



Figure 1. The Physical Photo of ATI18-700ILT



Figure 2. The Physical Photo of ATI18-700ILT

## DESCRIPTION

The LED Power Supply ATI18-700ILT is exclusively designed for the LED (Light Emitting Diode) lamps used indoors. It is a switch mode power supply with 700mA constant output current.

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 current.

## INSTALLATION INSTRUCTIONS

ATI18-700ILT conforms to the directive 2004/108/EC for electromagnetic compatibility and the low voltage directive 2006/95/EC.

- 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  $-10^{\circ}\text{C}$  to  $+45^{\circ}\text{C}$ ).
- The loads indicated on the power supply should not exceed or below the default value, 15-18W.
- 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 current. The experiment shows that the output current remains stable under different ambient temperatures, 20°C, -20°C, and 40°C, as shown in Figure 3 below.

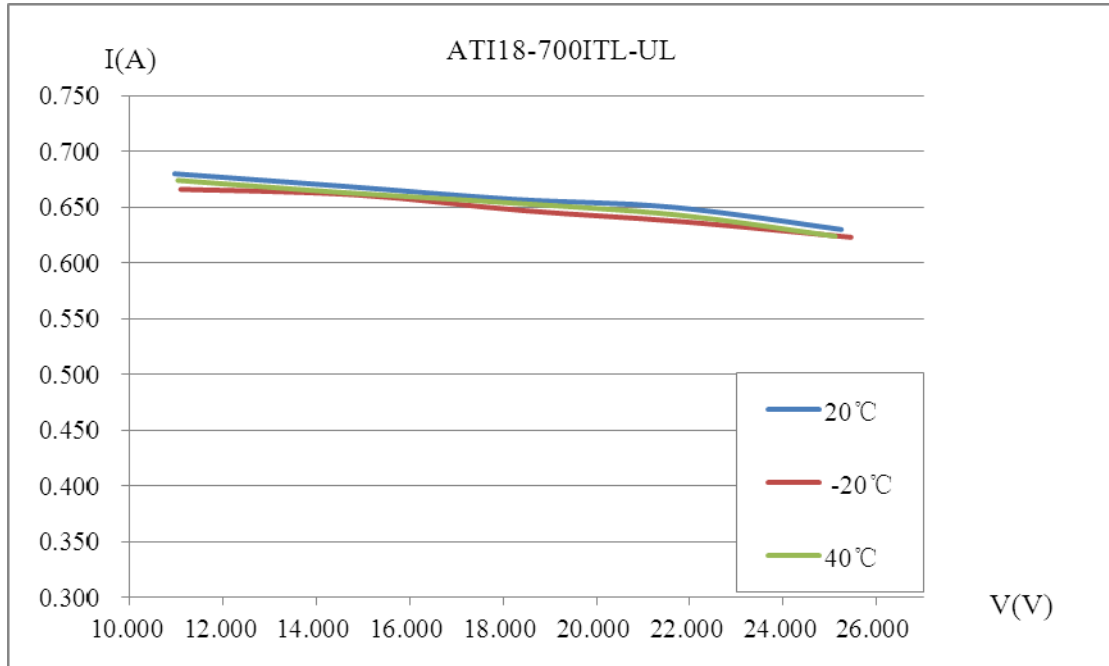


Figure 3. The curve for the output current under different temperatures

**SPECIFICATIONS**

Table 1. Characteristics

Parameters	Value
Input Voltage	220Vac50Hz
Input Current	< 0.2A
Output Current	700mA +/- 0.5%
Rated Power	18W
Protection Degree	IP20
Ambient Temperature (Ta)	Max. 45°C
Case Temperature (Tc)	Max. 80 °C
Primary Cable	H03VVH2-F 2×0.75mm <sup>2</sup>
Secondary Cable	H03VVH2-F 2×0.75mm <sup>2</sup>
Dimension	138×45×23mm



Table 2. Spec.

Parameters	Conditions	Request	Note
<b>Input</b>			
Rated input voltage	Ta below	120V	
Input voltage scope	Ta below	108V-132V	
Input voltage frequency	Ta below	60Hz	
Input current	25°C, input rated voltage, output max rated load	0.3A MAX	
Input power	25°C, input rated voltage, output max rated load	22W MAX	
Efficiency	25°C, input rated voltage, output max rated load	75% MIN	
Powerconsumption without load	25°C, input rated voltage, output without load	0.3W MAX	Average
Power factor	25°C, input rated voltage, output max rated load	0.85MIN	Related voltage
Input surge current	25°C, input rated voltage, output max rated load	10A MAX	PK-PK
<b>Output</b>			
Startup time	25°C, input rated voltage, output max rated load	<1sMAX	
Constant output current and precision	Ta below, input rated voltage, output max rated load	700mA±5%	
Rated output power/led lights quantity	Ta below, input rated voltage	7pcs LED (26V)	VF=3.6V
Output current wave	25°C, input rated voltage, output max rated load	-	
Overshoot	25°C, input rated voltage, output for 2 lights connection	-	
Rated output voltage and precision	Ta below, input rated voltage, output rated load	-	
Output voltage wave	25°C, input rated voltage, output max rated load	-	
Output open circuit voltage	Ta below, input rated voltage	29V MAX	
Dimmable mode		Traic dimmable	
dimmable scope		12%~90%	
<b>Protection</b>			
Open circuit protection	Ta below, input rated voltage, output without load	yes	
Overload protection	Ta below, input 0.94-1.06 times rated voltage, output 1.1 times rated load	-	
Short circuit protection	Ta below, input 0.94-1.06 times rated	yes	



	voltage, output short circuit for 1 hour		
Over temperature protection		-	
Automatically re-start	Ta below, short circuit, over heat protection retreated	yes	
<b>Temperature and others</b>			
Working temperature		-10°C~40°C	
Comparative humidity		10%~95%	
Max cover temperature		85°C	
Products life span	under max Ta, input rated voltage and output max rated load	30000hr	
<b>Mechanical structure, mounting and connection way</b>			
Cover material and sizes			
Mounting mode			
Anti-electric shock		Type II	
Protection grade		IP20	
Input connection way		Connectors	
Output connection way		Connectors	
Output wires length			
<b>Standard request</b>			
Safety		UL	
Harmonic	25°C, input rated voltage, MAX rated load	FCC PART15	
EMC--interference	25°C, input rated voltage, load is typical lights		
EMC--ANTI interference	25°C, input rated voltage, load is lights		

**DIMENSIONS**

The mounting location dimension of ATI18-700ILT are shown in Figure 4 below.

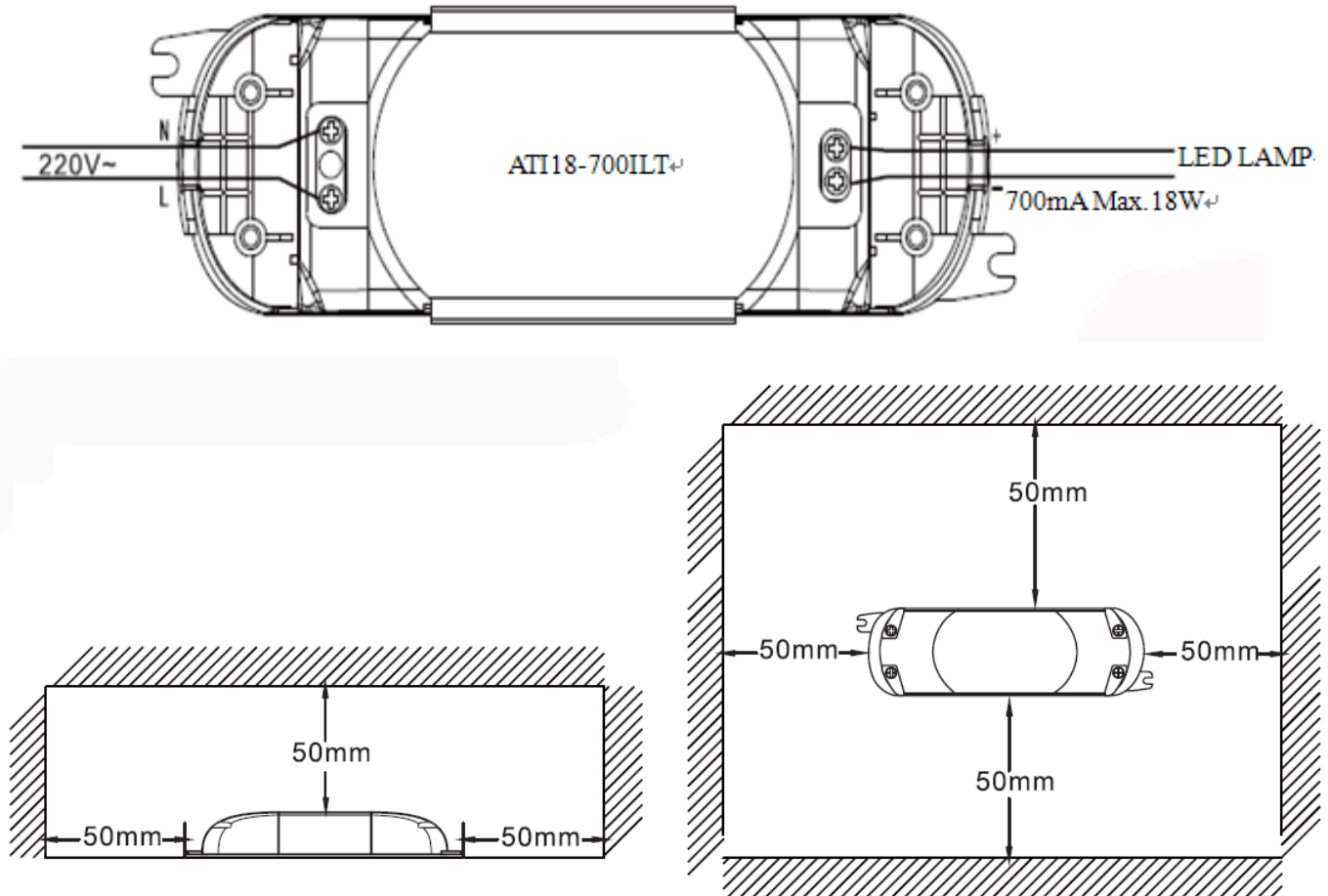


Figure4.Mounting Location Dimension

**ORDERING INFORMATION**

Table 3.Unit Price

Quantity	1 – 9	10 – 24	25 – 99	100 – 499	500 – 999	≥1000
ATI18-700ILT	\$17.9	\$16.5	\$16.0	\$15.0	\$13.9	\$12.9

**NOTICE**

- ATI reserves the right to make changes to its products or to discontinue any product or service without notice, and advise customers to obtain the latest version of relevant information to verify, before placing orders, that information being relied on is current and complete.
- All products are sold subject to the terms and conditions of sale supplied at the time of order acknowledgment, including those pertaining to warranty, patent infringement, and limitation of liability. Testing and other quality control techniques are utilized to the extent ATI deems necessary to support



this warranty. Specific testing of all parameters of each device is not necessarily performed, except those mandated by government requirements.

3. Customers are responsible for their applications using ATI products. In order to minimize risks associated with the customers' applications, adequate designs and operating safeguards must be provided by the customers to minimize inherent or procedural hazards. ATI assumes no liability for applications assistance or customer product design.
4. ATI does not warrant or represent that any license, either express or implied, is granted under any patent right, copyright, mask work right, or other intellectual property right of ATI covering or relating to any combination, machine, or process in which such products or services might be or are used. ATI's publication of information regarding any third party's products or services does not constitute ATI's approval, warranty or endorsement thereof.
5. IP (Intellectual Property) Ownership: ATI retains the ownership of full rights for special technologies and/or techniques embedded in its products, the designs for mechanics, optics, plus all modifications, improvements, and inventions made by ATI for its products and/or projects.