

Specification  
Constant current LED  
Power Supply



# Specification Constant current LED Power Supply

Model: GL-100C-56\*

Spec: 100W LED Power Supply

Version: V1.0

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# GL-100C-56\*

## Product Feature

- ▶ Isolation scheme,Active PFC,High PF,Low THD
- ▶ Constant Current Output
- ▶ Low output ripple
- ▶ Efficiency reach 90%
- ▶ 0/1-10V ,PWM,resistance Dimming
- ▶ The output is isolated from dimming,Dimming can be turned off
- ▶ Isolated auxiliary power supply:12V/0.4A
- ▶ SCP,OCP, OVP and OTP
- ▶ Suffix "\*\*\*", B for dimming, H for auxiliary power 12V



## Input Characteristics

Item	Min	Typ	Max	Remark
Voltage	100Vac		277Vac	
Frequency	47Hz	50/60	63Hz	
I <sub>max</sub>		1.25A		100Vac , full load
PF	0.95	0.97		220Vac/50Hz , full load
	0.91			100-277Vac/50Hz , 70-100%load
THD		8%	10%	220Vac/50Hz , full load
			15%	100-277Vac/50Hz , 70-100%load
P <sub>in</sub>			125W	100Vac , full load



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## Output Characteristics

Item	Min	Typ	Max	Remark
Rated Current	1.6A		2.3A	
Output Voltage Range	22V		56V	
Open-circuit voltage		60V		
Rated Power			100W	
Efficiency		89%		120Vac@56Vdc
		90%		220Vac@56Vdc
Current accuracy	-5%		5%	
Run-up time		≤1S		120Vac@56Vdc
		≤1S		230Vac@56Vdc
Line regulation		< 2%		Rated output voltage
Load regulation		< 2%		Rated input voltage



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## Other performance

Item		Min	Typ	Max
Auxiliary power supply function(VCC optional)	Output voltage	10.8V	12.1V	13.2V
	Output current	0mA		400mA
0-10V Dimming(optional)	Max voltage	0V		12V
	DIM range	10%		100%
	DIM voltage	1V		10V
PWM Dimming(optional)	PWM High level	3.3V		10.2V
	PWM Low level	0V		1V
	PWM Frequency	500Hz		5KHz
	PWM Duty	10%		100%
Resistance Dimming(optional)	DIM Resistance	10KΩ		100KΩ
	DIM range	10%		100%
Dimming can be turned off	Turn off voltage	3%	5%	7%
	Turn on voltage	5%	7%	9%



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## Environmental Requirements

Item	Min	Typ	Max	Remark
Tc	-40°C	25°C	90°C	
Lifetime		62000H		80%load@Tc75°C
Tst	-40°C	25°C	90°C	
Operating Humidity	10%RH		90%RH	non-condensing
Store Humidity	5%RH		95%RH	
Pressure	70KPa		106KPa	

## Safety&EMC

Item		Standard	Remark
Safety Standard		UL8750	
		EN61347-2-13:2014	
		EN61347-1:2008+A1:2011+A2:2013	
Hi-pot	(I/O)	3750vac	Reinforced insulation
	(I/S)	1875vac	Basic insulation
	(O/S)	1600Vac	Function of insulation
Insulation Resistance		≥10MΩ	500Vdc , 25°C , 70%RH
CE&RE		EN55015:2013+A1:2015	
Surge		EN61000-4-5	L-N:6KV L-E,N-E:12KV

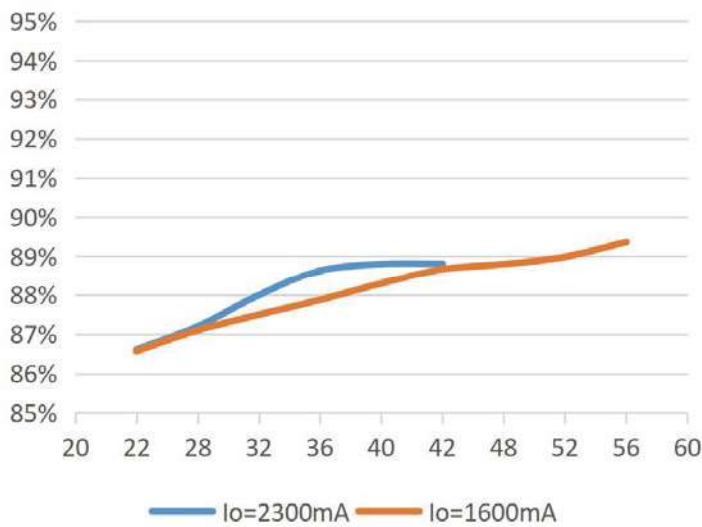


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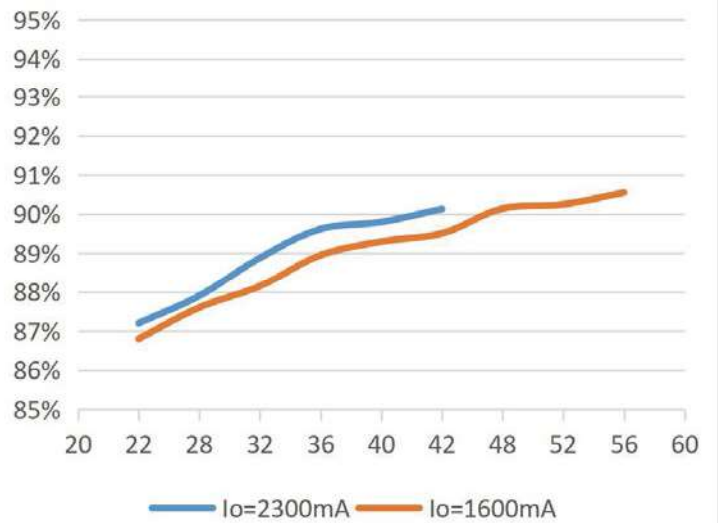


**Characteristic curve**

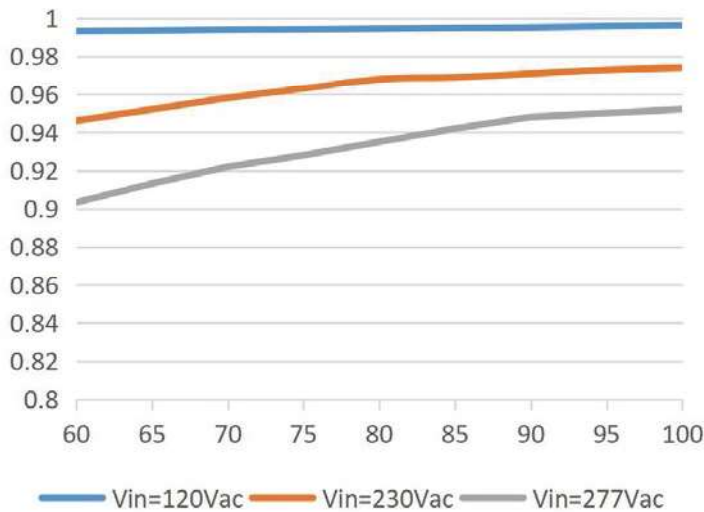
Efficiency VS Vout(Vin=120Vac)



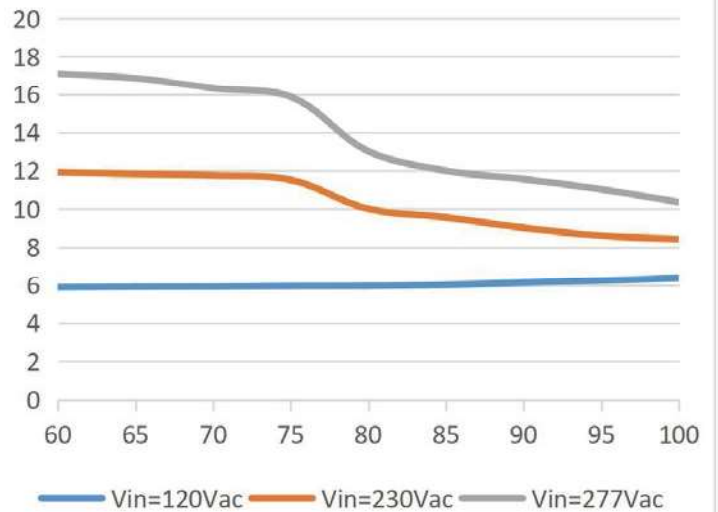
Efficiency VS Vout(Vin=230Vac)



Power Factor VS Output Power



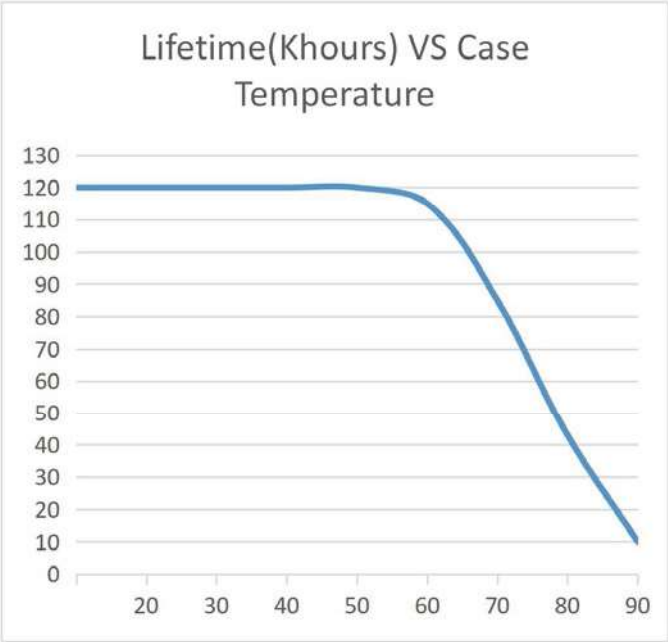
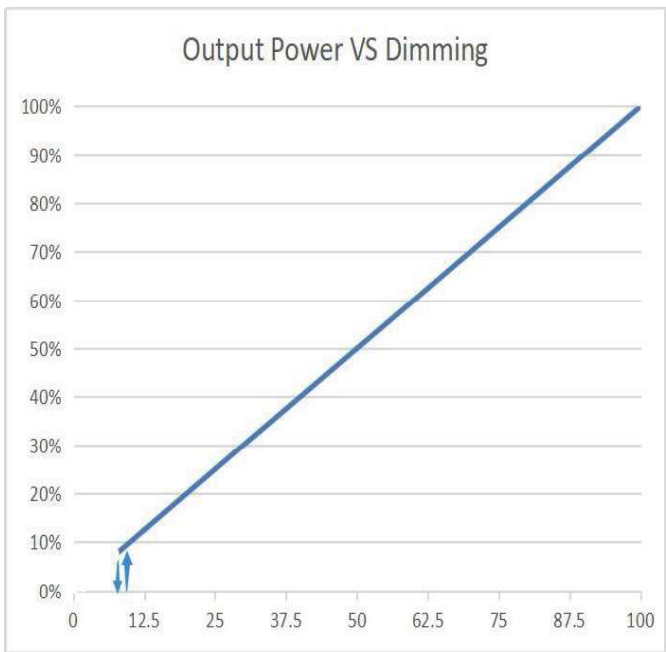
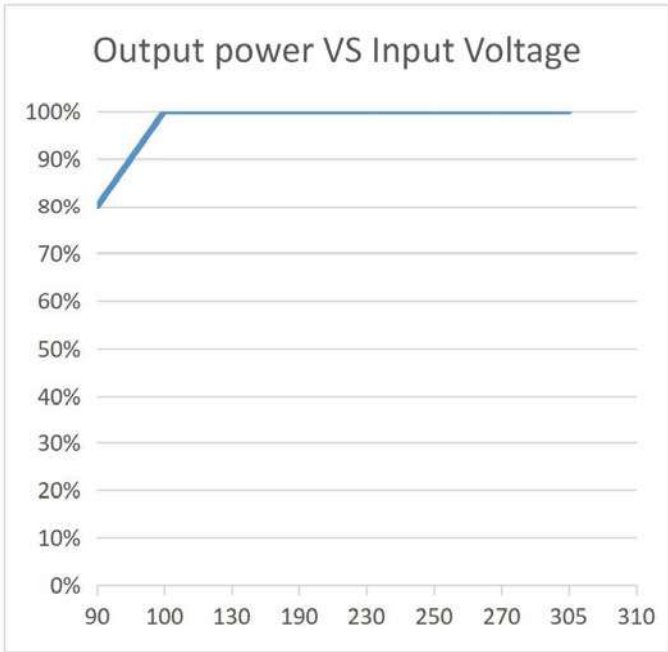
THD VS Output Power



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**Characteristic curve**



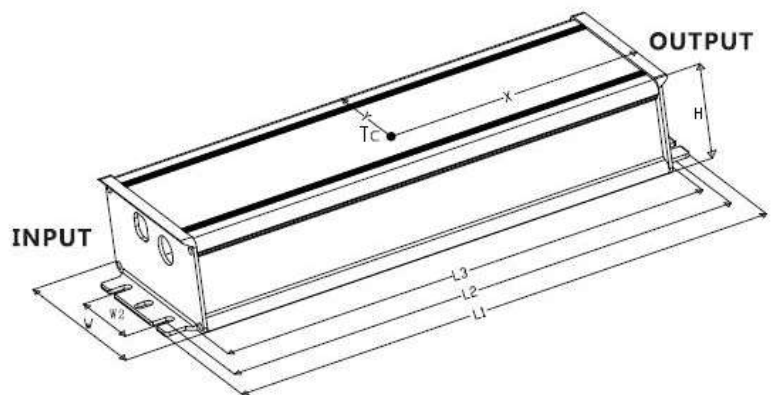
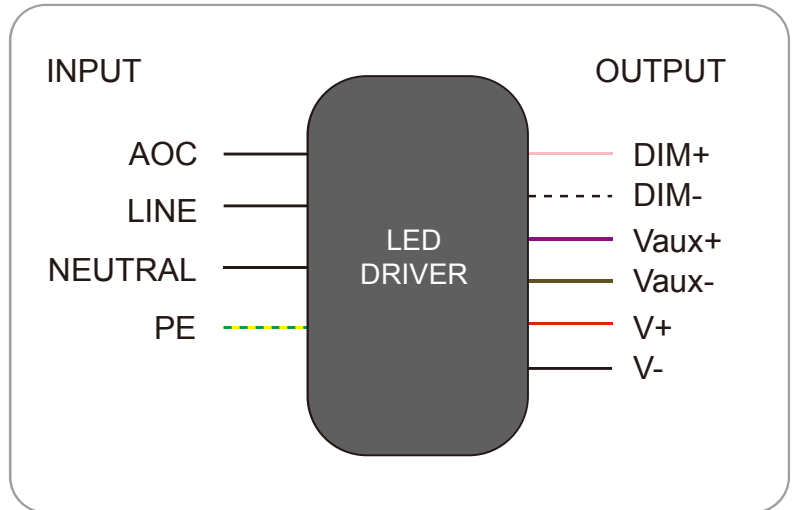
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### 2D Structure

Name Description	Standard Code	mm(In.)
Case Length	L3	154(6.06)
Case Width	W1	71(2.8)
Case Height	H	39.6(1.56)
Overall Length	L1	179(7.05)
Mounting Hole Length	L2	164(6.46)
Mounting Hole Width	W2	34(1.34)
TC point position	X	57(2.24)
TC point position	Y	36(1.42)

### Wiring diagram



### Structure

Item	TYP	Remark
Weight	830g	
Size	179mm*71mm*39.6mm	L*W*H
Input Wire	SJTW/3*18AWG/L:Black/N: White/PE :Green	
Output Wire	SJTW/2*18AWG/V+:Red/V-:Black	
Dim Wire/AUX Wire	21996/4*22AWG/DIM+:Purple/DIM-:Gr ey/Vaux+:Powder/Vaux-:Black/White	

