
MPU100-103	6 ~ 8 VDC	13.33 ~ 10.00 A	5%	80W
MPU100-104	8 ~ 11 VDC	11.25 ~ 8.20 A	4%	90W
MPU100-105	12 ~ 13 VDC	8.33 ~ 7.70 A	3%	100W
MPU100-106	13 ~ 16 VDC	7.70 ~ 6.30 A	3%	100W
MPU100-107	16 ~ 21 VDC	6.30 ~ 4.80 A	3%	100W
MPU100-108	21 ~ 27 VDC	4.80 ~ 3.70 A	2%	100W
MPU100-109	27 ~ 33 VDC	3.70 ~ 3.00 A	2%	100W
MPU100-110	33 ~ 40 VDC	3.00 ~ 2.50 A	2%	100W

#### Output Voltage And Current Rating Chart ( Multi Output ) :

Model Number	Output#1				Output#2				Output#3				Maximum Output Power
	Vonom	Iomin	Iomax	Regmax	Vonom	Iomin	Iomax	Regmax	Vonom	Iomin	Iomax	Regmax	
MPU100-200	+3.3V	1.0A	10A	7%	+12V	0.3A	3A	5%					69W
MPU100-201	+5V	1.0A	10A	5%	+12V	0.3A	3A	5%					80W
MPU100-202	+5V	1.0A	10A	5%	+15V	0.3A	3A	6%					80W
MPU100-203	+5V	1.0A	10A	5%	+24V	0.2A	2A	7%					80W
MPU100-204	+3.3V	1.0A	10A	7%	+5V	0.5A	5A	5%					55W
MPU100-209	+12V	0.7A	7A	5%					-12V	0A	1A	5%	80W
MPU100-210	+15V	0.6A	6A	5%					-15V	0A	1A	5%	80W
MPU100-212	+24V	0.3A	3A	5%					-24V	0A	1A	5%	80W
MPU100-215	+5V	1.0A	10A	5%					-24V	0A	1A	5%	74W
MPU100-300	+3.3V	1.0A	10A	7%	+12V	0.3A	3A	5%	-12V	0A	1A	5%	74W
MPU100-300-1	+3.3V	1.0A	10A	7%	+12V	0.3A	3A	5%	+12V	0A	1A	5%	74W
MPU100-301	+5V	1.0A	10A	5%	+12V	0.3A	3A	5%	-5V	0A	1A	5%	80W
MPU100-301-1	+5V	1.0A	10A	5%	+12V	0.3A	3A	5%	+5V	0A	1A	5%	80W
MPU100-302	+5V	1.0A	10A	5%	+12V	0.3A	3A	5%	-12V	0A	1A	5%	80W
MPU100-302-1	+5V	1.0A	10A	5%	+12V	0.3A	3A	5%	+12V	0A	1A	5%	80W
MPU100-303	+5V	1.0A	10A	5%	+15V	0.3A	3A	6%	-15V	0A	1A	5%	80W
MPU100-303-1	+5V	1.0A	10A	5%	+15V	0.3A	3A	6%	+15V	0A	1A	5%	80W
MPU100-304	+5V	1.0A	10A	5%	+24V	0.3A	3A	5%	-24V	0A	1A	5%	80W
MPU100-304-1	+5V	1.0A	10A	5%	+24V	0.3A	3A	5%	+24V	0A	1A	5%	80W
MPU100-305	+5V	1.0A	10A	5%	+24V	0.3A	3A	5%	-12V	0A	1A	5%	80W
MPU100-305-1	+5V	1.0A	10A	5%	+24V	0.3A	3A	5%	+12V	0A	1A	5%	80W
MPU100-306	+3.3V	1.0A	10A	7%	+12V	0.3A	3A	5%	-5V	0A	1A	5%	74W
MPU100-306-1	+3.3V	1.0A	10A	7%	+12V	0.3A	3A	5%	+5V	0A	1A	5%	74W
MPU100-308	+3.3V	1.0A	10A	7%	+5V	0.3A	3A	5%	-12V	0A	1A	5%	60W
MPU100-308-1	+3.3V	1.0A	10A	7%	+5V	0.3A	3A	5%	+12V	0A	1A	5%	60W

MPU100-105 had been approved by BSMI,KC,FCC.

#### Mechanical Specifications:



#### Note:

1. Dimensions are shown in inches or mm.
2. Weight: 778-800gs approx.
3. Optional output connector: See page Appendix.

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