

Energy Efficient ESX Lamps

Energy conservation on every front is need of the time. Conventional High-Pressure Sodium Vapor Lamps used for Streetlights generally known as HPSV lamps consumes lot of electrical energy. The electrical energy is getting expensive day-by-day beyond prohibitive limits. Beside this, these lamps also attract insects due to UV content. The cold start problem, very poor power factor and short life are some of the major problems with HPSV lamps.

To avoid these problems & to save valuable electrical energy, we provide unique **Energy Saver ESX series Lamps**. These are made up of Solid Sodium, Argon, and Neon with specially designed Electronic Selective Frequency Converters.

These **ESX lamps** lead to almost 65 to 72% energy saving in comparison to conventional HPSV lamps.

- 35 W, ESX lamp is equivalent to 70 W HPSV Lamps.
- 55 W, ESX lamp is equivalent to 150 W HPSV Lamps.
- 91 W, ESX lamp is equivalent to 250 W HPSV Lamps.

Features:

- ❖ Very low power consumption.
- ❖ No generation of UV; hence do not attract insects. Negligible soiling of the luminaries.
- ❖ No igniter required.
- ❖ Extra Long life upto 20,000 Amp. hours.
- ❖ Honeycomb cracks to the cover are totally avoided due to negligible heat radiation.
- ❖ Unity starting power factor as compared to lower than 0.5 of HPSV; and operates at positive lead power factor; thus acts as a power factor corrector.
- ❖ High contrast visibility even in misty & foggy weather.
- ❖ Instant hot re-start.



Solar Powered ESX lamp

Benefits:

- ❖ Saves drastically on ever increasing electrical energy cost.
- ❖ Ultra light-weight of the fixture reduces cost of supporting structure.
- ❖ Fast payback. Cost of the lamp gets recovered in 1st year itself.
- ❖ Revenue / income can starts from 2nd year by way of saving in electrical energy cost.
- ❖ Control Gear losses are limited to mere 2 to 3 watts compared to 35 to 50 watts or more of conventional Control Gears.
- ❖ At full glow the ESX lamp's lead P.F. helps in gaining incentive.
- ❖ An effective step towards Energy Conservation as per Energy Efficiency Bill 2000.
- ❖ Due to ultra low power consumption and unity p.f. these lamps can be economically used on Solar energy

**YOUR GESTURE OF SAVING ELECTRICAL ENERGY IS A MATTER OF PRIDE
AND COULD BE REMARKABLE EXAMPLE TOWARDS SELF RELIANCE IN POWER SECTOR !!!**

- : AREA OF APPLICATIONS :

TRADE & INDUSTRY

Steel Mills, Foundry, General Plants, Cement Works, Ware Houses And Transport Depots, Factory Yards, Parking Lots, Electrical Plants, Shipyards, Coal Mines, Petroleum Dispensing Stations.

TRAFFIC INSTALLATIONS

Motor-Ways, Arterial Roads, Tunnels & Sub-Ways, Pedestrian Crossings, Parks & Garden Paths, Railway Yards, Internal Roads of Housing Complexes.

FLOOD LIGHTING & SPECIAL APPLICATIONS

Flood Lighting of Buildings, Monuments, Parks, Landscape Lighting, Surface of Material Testing, Selective Applications of Bill Boards Lighting. Best suitable for Blending of lights.

COMPARISON CHART OF H. I. D. (Mercury , HPSV , ESX)LAMPS

PARAMETER	MERCURY VAPOUR	HI PRESSURE SODIUM VAPOUR	ENERGY SAVING ESX LAMP
Power Consumption (Ratings + Control Gear)	125 W + 45 W = 175W 250 W + 45 W = 295W 400 W + 60 W = 460W	70 W +35 W= 105W 150W+45 W= 195W 250W+50 W= 300W	35 W + 2 W= 37W 55 W + 2 W= 57W 90 W + 3 W= 93W
Lumens Output	5800 10000 22000	5600 12500 22000	5400 10000 18000
Lumens Efficiency	< 34 Lumens Per Watt.	< 53 Lumens Per Watt.	>180 Lumens Per Watt.
Contrast & Visibility	Poor Lighting in Misty & Foggy Weather.	Some What Better Than M.V.	High Contrast Visibility Even In Misty & Foggy Weather.
Hot Re-Starting Of Lamp	Needs Cooling Time. Deteriorates Lamp Life on frequent operations	Same Conditions Of M.V. Apply.	Instant Hot Re-Start; Due to use of Special technology.
Energy Savings	Very Poor	Average	Excellent
Compatibility For Renewable Energy (Wind/Solar)	Un-Economical	Un-Economical	Most Suitable to Operate Due To Low Power Consumption.
Operating Life	Approx. 6000 Hours	Approx. 8000 Hours	Approx. 20000 Hours

(SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE)

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