

# USER MANUAL

Impact Lighting Inc.  
Data Sheet for ThinGlow™

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3528 Single Color Series  
12V (300 pcs) Indoor

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3528 Flexible Strip (12V)

This Strip is comprised of Flexible Printed Circuit Boards that are easily bended for installation and utilize 3528 Top LEDs that emit an even, high brightness lighting effect. Each cutting unit is 50mm with 3 pieces of LEDs per group making customizing easy. The strip may contain six single colors (included: White, Warm White, Blue, Green, and Red & Yellow). The Strip is 12V DC and passed CE EMC testing. Suitable for both indoor & outdoor decorative applications.

### Product Features:

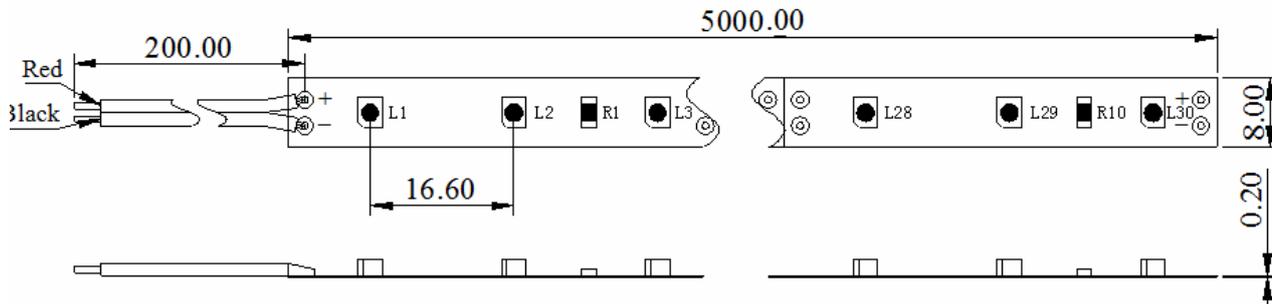
- ◆ 5M per reel
- ◆ Width of Strip: 8mm
- ◆ 300pcs 3528LED per Reel
- ◆ 3 LED per small Unit
- ◆ Unit length: 50mm
- ◆ Weight: 85g
- ◆ LED Life time: Mean time between failure (MTBF): 50K – 100K hours
- ◆ Storage temperature: 0 °C ~ +60 °C
- ◆ Humidity: 40% ~ 70% R
- ◆ Operating temperature: -20 °C ~ +45 °C
- ◆ Two Year Warranty

### Product Information:

THINGLOW NON WATERPROOF LEDS - 3528 (300 LEDS) :12V						
Part No.	Color	Luminous Flux(lm)	color temperature(K)	LED Qty	Dominant Wavelength λ d	Operating Voltage
IL-TG-3528-300-12V	warm white	720	2700~3300	300	Red: 620~630 Green: 520~530 Blue: 460~470 Yellow: 580~590	DC 12V
	pure white	900	5700~6300			
	Red	375				
	Green	1077				
	Blue	384				
	Yellow	375				
Operating Current		Operating Power	LED size	Cut length	Width of PCB board	View Angle
2A		24W	35*28mm	3-led 5cm	8mm	120°

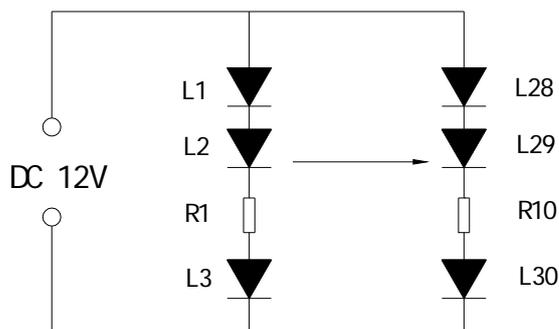
1. Tolerance of measurement of luminous intensity is ±10%
2. The dominant wavelength λd is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.
3. Specifications are subject to change without notice.
4. θ1/2 is the off-axis angle at which the luminous intensity is half the axial luminous intensity.

Dimension Drawing:

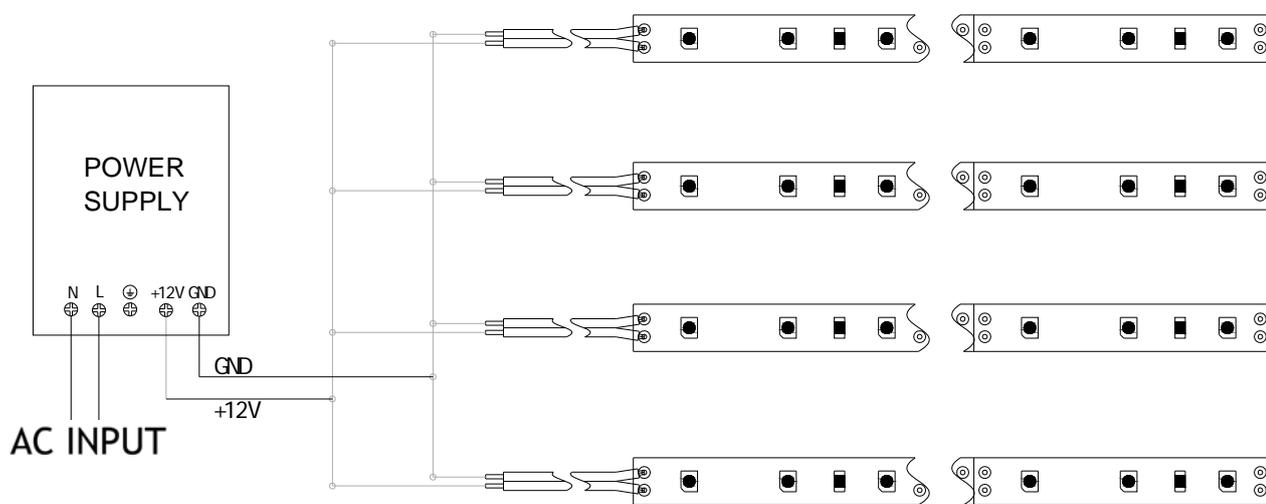


NOTE: 1. All dimensions are in millimeter.  
2. Tolerance of measurement is  $\pm 0.05\text{mm}$  (.02") unless others otherwise noted.

Circuit Diagram:



Installation Drawing



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## Safety Notes and Warnings:

1. In order to guarantee the LED life and the optimal use of the product, do not forcefully manipulate any part by crimping the tape light or forcefully pulling connector wires or putting direct force on the LED's themselves.
2. Avoid the crossing of wires to avoid damage to the LEDs.
3. For optimal light output, each 5-meter strip must connect the main power source.
4. Make sure each power source (GND) is connected
5. Do not bend product past 60mm diameter in order to avoid damage to wiring or leds

## Storage

1. Product should be stored at 0 °C - +60 °C or less and 40% - 70% Relative Humidity or less after being shipped and the storage life limits are 3 months.
2. If the Flexible SMD Strip is stored more than 3 months, they can be stored for a year in a sealed container with a nitrogen atmosphere and moisture absorbent material.
3. Please avoid rapid transitions in ambient temperature, especially, in high humidity environments where condensation can occur.

## Static Electricity

1. Static electricity or surge voltage will damage the Flexible SMD Strip.
2. It is recommended that a wristband or an anti-electrostatic glove be used when handling the Flexible SMD Strip.
3. All devices, equipment and machinery must be properly grounded.
4. It is recommended that measures be taken against surge voltage to the equipment that mounts the Flexible SMD Strip.

## Heat Generation

1. Thermal design of the end product was most importance. Please consider the heat generation of the Flexible SMD Strip when making the system design. 2. The thermal resistance of the circuit board and density of Flexible SMD Strip placement on the board, as well as other components is an important factor affecting the coefficient of temperature increase per input electric power. 3. Avoid intense heat generation and operate within the maximum ratings given in the specification. 4. The operating current should be decided after considering the ambient maximum temperature of Flexible SMD Strip.

## Misc

1. Care must be taken to ensure that the reverse voltage will not exceed the absolute maximum rating. 2. The Flexible SMD Strip described in this manual is intended to be used for ordinary electronic equipment. Consult Impact Lighting's sales staff in advance for information on the applications in which exceptional quality and reliability are required, particularly when the failure or malfunction of the Flexible SMD Strip may directly jeopardize life or health. 3. Impact Lighting is not responsible for issues caused by reverse engineering, disassembling or using Flexible SMD Strip outside of its intended use. If defective Flexible SMD Strip is found, inform Impact Lighting directly and do not disassemble as this will revoke any warranties.

## Warning

Proper use of the power source, voltage and proper positive and negative connection is important to guarantee the optimal integrity and safety of the Flexible SMD strip.