



SAVES POWER



SAVES MANPOWER

TWIN BENEFITS - SAVES POWER AND MANPOWER

Electronic Street Light Controller

Beneficiary Speak: “We have noticed monthly savings of Rs. 2,500.00 (in INR) from the Installation of Electronic Street Light Controller. From the above installed equipment we are not only saving power but also manpower and it is safe equipment.”



Electronic Street
Light Controller

- TROUBLE FREE
LONG LIFE
- LONG LOAD LIFE
- POWER FACTOR
CORRECTION (Optional)
- POWER SAVING

Power Saving Electronic Street Light Controller shortly known as SLC is one among our state-of-the-art power conservation product. It is the most efficient solution to our street light controlling requirements as it not only efficiently manages ON/OFF operations of street lights but can reduce power consumption by 25-30% through a host of salient methods.

Why SLC?

In the current situation of ever demanding power consumption increase, power conservation should stand as a primary focus as

- Every unit saved is every unit produced
- Additional power generation can increase global warming threats.

Benefits

- **TROUBLE FREE LONG LIFE** – As the SLC operates through electronic contact less switches, it can be trusted to work at dusty and soot filled environment with zero troubles. Further, the product has conformal coating to insulate against dust and soot.
- **LONG LOAD LIFE** – The controller can handle input voltage range between 170V to 290V, while maintaining a constant output voltage. As a result it can increase the life span of the Lamps.
- **POWER FACTOR CORRECTION (Optional)** – The product uses a Solid State Relay (SSR) to switch ON a Power Capacitor for power factor correction towards the load and hence reducing current consumption.
- **POWER SAVING** – The controller provides two key functions that enhance the power saving against our competitors (check our power conservation calculator below)
 - It can be programmed to turn On/Off the street lights at pre-selected time, therefore nullifying faulty manual interventions in doing so.

Testimony of Incorporation.

These photographs are of installation, Field Seegehalli, Krishna Raja Puram, Bangalore East – 560049.



Features

- A 10kW SLC can handle a load of 30 to 35 numbers of 250W lamps. This means it can handle more than 50 to 58 numbers of 150W lamps (which is generally used in street lights).
- SLC makes use of a Real Time Clock (RTC) through Astronomical Timer to do the switching automatically, also the SLC comes with a season based astronomical clock. It can also be further manually switched ON/OFF during routine maintenance checking of lamps. The Astronomical Clock in the μ -Controller is programmed for 10 Years.
- The product comes with a weather proof pole mountable enclosure.
- A SLC of 10kW Capacity has a 1-pole 63 Amps class 'C' miniature Circuit breaker and acts as a preventive damage controller.
- Overvoltage, under voltage protection provided, which is not possible in contact based switching.
- A SLC of 10kW Capacity makes use of 95A, 1600/1800PIV Thyristor-Thyristor module with RC snubbers mounted on an anodized heat sink.
- We have standardized 3 ratings i.e. 2kW, 5kW & 10kW. But we can customise the rating based on the Device (Thyristor-Thyristor Modules used for switching instead of contactor) ratings available with SEMIKRON / IXYS.
- Control Circuit: 16 Bit micro-controller based control card with Real Time Clock (RTC) and with Battery backup.
- After interacting with few customers and also from our observation, energy consumption of 15% to 20% can be saved per unit.

Power Conservation Calculator

Say a street light with 20 to 25 lamps will have a power consumption of 7200 to 9000 watts. Generally, the energy consumption for time of 18:00Hrs to 7:00Hrs will be $13 \times 9\text{kW} = 117$ units.

If suppose our SLC reduces power by 15% {observed in the field trial units installed in a site at 3rd Cross, Jayanagar 7th Block, K-R Road (Opposite to Uma Maheshwari Temple)}, the Switching Time is based on Astronomical Timer (please visit the below website for accurate timings of Sunrise & Sunset), here we consider Sunset & Sunrise of 6.30 & 18.00 respectively.

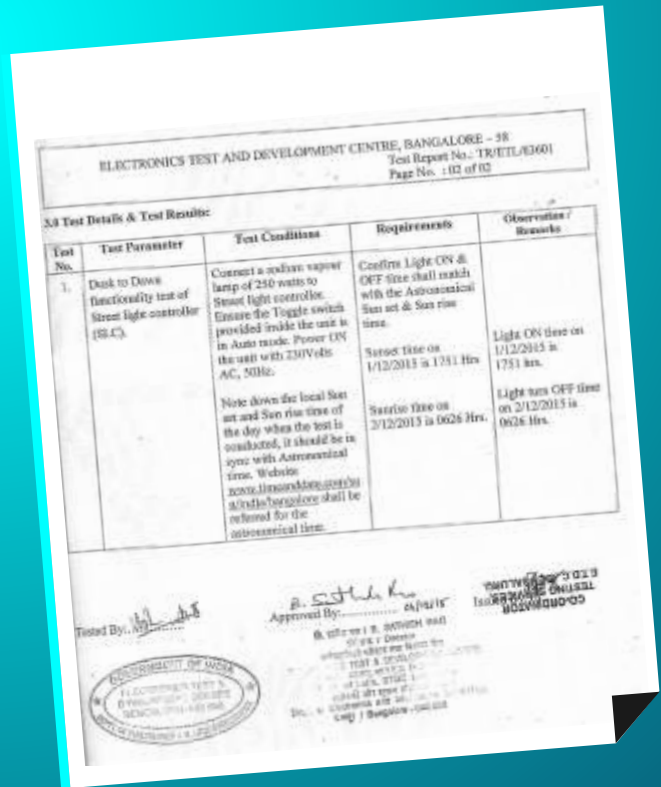
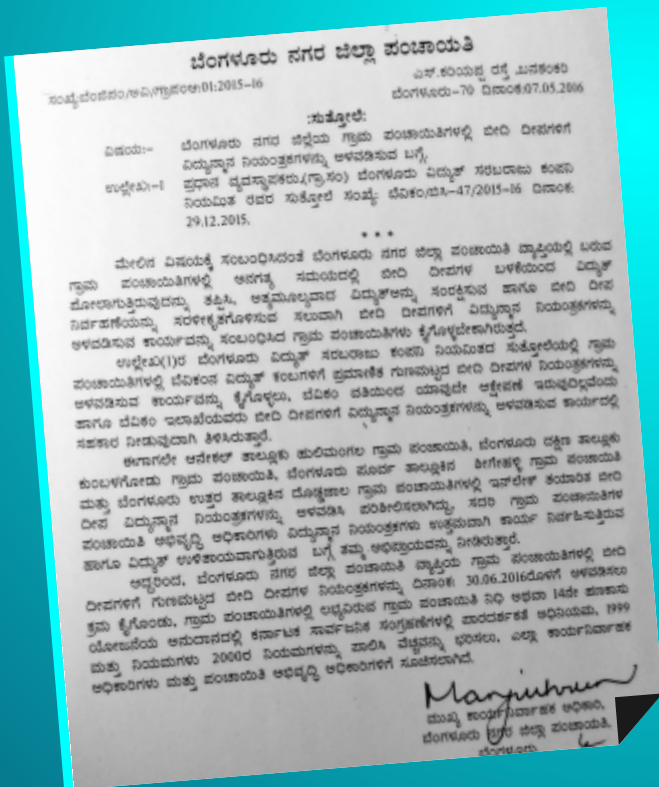
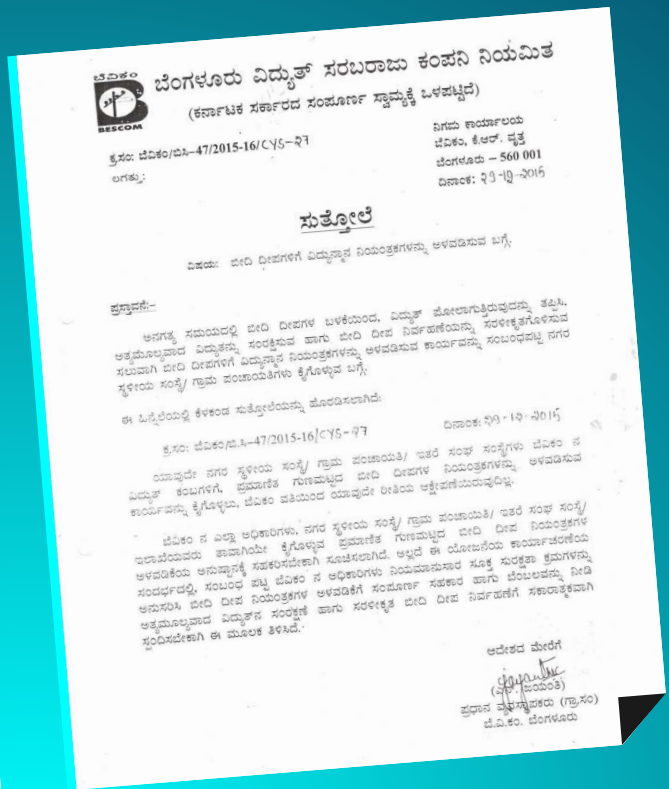
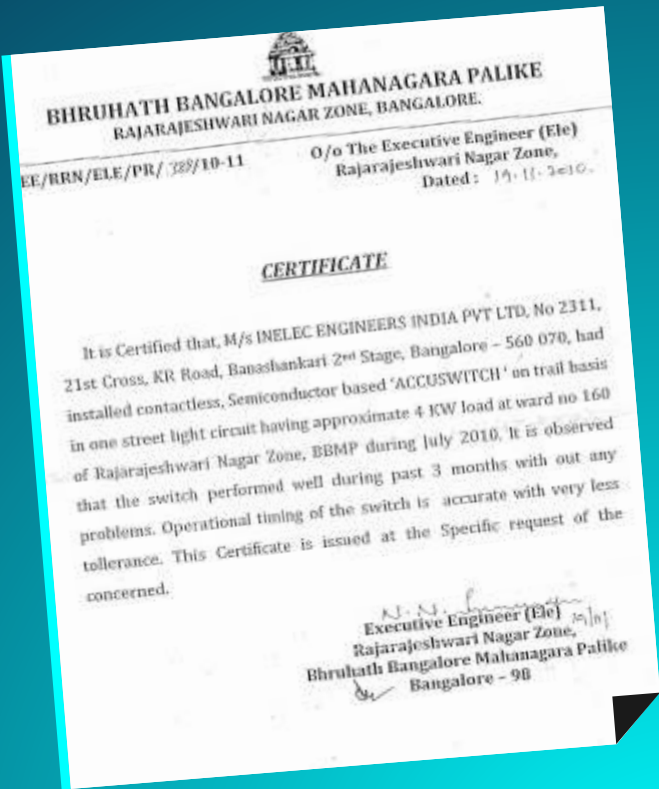
The power consumption of Street Lights with SLC for the above time of 11 Hours, 45 Minutes is $11.75 \times 9\text{kW} = 105.75$ units.

Which means a saving of 11.25 units per day $\times 30$ days = 337.5 units per street per month. Hence savings per street @ the rate of $337.5 \times \text{Rs.}5.00 = \text{Rs. } 1,687.5.00$ per street.

<http://www.timeanddate.com/sun/india/bangalore>

THIS MEANS A RETURN ON INVESTMENT OF 4 OR 5 MONTHS

Certificates from Govt. Authorities



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