

**BINAY  
Model 6S/R 12W PowerLED Downlighter**

***BINAY's PowerLED-based Downlighters offer equivalent light output to 2 x 18W CFL downlighters, with low power consumption and a maintenance-free long life – a true 'GREEN' lighting product***

The BINAY Model 6S/R-9-12W-CLR-CW LED Downlighter has a power consumption of 12 watts only. It is available in both round and square models, and in cool white or warm white.

This model is designed to replace the light output of a standard 2 x 18W CFL downlighter (which has a total wattage consumption of 36W for two CFLs, plus 8W for estimated ballast loss, or total 44W). Therefore, each such LED Downlighter will effect a saving of 50%-75% in energy over the existing CFL unit, apart from having a maintenance-free long life of 10 to 15 years.

**Advantages**

- Power saving: About 30W per unit (over each 2 x 18W CFL unit)
- Long Life: Over 10-15 years to L<sub>70</sub> life (@12 hours operation per day)
- Immunity from voltage fluctuations: Light output remains same in spite of input voltage variation from 90V-250V
- Zero Maintenance costs as there is no failure, so no replacement is required
- Zero dirt degradation, as the unit is sealed from dust. No light loss due to dust, and no cleaning required. (Normal CFL Downlighters, even after cleaning do not retain their original reflectivity due to scratches and chemical oxidation of the reflector surface)
- Very high reliability, as it uses solid-state construction with very high MTBF
- Instant ON (unlike PL lamps)
- No flickering or stroboscopic effect problems (common to fluorescent lamps) as LEDs are running on DC, not AC
- No reduction of light output at cold ambient temperatures (as happens in CFLs)

The model number of the 12W LED square Downlighter model is called 6X-X-X-XX-XXX-XX. For example, model 6S-R-9-12W-CLR-CW would be as follows:

6S - 6-inch Square (or 'R' for round)  
R - Recessed (or 'S' for Surface Mount)  
9 - 9 power LEDs  
12W - Nominal Wattage  
CLR - Clear lens finish or FRD (frosted diffused)  
CW - Cool White (or 'WW' for Warm White)



*BINAY's 6-S/R PowerLED Downlighter is available in both round and square models, and in both cool white and warm white light emission*



**PROJECT CASE STUDY WITH BINAY 6S/R LED DOWNLIGHTERS**

*These LED Downlighters have been used in a project for a 100% LED-lit office-cum-factory in Salt Lake, Calcutta, where the complete illumination has been done with our LED-based Downlighters.*

*With CFLs, the power consumption of the factory was projected to be 4.5KW. However, with our LED Downlighters, the total power consumption of the lighting is now only 1200W for an area of 5500 sq. feet, which translates to about 2 watts of power consumption per sq. meter only. With such low power consumption, this factory is now 100% lit by Solar power, making it India's first GREEN factory.*



*All factory illumination is with our 12W LED Downlighters. About 80 Downlighters have been used over a 5500 sq. feet area to achieve a lux level of 250 Lux on the work plane, as this is going to be an electronics factory.*



*BINAY LED Downlighters installed at Yamaha showroom, Calcutta*



**binay opto electronics private ltd.**

44, Armenian Street, Calcutta 700 001, India  
Telephone: (033) 22429082, 22102039, 22103807

Fax: 91-33-22421493

**www.binayLED.com**

email: info@binayLED.com, binay@vsnl.com