

## **LED Lighting Concept**

LED, known as Light Emitting Diode, uses solid semiconductor chips as luminescent material. When put the forward voltage on the two ends, the current carriers in the semiconductor combine together and releases the superfluous energy, leading the emission of photon to create visible light. LED is mainly featured by high efficiency, high light quality, pure light colour, lower power consumption, long life span, good reliability & long durability, flexible application, safety, fast response, environmental friendly, easiness in control, shake-proof, cold light source, etc. It is widely applied to indicator light, signal light display screen, night lighting on scenery site, etc. Before, it is often seen on household appliance, telephone, panel lighting, explosion-proof lamp & brake lamp of automobile &traffic light. Now, it has been widely applied to high-power LED lighting, such as road and commercial lightning.

## **LED Lighting Principle**

Composed of PN-junction chip, electrode and optical system, the lighting process of LED includes three parts; carriers injection under the positive voltage, complex radiation and luminous energy transmission. The tiny semiconductor chip is packaged in clean ex oxide resin. When the electron passes the chip, the negative electron and hole, photon will is created. The bigger the energy (gap) between electron and hole is, the higher the energy created by photon is. The energy of photon in turn corresponds with the light colour: in the coverage of visible light, the energy carried by blue and purple light is the biggest while the energy carried by yellow and red light is the smallest. Different gap because of different materials leads to various in light colours.







## **Basic Features**

## **High Luminous Efficiency**

By decades of technological improvement, the LED has greatly increased in luminous efficiency. The luminous efficiency of an incandescent light and a halogen lamp is 12-24 lumens/watt, a fluorescent lamp is 50/70 lumens/watt. Most of the power consumption converts to calorific loss. After refinement, the luminous efficacy of a LED will reach 200-300 lumens/watt with good monochromaticity of colour, narrow spectral but without filtration it could produce colourful visible lights.

## **Low Power Consumption**

A LED's single tube adopts direct drive and in charge of the power of 1W (watt), the drive voltage of 1.5 - 3.5 V (volt), the electric current of 300-350 MA (milliampere). Moreover, it responds quickly and could operate under the circumstance of high frequency. Under the same illumination effect, the power consumption of a LED is about 1/8 of an incandescent lamp and about 1/2 a fluorescent tube.

## **Long Life Span**

An incandescent lights emits light by using the electronic light field radiation, and has the disadvantages of easy to be burnt in lighting, heat deposition, light wane etc., while the high-power LED is in possession of small volume, light weight, epoxy resin package and could bear the high intensity impact and vibration and is not easily crumbled by comparison. The average longevity of LED will arrive at 100,000 hours. Moreover, a LED has a long life span of 5-10 years, thus this can greatly reduce the maintenance charge and avoid the trouble of changing the lamps frequently.

## Safety and Reliability

A LED has the following characteristics: low heat, no heat radiation, the cold light source, and it could contact safely. Moreover, it accurately controls the type of light and the anglers of lighting. It possesses the soft light colour but no glare and mercury, natrium etc. Elements which might be harmful to health. The inside microprocessor could control the intensity of light, adjust the methods of lighting, and fulfil the combination of light and art.

#### **Environmental Friendliness**

A LED is a type of lamp which is all solid state lighting, and possesses the features of antivibration, impact resistance, hard to break, waste recyclable and no pollution. The volume of light source is small and could be combined at random, and easy to develop portable and smallishtyped light products. Moreover, it's easy for installation and conservation. Of course, energy-saving is the main reason of using LEDs. Maybe the light source, however, we could use one year's energy-saving to take back the investment of light source, and then gain the several times of net energy-saving income per year in the next 4-9 years.



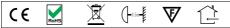
#### **LED CEILING LIGHT SERIES**

#### Features:

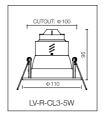
High quality aluminium housing
Diffused soft lighting effect, suitable for commercial and residential applications
Integrated heat-dissipation aluminium structure
Light weight, long lifetime and smart design

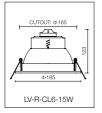
LV-R-CL

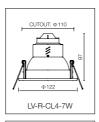


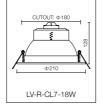


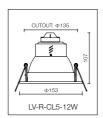
Item Number	Watts	Luminous Flux	Input Voltage	Light Source	CRI	Cutout Size
LV-R-CL3-5W	5W	380lm	110-240V AC	0.5W SMD LED	>75	ф100mm
LV-R-CL4-7W	7W	530lm	110-240V AC	0.5W SMD LED	>75	ф110mm
LV-R-CL5-12W	12W	900lm	110-240V AC	0.5W SMD LED	>75	φ135mm
LV-R-CL6-15W	15W	1140lm	110-240V AC	0.5W SMD LED	>75	φ165mm
LV-R-CL7-18W	18W	1375lm	110-240V AC	0.5W SMD LED	>75	ф180mm
LV-R-CL8-18W	18W	1375lm	110-240V AC	0.5W SMD LED	>75	ф210mm

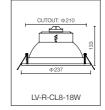














LV-SL-CL

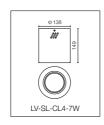
CE

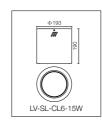


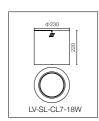
RoHS (-0.5m-)

Item Number	Watts	Luminous Flux	Input Voltage	Light Source	CRI
LV-SL-CL3-5W	8W	380lm	110-240V AC	0.5W SMD LED	>75
LV-SL-CL4-7W	7W	530lm	110-240V AC	0.5W SMD LED	>75
LV-SL-CL6-15W	15W	1140lm	110-240V AC	0.5W SMD LED	>75
LV-SL-CL7-18W	18W	1375lm	110-240V AC	0.5W SMD LED	>75







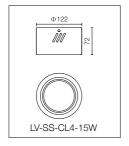




LV-SS-CL



Item Number	Watts	Luminous Flux	Input Voltage	Light Source	CRI
LV-SS-CL4-15W	15W	1140lm	110-240V AC	0.5W SMD LED	>75
LV-SS-CL6-18W	18W	1375lm	110-240V AC	0.5W SMD LED	>75
LV-SS-CL8-24W	24W	1730lm	110-240V AC	0.5W SMD LED	>75









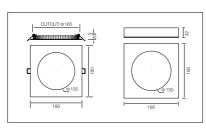
## Features:

Material: high quality aluminium housing and LumiSheet acrylic plate (PMMA)

Surface finish available: silver or white painting Easy installation: flush mounted or surface mounted

Shape available: round or square







## LV-CL7S-7W

Light Source: Ultra-bright Low Power SMD LED

Input: 110-240V AC Luminous Flux: 590lm

Watts: 7W

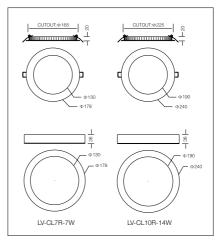


## **LED CEILING LIGHT SERIES**

## LV-CL7R-7W/LV-CL10R-14W









Item Number	Watts	Luminous Flux	Input Voltage	Light Source	CRI	Cutout Size
LV-CL-7R-7W	7W	590lm	110-240V AC	ultra bright low power SMD LED	>75	φ165mm
LV-CL-10R-14W	14W	1050lm	110-240V AC	ultra bright low power SMD LED	>75	ф225mm



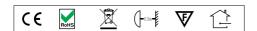


## LV-NC-CL

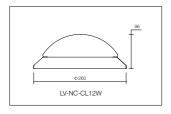


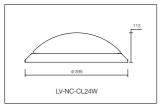
#### Features:

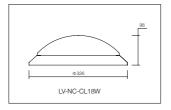
Diffused soft lighting effect, suitable for residential applications No UV or RF interference. No mercury or lead Save 50% more energy over conventional lighting fixtures Dimmable function available With Motion Sensor Light weight, long lifetime and simplified design

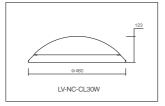


Item Number	Watts	Luminous Flux	Input Voltage	Light Source	CRI	Power Factor
LV-NC-CL12W	12W	780lm	110-240V AC	0.5W SMD LED	>75	>0.92
LV-NC-CL12W	18W	1200lm	110-240V AC	0.5W SMD LED	>75	>0.92
LV-NC-CL12W	24W	1550lm	110-240V AC	0.5W SMD LED	>75	>0.92
LV-NC-CL12W	30W	1860lm	110-240V AC	0.5W SMD LED	>75	>0.92











#### Features:

Smart design and nice looking
Using 1W/3W high power LED
Special heat sink design, low working temperature
Eco-friendly: no UV or RF interference, no Mercury or lead
Energy saving: saving 80% energy over conventional lighting fixtures
Beam angle adjustable
Recessed mounted

## Application:

Ceiling light





## LV-N15 x 1W

Light Source: Edison LED/Cree LED Beam Angle: 15°, 30°, 45°, 60° Input: 24V DC

Watts: 15 x 1W



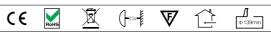




## LV-N12 x 1W

Light Source: Edison LED/Cree LED Beam Angle: 15°, 30°, 45°, 60°

Input: 24V DC Watts: 12 x 1W





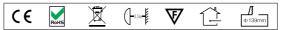




#### LV-N9 x 1W

Light Source: Edison LED/Cree LED Beam Angle: 15°, 30°, 45°, 60°

Input: 24V DC Watts: 9 x 1W



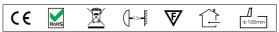




#### LV-N6 x 1W

Light Source: Edison LED/Cree LED Beam Angle: 15°, 30°, 45°, 60°

Input: 12V DC Watts: 6 x 1W



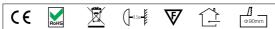




#### LV-N302B

Light Source: Cree LED 3W Beam Angle: 15°, 30°, 45°, 60°

Input: 12V DC Watts: 3 x 3W









## LV-M3 x C1W

Light Source: Cree LED Beam Angle: 20°, 30°, 45°, 60°

Input: 350mA Watts: 3 x 1W



















## LV-M4 x C1W

Light Source: Cree LED Beam Angle: 20°, 30°, 45°, 60°

Input: 350mA Watts: 4 x 1W



















## LV-M5 x C1W

Light Source: Cree LED Beam Angle: 20°, 30°, 45°, 60°

Input: 350mA Watts: 5 x 1W







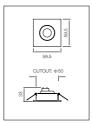










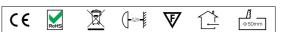


#### LV-201

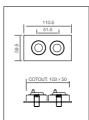
Light Source: Edison LED 1W/
Cree LED 3W

Beam Angle: 20°, 30°, 45°, 60°

Input: 12V DC Watts: 1 x 1W 1 x 3W







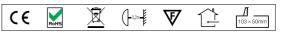
#### LV-202

Light Source: Edison LED 1W/ Cree LED 3W

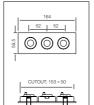
Beam Angle: 15°, 30°, 45°, 60°

Input: 12V DC

Watts: 2 x 1W 2 x 3W







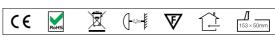
## LV-203

Light Source: Edison LED 1W/ Cree LED 3W

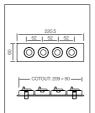
Beam Angle: 15°, 30°, 45°, 60°

Input: 12V DC

Watts: 3 x 1W 3 x 3W







## LV-204

Light Source: Edison LED 1W/

Cree LED 3W

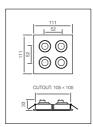
Beam Angle: 15°, 30°, 45°, 60°

Input: 12V DC

Watts: 4 x 1W 4 x 3W







#### LV-204R

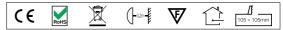
Light Source: Edison LED 1W/

Cree LED 3W

Beam Angle: 15°, 30°, 45°, 60°

Input: 12V DC

Watts: 4 x 1W 4 x 3W





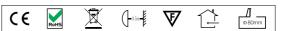




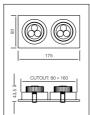
## LV-501

Light Source: Edison LED/Cree LED Beam Angle: 15°, 30°, 45°, 60°

Input: 12V DC Watts: 3 x 1W



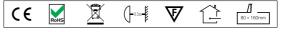




## LV-502

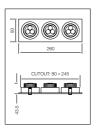
Light Source: Edison LED/Cree LED Beam Angle: 15°, 30°, 45°, 60°

Input: 12V DC Watts: 6 x 1W





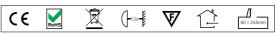




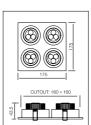
## LV-503

Light Source: Edison LED/Cree LED Beam Angle: 15°, 30°, 45°, 60°

Input: 12V DC Watts: 9 x 1W



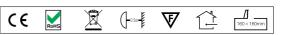




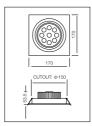
## LV-504R

Light Source: Edison LED/Cree LED Beam Angle: 15°, 30°, 45°, 60°

Input: 12V DC Watts: 12 x 1W



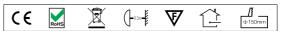




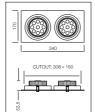
## LV-601

Light Source: Edison LED/Cree LED Beam Angle: 15°, 30°, 45°, 60°

Input: 12V DC Watts: 9 x 1W



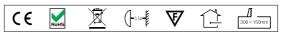




#### LV-602

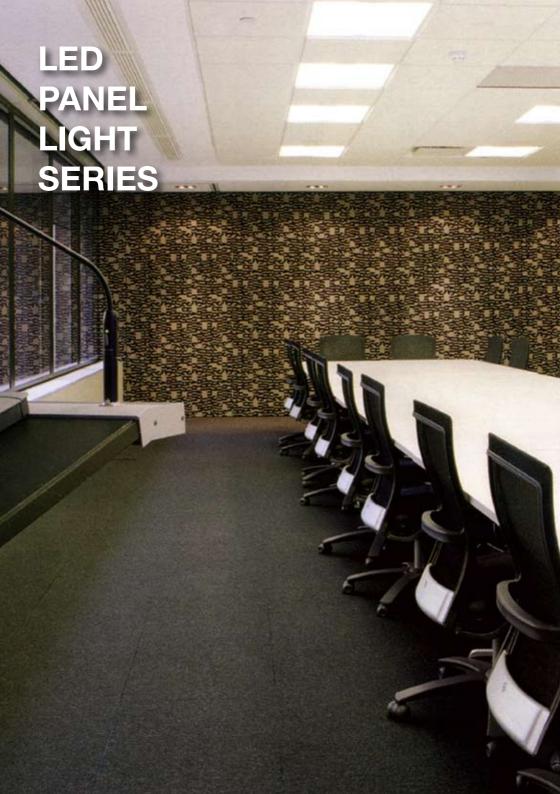
Light Source: Edison LED/Cree LED Beam Angle: 15°, 30°, 45°, 60°

Input: 12V DC Watts: 18 x 1W









#### **LED PANEL LIGHT SERIES**





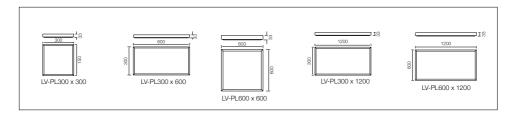
#### Features:

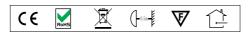
Bright and extremely uniform light effect Long lifetime and low maintenance cost Different installation method to choose, surface, recessed or suspended installation

#### Accessories to choose:

Suspension wire for suspended installation Bracket for surface installation Power supply

Item Number	Watts	Luminous Flux	Input Voltage	Light Source	CRI
LV-PL300 x 300-W	14W	1100lm	110-240V AC	3528 SMD LED	>75
LV-PL300 x 300-WW	14W	1000lm	110-240V AC	3528 SMD LED	>75
LV-PL600 x 300-W	28W	2200lm	110-240V AC	3528 SMD LED	>75
LV-PL600 x 300-WW	28W	2200lm	110-240V AC	3528 SMD LED	>75
LV-PL600 x 600-W	56W	4400lm	110-240V AC	3528 SMD LED	>75
LV-PL600 x 600-WW	56W	4000lm	110-240V AC	3528 SMD LED	>75
LV-PL1200 x 300-W	56W	4400lm	110-240V AC	3528 SMD LED	>75
LV-PL1200 x 300-WW	56W	4000lm	110-240V AC	3528 SMD LED	>75
LV-PL1200 x 600-W	112W	8800lm	110-240V AC	3528 SMD LED	>75
LV-PL1200 x 600-WW	112W	8000lm	110-240V AC	3528 SMD LED	>75





# LED BULB SERIES



#### Features:

Energy saving: saving 85% energy over conventional incandescent lamps

Long lifespan: 40.000hrs design lifespan, 30 times longer than incandescent lamps

Easy installation: 85-265VAC, with integral driver and power supply, can replace incandescent

lamps directly

Different socket for choices: E27, E26, B22, E14

Dimming function available

Patented design

Materials: PC Cover

**Aluminium Housing** 

Surface finish: silver or golden

Item Number	Watts	Luminous Flux	Input Voltage	Light Source	CRI	Power Factor
LV-BL-3xC1W-W	3W	290lm	85-256V AC	CREE	75	>0.9
LV-BL-3xC1W-WW	3W	230lm	85-256V AC	CREE	75	>0.9
LV-BL-5xC1W-W	5W	480lm	85-256V AC	CREE	75	>0.9
LV-BL-5xC1W-WW	5W	380lm	85-256V AC	CREE	75	>0.9
LV-BL-7xC1W-W	7W	620lm	85-256V AC	CREE	75	>0.9
LV-BL-7xC1W-WW	7W	520lm	85-256V AC	CREE	75	>0.9



LV-G60 x 5W/7W





















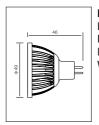


# LED SPOT LIGHT SERIES



#### **LED SPOT LIGHT SERIES**

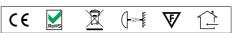




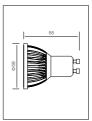
## LV-MR16-3 x 1W

Light Source: Edison LED/Cree LED Beam Angle: 15°, 30°, 45°, 60°

Input: 12V AC/DC Watts: 3 x 1W



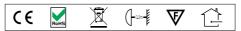




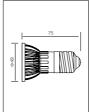
#### LV-GU10-3 x 1W

Light Source: Edison LED/Cree LED Beam Angle: 15°, 30°, 45°, 60°

Input: 110/240V AC Watts: 3 x 1W



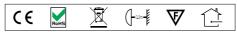




#### LV-E27-3 x 1W

Light Source: Edison LED/Cree LED Beam Angle: 15°, 30°, 45°, 60° Input: 110/240V AC

Watts: 3 x 1W



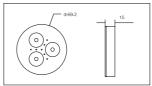


#### Features:

Smart design and nice looking
Using 1W/3W high power LED
Eco friendly: no UV or RF interference, no Mercury or lead
Energy saving: saving 80% energy over conventional lighting fixtures
Lumen maintenance: 70% at 30,000hrs

## **LED CABINET LIGHT SERIES**





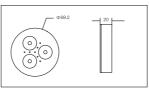
#### LV-301-3 x 1W

Light Source: Edison LED/Cree LED

Beam Angle: 120° Input: 12V DC Watts: 3 x 1W





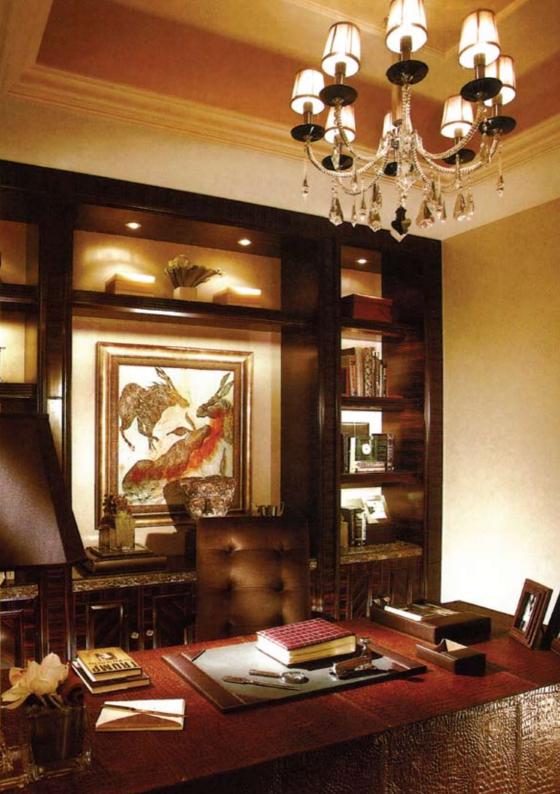


## LV-301C-3 x 1W

Light Source: Edison LED/Cree LED Beam Angle: 15°, 30°, 45°, 60°

Input: 12V DC Watts: 3 x 1W









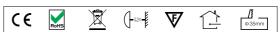
# LV-101A

Light Source: Edison LED 1W/

Cree LED 3W

Beam Angle: 120° Input: 12V DC

Watts: 1 x 1W 1 x 3W







# LV-101B

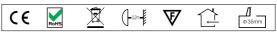
Light Source: Edison LED 1W/

Cree LED 3W

Beam Angle: 15°, 30°, 45°, 60°

Input: 12V DC

Watts: 1 x 1W 1 x 3W







## LV-101C

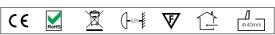
Light Source: Edison LED 1W/ Cree LED 3W

Beam Angle: 15°, 30°, 45°, 60°

Land 1 40/ DO

Input: 12V DC

Watts: 1 x 1W 1 x 3W









# LV-102C

Light Source: Edison LED/Cree LED

Beam Angle: 120° Input: 12V DC Watts: 1 x 1W

















# LV-102B

Light Source: Edison LED/Cree LED Beam Angle: 60°

 $\nabla$ 

Input: 12V DC Watts: 1 x 1W





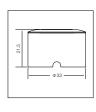












# LV-102C

Light Source: Edison LED/Cree LED Beam Angle: 15°, 30°, 45°, 60°

Input: 12V DC Watts: 1 x 1W







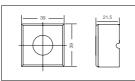










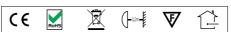


# LV-103

Light Source: Edison LED/ Cree LED

Beam Angle: 15°, 30°, 45°, 60°

Input: 12V DC Watts: 1 x 1W





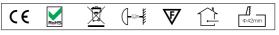


## LV-103A

Light Source: Edison LED 1W/ Cree LED 3W

Beam Angle: 80° Input: 12V DC

Watts: 1 x 1W 1 x 3W







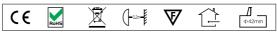
# LV-104B

Light Source: Edison LED 1W/

Cree LED 3W

Beam Angle: 120° Input: 12V DC

Watts: 1 x 1W 1 x 3W









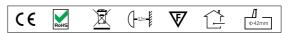
### LV-105A

Light Source: Edison LED 1W/

Cree LED 3W Beam Angle: 15°, 30°, 45°, 60°

Input: 12V DC

Watts: 1 x 1W 1 x 3W







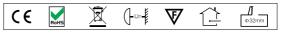
# LV-106

Light Source: Edison LED 1W/

Cree LED 3W

Beam Angle: 15°, 30°, 45°, 60° Input: 12V DC

Watts: 1 x 1W 1 x 3W



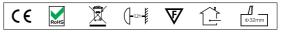


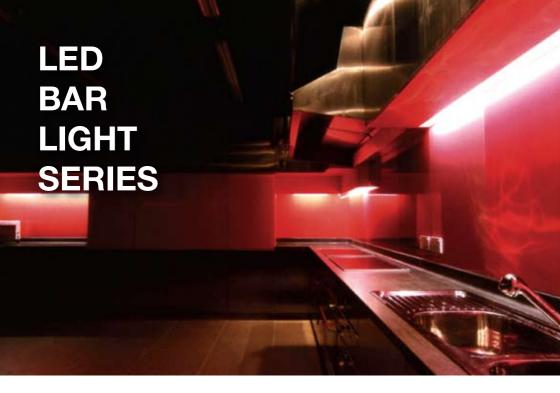


# LV-PS-1W

Light Source: 3528 SMD LED

Beam Angle: 120° Input: 12V DC Watts: 0.5W





#### Features:

Smart design and nice looking Using high power LED

Eco friendly: no UV or RF interference, no Mercury or lead

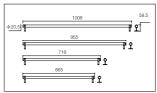
Energy saving: saving 80% energy over conventional lighting fixtures

The length can be customized

# Application:

Cabinet Lighting
Display Case Lighting
Museum and Art Lighting





#### LV-MOT

Light Source: Ultra-bright 3528 SMD LED Input: 135V DC AC Or 185-265V AC

Dimension: 650mm, 718mm, 955mm, 1008mm







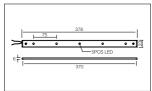






#### **LED BAR LIGHT SERIES**





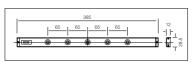
# LV-CB-A

Light Source: Edison LED/Cree LED

Beam Angle: 80° Input: 12V DC Watts: 5 x 1W



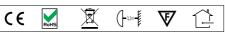




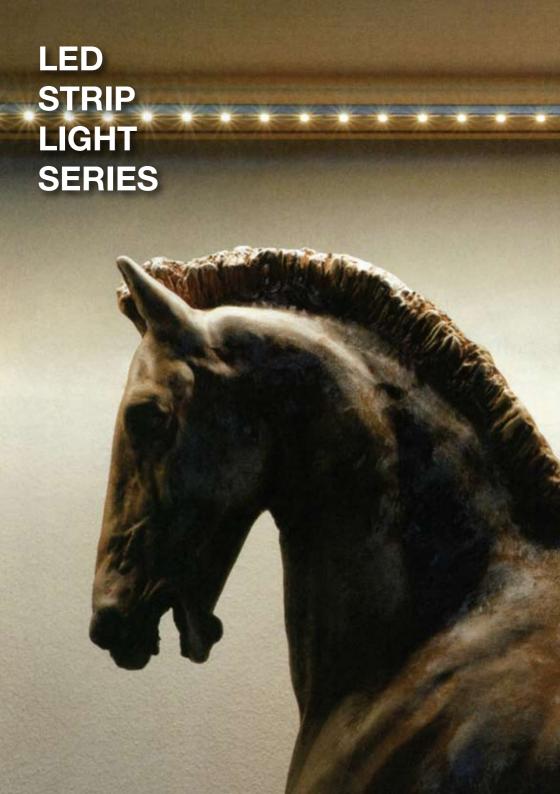
# LV-CB-B

Light Source: Edison LED/Cree LED Beam Angle: 15°, 30°, 45°, 60°

Input: 12V DC Watts: 5 x 1W







#### **LED STRIP LIGHT SERIES**

#### Features:

Eco friendly: no UV or RF interference, no Mercury or lead

Energy saving: saving 80% energy over conventional

lighting fixtures

Long working lifespan: more than 40,000 hours

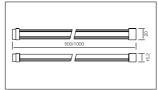
## Application:

Cabinet Lighting Display Case Lighting

Decorating lighting for hotel and bar

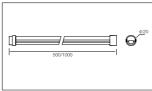
Item Number	Watts	Luminous Flux	Input Voltage	Light Source
LV-ALF-24-W	5W	300lm	12V DC/24V DC	5050 SMD LED
LV-ALF-48-W	10W	600lm	12V DC/24V DC	5050 SMD LED
LV-ALR-24-W	5W	300lm	12V DC/24V DC	5050 SMD LED
LV-ALR-48-W	10W	500lm	12V DC/24V DC	5050 SMD LED



















# **LED STRIP LIGHT SERIES**



Item Number	Watts	Input Voltage	Light Source	Dimension	Waterproof
LV-AL-15	3.6W	12V DC/24V DC	5050 SMD LED	L250 x W24 x H10mm	IP65
LV-AL-30	7.2W	12V DC/24V DC	5050 SMD LED	L500 x W16 x H11mm	IP65
LV-AL-60	14.4W	12V DC/24V DC	5050 SMD LED	L1000 x W16 x H11mm	IP65
LV-AL-27SMD	2.1W	12V DC/24V DC	3528 SMD LED	L250 x W24 x H10mm	IP65
LV-AL-36SMD-RGB	2.8W	12V DC/24V DC	3528 SMD LED	L250 x W24 x H10mm	IP65
LV-AL-54SMD	4.2W	12V DC/24V DC	3528 SMD LED	L500 x W24 x H11mm	IP65
LV-AL-72SMD-RGB	5.6W	12V DC/24V DC	3528 SMD LED	L500 x W24 x H11mm	IP65
LV-AL-108SMD	8.4W	12V DC/24V DC	3528 SMD LED	L1000 x W24 x H11mm	IP65
LV-AL-144SMD-RGB	11.2W	12V DC/24V DC	3528 SMD LED	L1000 x W24 x H11mm	IP65
LV-AL-27	2.1W	12V DC/24V DC	φ5 Through Hole LED	L250 x W24 x H10mm	IP65
LV-AL-36-RGB	2.8W	12V DC/24V DC	φ5 Through Hole LED	L250 x W24 x H10mm	IP65
LV-AL-54	4.2W	12V DC/24V DC	φ5 Through Hole LED	L500 x W24 x H11mm	IP65
LV-AL-72-RGB	5.6W	12V DC/24V DC	φ5 Through Hole LED	L500 x W24 x H11mm	IP65
LV-AL-108	8.4W	12V DC/24V DC	φ5 Through Hole LED	L1000 x W24 x H11mm	IP65
LV-AL-144-RGB	11.2W	12V DC/24V DC	φ5 Through Hole LED	L1000 x W24 x H11mm	IP65



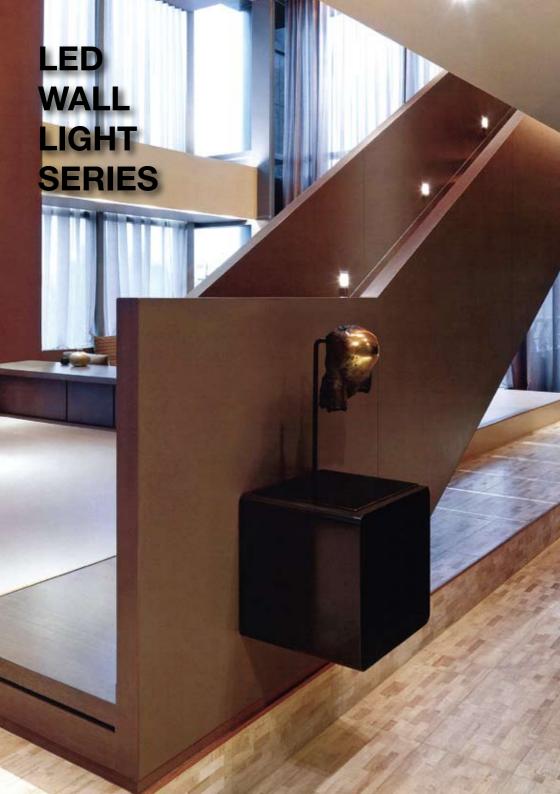












## **LED WALL LIGHT SERIES**

Features:

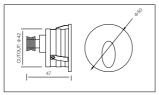
Using 1W high power LED High brightness, long lifespan, energy saving No radiation, no flickering

**Application to choose:**Aluminium tube for installation









# LV-701A

Light Source: Edison LED/Cree LED

Beam Angle: 45° Input: 350mA Watts: 1 x 1W













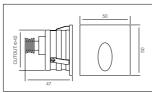






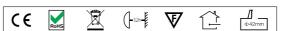
#### **LED WALL LIGHT SERIES**



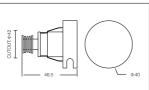


## LV-701B

Light Source: Edison LED/Cree LED Beam Angle: 45° Input: 350mA Watts: 1 x 1W





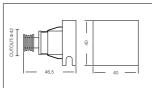


#### LV-702A

Light Source: Edison LED Beam Angle: 120° Input: 350mA Watts: 1 x 1W

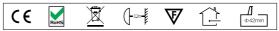






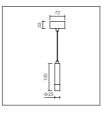
#### LV-702B

Light Source: Edison LED Beam Angle: 120° Input: 350mA Watts: 1 x 1W



## **LED PENDANT LIGHT SERIES**





## LV-PD

Light Source: Edison LED/Cree LED Beam Angle: 15°, 30°, 45°, 60°

Input: 60-240V AC Watts: 1W/3W

# **Features:**High quality aluminium housing Suspension wire can be adjustable when install Perfect for kitchen island, living room and bar















