

EXL LAMPS

**ENERGY
SAVING**



Replaced by



- 10** tentfold brightness
- 10** tentfold lifetime
- 20** twenty percent energy consumption

Incandescent Lamps

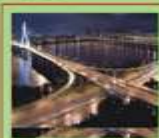
EXL LAMP

Introduction of EXL Lamp

EXL lamp, acronym for Energy Saving XET lamp Discharge, which means high-Energy gas discharge lamp.

EXL lamp has all the advantages of gas discharge lamps in general, also has the advantages of our company's patented technology. When EXL lamp combines with EXL - specific ballast, luminous efficiently can achieve 140LM / W. EXL is a totally new concept proposed by TVZSTEC

We have been taking the lead in the EXL product development and application to a variety of lighting areas and have won praise of the market.



tvzstec A NEW ADVANCED LIGHTING SYSTEM IN 21 ST CENTURY.

EXL LIGHTINGS

EXL LAMP'S BENEFITS

- 1. High luminous efficiency**
EXL lamp's efficiently achieve 140LM / W equivalent to ceramic metal lamp and two times higher than ordinary metal halide lamps.
- 2. High colour rendering**
EXL lamps gives full spectrum light that is close to daylight with a CRI | colour rendering index | of up to 94. EXL gives more clear and natural-looking light than the old mercury-vapour and sodium-vapour lamps. It Provides noticeable stability and consistency in lamp-to-lamp colour, initially and throughout life.
- 3. Long Life**
Up to 20,000 hrs life, which is approx 2 times longer than ordinary metal halide lamps.
- 4. EXLs turn on instantly**
Shorter cold and hot Start-up time than ordinary metal halide lamps and CDM lamps.
- 5. Low energy consumption, save money on electricity**
Energy saving, up to 80% less energy consumption than most conventional lighting products. With less thermal radiation make running costs reduced.
- 6. Cost effective replacement**
With replacement costs every 3 or more years, low electrical bills and an affordable purchase price. EXL lamps have become the common replacement for many types of conventional lighting applications
- 7. Wide range of application**
Can be used in all the required areas of lighting. Applications for EXL lamps include industrial lighting, commercial lighting and office lighting as well as street and solar street lighting.

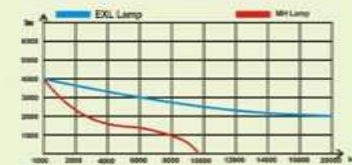
*Also Available 10000 Burning Hours Lamps.

Comparison Statement

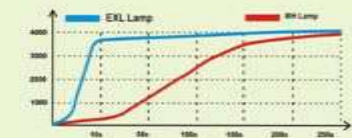
| Per day consumption | | Your savings per year | | | | |
|---|---------------------|---|--------------------------|---|------------------------|-------|
| Light fixture Watt | No Lamp in-use Area | Days to start | Energy Cost/1000H Rs.5.5 | Energy SAVING / YEAR | Replacement Investment | |
| HPSV* | 200 | 10 | 3400 | 5.5 | | |
| LED** | 100 | 9 | 1200 | 5.5 | 4578 | 11200 |
| EXL*** | 70 | 8 | 840 | 5.5 | 3578 | 4500 |
| HPSV* - High pressure sodium vapor Lamp | | LED** - Light Emitting Diode | | EXL*** - Energy saving XET Lamp Our Product | | |
| Assumption for 10 Lamp | | | | | | |
| Replacement Investment | | MH/ EXL | MH/ VS LED | | | |
| By back period in Years | | 9 Month | 2.4 Years | | | |
| Your Savings per Year | | Rs - 5578 | Rs - 4578 | | | |
| MH* Metal Halide Lamp | | *Considers 15% magnetic Chock loss *365 working days | | | | |

| Parameter | EXL | LED | HPSV | | | |
|----------------------------|-----------|-----------|-------|-------|------|------|
| Power (W) | 35 | 50 | 30 | 60 | 150 | 250 |
| Illumination LX (8 meters) | 30 | 55 | 14 | 18 | 35 | 50 |
| Illumination Lumens / Watt | 100-120 | 80-90 | | 70 | | |
| Colour temperature K | 4300-6000 | 4200-6000 | 9000 | 9000 | 2300 | 2300 |
| Colour-Ra | 75-95 | 75-95 | 70-90 | 70-90 | 30 | 30 |

Luminous Flux Maintenance Curves of EXL & MH Lamps



Stabilizing Time Curves of EXL & MH Lamps



Powertec Control Instruments.



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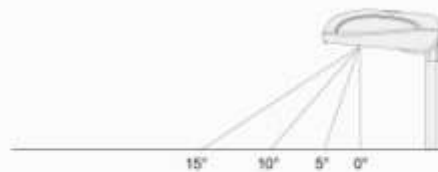
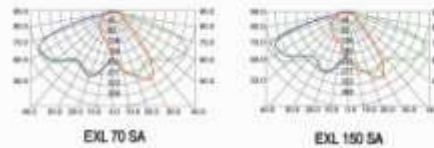
Materials and features:

- High pressure die-casting aluminum alloy body, anti-corrosion and treated by electro-static powder spraying.
- Heatproof Silicon gasket , safety tempered glass with the good transparency.
- High purity anodic oxidation aluminum reflector.
- Lamp can adjust up and down or around and change the projection angle.

Applicable places:

The illumination of urban roads, port and factories etc.

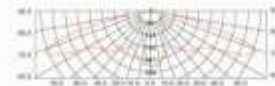
(cd/1000lm)
Light distribution curve



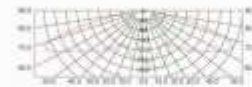
| Item No. | Light Source | Power | Beam Spread | Power Factor | Voltage | Lamp Type |
|-----------|--------------|-------|-------------|--------------|---------|-----------|
| TVZ 798-1 | EXL 70 SA | 70W | > 0.95 | AC220V | E27/E40 | |
| TVZ 798-2 | EXL 150 SA | 150W | > 0.95 | AC220V | E27/E40 | |



(cd/1000lm)
Light distribution curve



EXL 100 W



EXL 150 W

Materials and features:

High pressure die-casting aluminum alloy body, anti-corrosion and treated by electro-static powder spraying.

Heatproof Silicon gasket, safety tempered glass with the good transparency.

High purity anodic oxidation aluminum reflector.

Applicable places:

The illumination of urban roads, highways, over-head road, bridge, port and factories etc.

| Item No. | Light Source | Power | Lamp Type |
|----------|--------------|-------|-----------|
| TVZ 920 | EXL 100 SA | 100 W | E40 |
| TVZ 920 | EXL 150 SA | 150 W | E40 |

Mast-arm Mast-top mounting with possibility of inclination of the fixtures











Down Factory Light



COMPARISON

HPSV vs. EXL

HPSV 70Watt = EXL 20Watt

HPSV 100Watt = EXL 35Watt

HPSV 150Watt = EXL 50Watt

HPSV 250Watt = EXL 70Watt

HPSV 400Watt = EXL 150Watt

LED LIGHTS

LED Street Lights



Mono Crystalline Silicon-cell Technology
15 - 20 Years Life

SOLAR STREET LIGHT (LED)

Tvzstec is professional solar street light designers. We can design according to the customer's requirement. Solar Street light consists of high efficiency Mono/Poly Crystalline solar panel. The intelligent digital controller has the sophisticated functions to increase the life of battery and user friendly system. Tvzstec solar lights are suitable for highway, City Street, Rural road, Industrial and development zone, Park, Garden green area and residential flat use.

Sound features:

- ❖ Stand alone system,
- ❖ Dusk to Dawn , Automatic ON/OFF,
- ❖ 2 to 3 Days Autonomy,
- ❖ It indicate the Low Battery & Battery Charging,
- ❖ Prevent the over charging and over discharging. Having out put short circuit,
- ❖ High Brightness & not to laying of cable,
- ❖ Electric Charging is optional,
- ❖ Free maintenance battery is optional

| Model No | Operation Time | Light Out put Lumins | Type of Luminor | Battery Type | Solar Panel Wattage | Pole Hight From Ground Level |
|-----------------|----------------|--|----------------------|--------------|---------------------|------------------------------|
| TSL - 10 D-D | 11 Hours | 5000 to 5500 K 950-1000 Lumins | LED -50,000 Hrs Life | 26 AH | 35 Watt | 12 Feet |
| TSL - 20/10 D-D | 11 - 12 Hours | 2000 Lumins upto 10' Clock 10-6 Clock 1000 Lumins | LED-50,000 Hrs Life | 46 AH | 50 Watt | 12 Feet |
| TSL - 40/20 D-D | 11-12 Hours | 4000 Lumins upto 10' Clock 10-6 Clock 2000 Lumins | LED-50,000 Hrs Life | 120 AH | 120 Watt | 15 Feet |

CFL Street Light

| Model No | Operation Time | Light Out put Lumins | Type of Luminor | Battery Type | Solar Panel Wattage | Pole Hight From Ground Level |
|--------------|----------------------------------|----------------------|-----------------|--------------|---------------------|------------------------------|
| TSL - 11 D-D | 11 -12 Hours 2-3 Day Autonomy | 900 Lumins | CFL-11Watt | 75 AH | 74 Watt | 15 Feet |

Powertec Control Instruments

24 Dsp Compound, Laxmipuram Ganapathy, Coimbatore-6
Mail:sales@tvzstec.com, PH : 0422 4212559, Fax 0422 4212659,

www.tvzstec.com





Road illumination Light Fixture

TVZ12-20 LED





Model Number Ts 327AC

Light source: 5 W,6 W,7W 8 W 10 WLED
Input voltage: 85 to 260V AC
Base: E27/E26 optional
Dimmer: optional
Color: white, warm white
Housing material: aluminium formation product
Lifespan: over 50,000 hours
LED bulb surface temperature: <65°C
Working temperature: <45°C
Led Make : Osram/Cree/Philips

Applications:
General Lighting, Interior lights, down lights, Home lighting, Shops, Hotels, Malls,
Schools, Collages, Offices

Mfrs By
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Dealer

EXL vs LED

- **EXL 35watt = LED 50watt**
- **EXL 50watt = LED 70watt**
- **EXL 70watt = LED 100watt**
- **EXL 150watt = LED 780watt**

Thank You