

FEATURES :

- Universal Input 90~305VAC
- Efficiency up to 90%
- Protection: Short Circuit /Over current/Over voltage/ over temperature
- Power Factor Correction
- Internal Input Filter
- IP67 design for indoor or outdoor installation
- Application: Suitable for LED lighting and moving sign applications
- ROHS Compliant
- Customized Solution Available

YUAN DEAN SCIENTIFIC



LED Driver

LGA120 SERIES

40~120Watt

Single Output

Switching Power Supply

Specifications typical at TA=25°C, nominal input voltage and rated output current unless otherwise specified

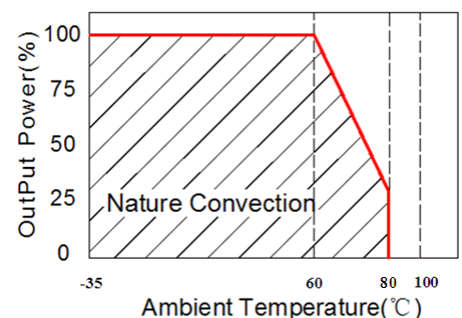
Part Number	Output Wattage	Output Voltage	Constant Current Region	Output Current	Efficiency
	(W)	(V)	(V)	(mA)	
LGA120-900-1200X	120	Vo=+90.0	56-100	1200±3%	90
LGA100-900-1000X	100	Vo=+90.0	56-100	1000±3%	
LGA070-900-700X	70	Vo=+90.0	56-100	700±3%	
LGA120-990-1200X	120	Vo=+99.0	65-100	1200±3%	88
LGA100-990-1000X	100	Vo=+99.0	65-100	1000±3%	
LGA070-990-700X	70	Vo=+99.0	65-100	700±3%	
LGA70-480-1500X	70	Vo=+48.0	36-54	1500±3%	88
LGA60-480-1200X	60	Vo=+48.0	36-54	1200±3%	
LGA60-480-1000X	50	Vo=+48.0	36-54	1000±3%	



Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Rated input voltage	Vo,Io nom		110-220		Vac
Voltage Range	Vo,Io nom	90		305	Vac
Frequency		47	50/60	63	Hz
Input Current	Vo,Io nom			1.5	A
Inrush Current	At 277Vac			60	A
Input Fuse	VDE/UL/CCC FUSE 2.5A/250V(Slow Blow)				
Power Factor	PF> 0.92/ 110Vac PF> 0.9/ 220Vac at full load				

Temperature Derating Graph



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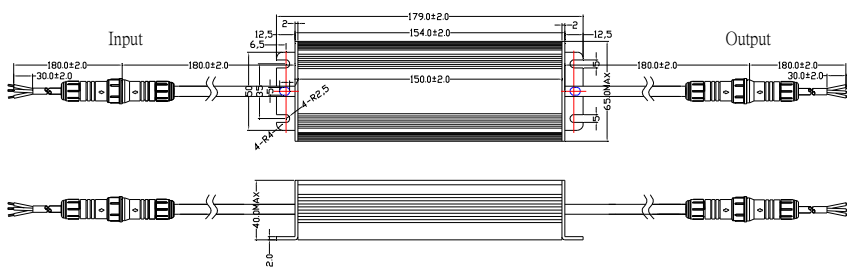
Output Specifications (Standard)

Parameters	Conditions	Min	Typ	Max	Units
Output Voltage Accuracy	Vi nom, Io nom Vo			±3	%
Rippled & noise	5V(Vpeak-peak) max		2.0	5	V
Line Regulation	Io nom, Vi min...Vi max		±1		%
Load Regulation	Vi nom, Io min...Io nom Vo		±2		%
Protection	Over Current	110%Io~180%Io			
		Protection type: Recovers automatically after fault condition is removed			
	Over Voltage	When the output voltage is over 110%Vo(TYP) the product is protected such as hiccup or when it is at the highest point of output voltage the product would not be damaged when the fault is removed or ACIN restart again, the power supply is working normally.			
	Short circuit	The input power shall decrease when the output rail short, the power supply shall no damage, and shall be self-recovery when the fault condition is removed			

General Specifications

Parameters	Conditions	Min	Typ	Max	Units
EMI Conduction & Radiation	Design refer to EN55015, EN55022 (CISPR22) Class B				
Harmonic Current	Design refer to EN61000-3-2 Class C; EN61000-3-3				
EMS Immunity	Design refer to EN61000-4-2,3,4,5,6,8,11; EN61547, EN55024, light industry level (surge 4KV), criteria A				
Safety Standards	Design refer to EN60950-1, EN61347-1, EN61347-2-13,IP67				
Isolation Voltage	Input / Output	3KVac/ 5mA/5Secs			
Isolation Resistance	I/P-O/P 500Vdc/25°C/70%RH	50			%
Operating Temperature	Operating at Vi nom, Io nom	-35		+60	°C
Storage Temperature	Non Operational	-40		+80	°C
LIFE Time Qualification	The Life Time shall be at least 50,000hours at 45°C, Full load and nominal input condition				
Relative Humidity	Vi nom, Io nom	10		100	% RH
Dimension	L150.0 x W65.0 x H40.0				mm
Cooling	Free air convection				

Markings and dimensions



UNIT: mm Unless otherwise specified, all tolerances are ±0.50

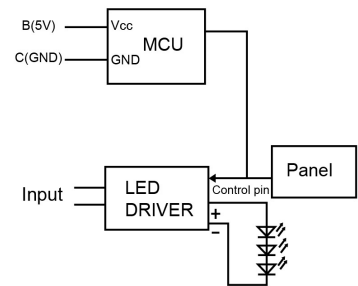
Part Number

LG	A	120	-	990	-	1200	A
A	B	C	D	E	F		

- A : Series
- B : Package
- C : Output Wattage
- D : Output Voltage
- E : Output Current
- F : A(Standard)
B(Customization)

Output Spec (Customization, Optional)

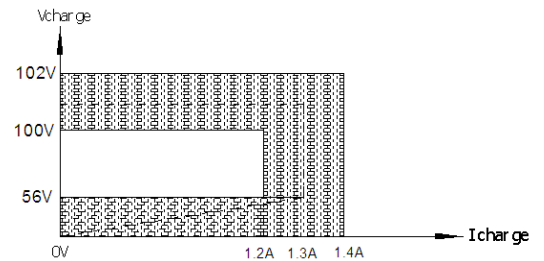
To provide Logic control power 5V, for use control loop



Time control, timing control according to customer demand production
For example: the timing dimming system

Note:
MCU provides dimming control system

Voltage/Current Curve



Remark:

Constant Current Output Characteristics	Minimum	Typical	Maximum
Output Current Range	1.16A	1.2A	1.24A
Output Voltage Range	56V	90V	100V