

### 15W Desk Top Switching Power Supplies For Medical Equipment.

#### Description:

The MPU15C series of AC/DC switching mode power supplies provide 15 Watts of continuous output power and is well-suited for a variety of applications. All supplies are UL 94V-1 min compliant. All models comply with UL/c-UL (UL 60601-1), TUV/T-mark (EN 60601-1) and new CE requirements. All units are 100% burned-in and tested.



#### Features:

- Wide Input Voltage 90 to 264 VAC, 47 to 63 Hz
- IEC-320-C6 Input Inlet
- Output Voltage Available From 5VDC Thru 36VDC
- Single Output
- Splash proof
- Over Voltage and Over Load protection.
- Over temperature Detection
- Class I Insulation
- CEC and Energy Star compliance
- 3 year warranty

#### Safety Approvals:



#### Electrical Characteristics:

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Vin	Input Voltage	Operating Voltage	90		264	VAC
Fin	Input Frequency		47		63	Hz
Wo	Output Power Range	Vin=90 to 264VAC	0		15	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=115VAC		0.25	0.33	A
Iih	Input Current (High Line)	Io=Full load, Vin=230VAC		0.17	0.18	A
Irl	Low Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=115VAC		14	16	A
Irh	High Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=230VAC		28	30	A
Eff	Efficiency	Io=Full Load, Vin=230VAC	73		85	%
REG-i	Line Regulation	Io=Full Load		0.5	1	%
REG-o	Load Regulation	Vin=230VAC	1	3	5	%
OVP	Over Voltage <sup>①</sup> Protection		112		132	%
OCP	Over Current <sup>①</sup> Protection		110		150	%
Ttr	Transient Response	Io=Full Load to Half Load, Vin=100VAC			4	mS
Thold	Hold-Up Time	Io=Full Load, Vin=110VAC	10	16		mS
Ts	Start Up Time	Io=Full Load, Vin=100VAC		0.5	1	S
Vrn	Ripple & Noise (Peak to Peak)	Full Load, Vin=90VAC		0.5	1	%
Ilk	Safety Ground Leakage Current	Io=Full Load, Vin=240VAC			0.3	mA
Tc	Temperature Coefficient	All output	-0.04		0.04	%/°C
Pnlc	Power Consumption (No load)	No load, Vin=240VAC	0	0.4	0.5	W
Tjtd	Thermal Shutdown <sup>①</sup> by Junction Temperature Controller	The parameter is not subject to production test-verified by design/characterization of integrated controller.	-20		125	°C

<sup>①</sup> When the power system interruption is isolated, the product would re-start after recovering by hand.

#### Environmental :

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Toper	Operating Temperature		0	50	70	°C
Tstg	Storage Temperature		-40		85	°C
Hr	Relative Humidity		5		95	%
Pd	Derate linearly from 100% load at 50 °C to 50% load at 70 °C					

# MPU15C SERIES

## 15W Desk Top Switching Power Supplies For Medical Equipment.

### 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	2121			VDC
Ri	Isolation Resistance	Test Voltage=500VDC	50			M Ω
EN55022	EMI requirements for EN55022	Vin=120VAC, 60HZ	B			CLASS
FCC	EMI requirements for FCC PART-15, FCC PART-18	Vin=120VAC, 60HZ	B			CLASS

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

Model Number	Output Voltage	Output Current	Total Regulation <sup>Ⓢ</sup>	Max. Output Power
MPU15C-102	5 VDC	2.60 A	5%	13W
MPU15C-103	7 VDC	1.85 A	5%	13W
MPU15C-104	9 VDC	1.66 A	5%	15W
MPU15C-105	12 VDC	1.25 A	5%	15W
MPU15C-106	16 VDC	0.93 A	5%	15W
MPU15C-107	18 VDC	0.83 A	5%	15W
MPU15C-108	24 VDC	0.62 A	3%	15W
MPU15C-109	30 VDC	0.50 A	3%	15W
MPU15C-110	36 VDC	0.41 A	3%	15W

Ⓢ The total regulation on model 102~103 is required to use AWG#18 / 4FT output cable.

The total regulation on model 104~106 is required to use AWG#18 / 6FT output cable.

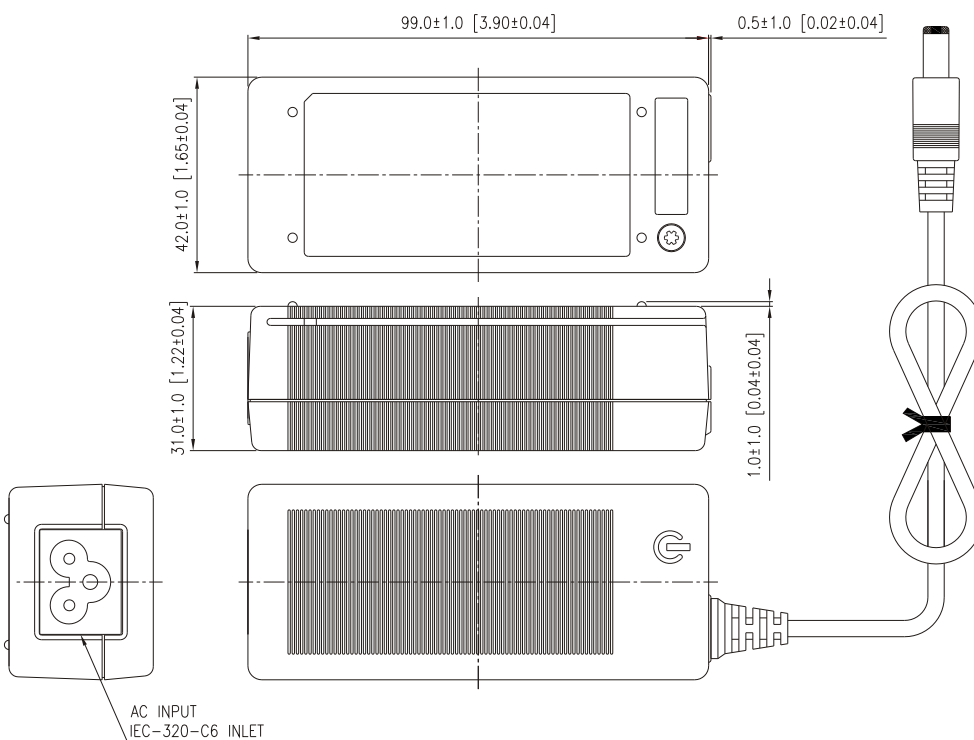
The total regulation on model 107~110 is required to use AWG#20 / 6FT output cable.

The regulation and efficiency will be changed by modified output cable.

### Mechanical Specifications :

Note:

1. Dimensions are shown in mm.
2. Weight: 170gs approx.
3. Optional output connector: See page Appendix.



North America Office:  
**L.Q.P. Enterprises Co., LTD.**  
 175-5489 Byrne Road,  
 Burnaby, B.C. V5J 3J1 Canada  
 TEL: (604)451-7899 FAX: (604)451-7858  
 www.LeadingQP.com, www.LQP.ca