Figure 1. The Physical Photo of ATI30-12VF

Figure 2. The Physical Photo of ATI30-12VF

DESCRIPTION

The LED Power Supply ATI30-12VF (UL)is exclusively designed for the LED (Light Emitting Diode) lamps used indoors. It is a switch mode power supply with 12VDC constant output voltage.

An electronic protection circuit switches off the power supply in case of short circuit or overload in the secondary circuit, overheat as well as open circuit. After the removing of the faults, the LED power supply is resetting automatically for operation again.

APPLICATIONS

This LED power supply is used for providing power to LEDs with constant voltage.

INSTALLATION INSTRUCTIONS

ATI30-12VF conforms to the UL1310 for safety regulation and FCCPART 15 for electromagnetic compatibility.

- This LED power supply can only be used with the LED lamps
- This LED power supply is only suitable for indoor use. Protect the LED power supply against excessive heat (permissible operating temperature range is −20ºC to +45ºC).
- The loads indicated on the power supply should not exceed or below the default value, 0-30W.
- Connect the LED lamps to the LED power supply with correct polarity according to the schematic drawing.
- The maximum length of the output cable should be less than 2m in order to meet EMC standard.
- If the power supply is used for purposes other than originally intended or it is connected in a wrong way, no liability can be guaranteed.

STABLE VOLTAGE

This power supply has a stable output voltage. The experiment shows that the output voltage remains stable under different ambient temperatures, 20ºC, -20ºC, and 45ºC, as shown in Figure 3 below.

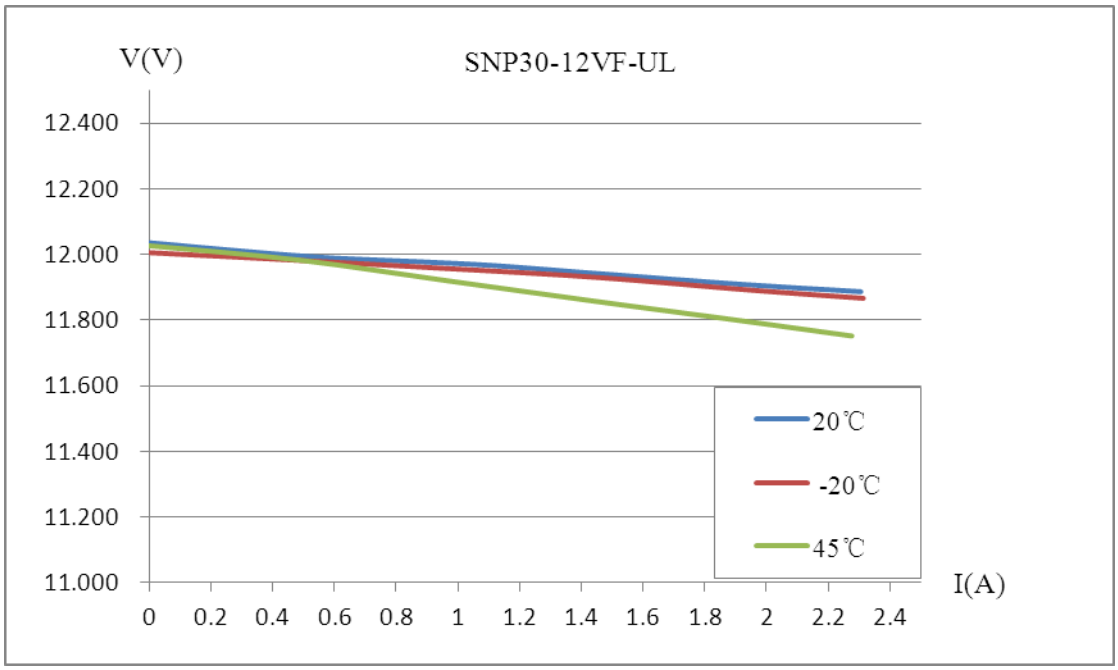

Figure 3. The curve for the output current under different temperatures

SPECIFICATIONS

Table 1. Characteristics

Parameters	Value
Input Voltage	120V+/-10%60Hz
Input Current	< 0.55A
Output Voltage	12VDC+/- 0.5%
Rated Power	30W
Protection Degree	IP20
Ambient Temperature (Ta)	Max. 45ºC
Case Temperature (Tc)	Max. 85 ºC
Primary Cable	SPT-2 18AWG WIRE
Secondary Cable	SPT-2 18AWG WIRE
Dimension	160×57×18mm

Table 2. Spec.

Parameters	Conditions	Request	Note
Input			
Rated input voltage	Ta	AC120V	
Input voltage scope	Ta	AC108-132V	
Input voltage frequency	Ta	60Hz	
Input current	25℃, input rated voltage, output max rated load	<0.55A	
Input power	25℃, input rated voltage, output max rated load	<38.5W	
Efficiency	25℃, input rated voltage, output max rated load	≥81%	
Power consumption without load	25℃, input rated voltage, output without load	<0.5W	Average
Power factory	25℃, input rated voltage, output max rated load	≥0.90	
Input surge current	25℃, input rated voltage, output max rated load	<70A	Peak
Output			
Startup time	25℃, input rated voltage, output max rated load	<2S	
Constant output current and precision	Ta, input rated voltage, output max rated load	-	
Rated output power/led lights quantity	Ta, input rated voltage	-	VF=3.6V
Output current wave	25℃, input rated voltage, output max rated load	-	Ip-p
Overshoot	25℃, input rated voltage, output for 2 lights connection	-	
Rated output voltage and precision	Ta, input rated voltage, output rated load	12V±5%	
Output voltage wave	25℃, input rated voltage, output max rated load		Vp-p
Output open circuit voltage	Ta, input rated voltage	<13V	
Dimmable mode		-	
Dimmable scope		-	
Protection			
Open protection	Ta, input rated voltage, output without load	yes	
Overload protection	Ta, input 0.94-1.06 times rated voltage, output 1.1 times rated load	yes	
Short protection	Ta, input 0.94-1.06 times rated voltage, output short circuit for 1 hour	yes	

Over temperature protection	Interior temperature test	yes	
Automatic re-start	Ta overload, short, over temperature protection retreated	yes	
Temperature and others			
Working temperature		-20℃~45℃	
Relative humidity		45%~85%	
Max cover temperature		85℃	<90℃
Products life span	Under max Ta, input rated voltage and output max rated load	30000hr	
Working noise	25℃, input rated voltage, outputrated load, background noise<30dB, voice source is 10cm away from product	<35dB	
Mechanical structure, mounting and connection way			
Cover material and sizes	Plastic cover, 161.8mm×58.9mm×18.6mm		
Mounting ways	Independent		
Anti-electric shock	Second grade		
Protection grade	IP20		
Input connection way	1 way, terminal, to connect SPT-2 18AWG wire		
Output connection way	1 way, terminal, to connect SPT-2 18AWG wire		
Output wires length	2m max		
Standard request			
Security	UL1310		
Harmonic	25℃, input rated voltage, MAX rated load		
EMC--interference	25℃, input rated voltage, load is typical lights	FCC PART15	
EMC--ANTI interference	25℃, input rated voltage, load is light		

DIMENSIONS

The mounting location dimension of ATI30-12VF is shown in Figure 4 below.

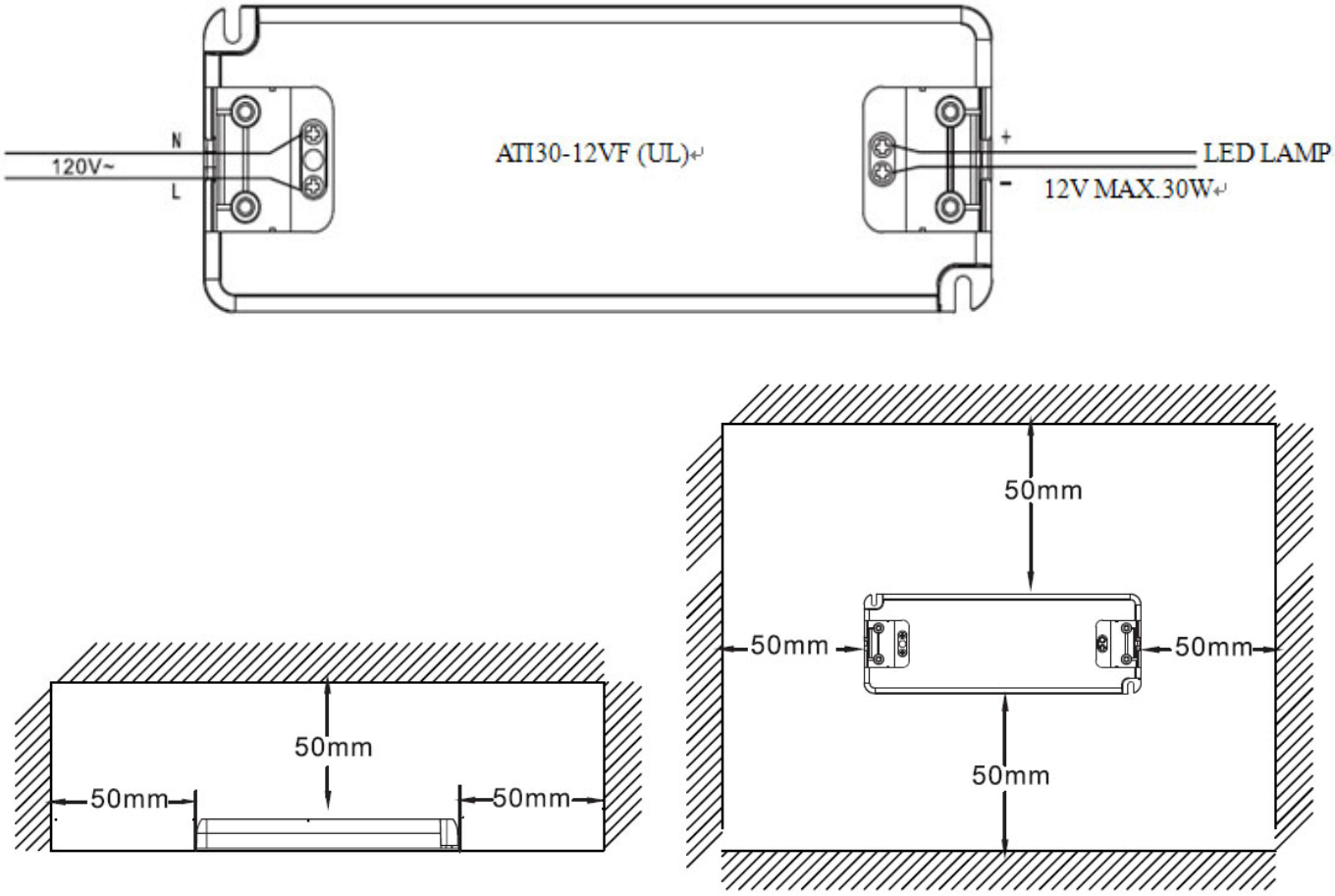

Figure4. Mounting Location Dimension

ORDERING INFORMATION

Table 3. Unit Price

Quantity	1 – 9	10 – 24	25 – 99	100 – 499	500 – 999	≥1000
ATI30-12VF	$20.5	$19.5	$18.5	$17.0	$15.9	$14.9

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