

**BINAY**  
**Model 600<sup>2</sup> and Model 300<sup>2</sup> PowerLED-based Luminaires**

***BINAY's Model 600<sup>2</sup> PowerLED Luminaire is a revolutionary new lighting product which offers the advantages of a long-life and power-saving eco-friendly LED light unit in a standard recessed mounting luminaire design***

The Model 600<sup>2</sup> PowerLED luminaire is designed as a recessed fitting (popularly known as '2 by 2'), suitable for installation into a 21" x 21" panel grid (600mm x 600mm). It replaces conventional CFL luminaires (which have an efficiency of only 60 lumens per watt and a life of only 8,000 hours), and offers the following benefits:

- *High luminaire efficiency (95%) and low power consumption (75% saving in power over equivalent fluorescent tube lighting)*
- *Long useful life (50,000 - 100,000 hours)*
- *Constant light output irrespective of input voltage variation from 90V-260VAC*
- *No infrared radiation – does not create any load on air conditioning systems*
- *An ecologically friendly product, and contributes to the reduction of global warming; is a factor for "Green" building certification.*

The body is constructed of mild steel, painted white, and with a corrosion-resistant base. The light source is by means of highest intensity 1.1W power LEDs having a correlated colour temperature of 6500°K. Luminous efficiency is 100 lumens per watt, with high reflective index silicone encapsulant for maximum light extraction (minimum 100 lumens per LED).

Optimum Thermal Management is provided for the LEDs by mounting the LEDs on an MCPCB base, which is in turn directly mounted on an aluminium heat spreader for maximum heat dissipation.

As a result of the 180° directional radiation property of LEDs, the basic luminaire efficiency is as high as 95%-98%. Superior optical systems are used to direct and control the light distribution, providing excellent light technical performance, good uniformity and glare control. The LEDs used have 90° to 170° primary lens, and the output from these can be further modified by a secondary TIR lens to give maximum luminaire-delivered scotopically enhanced lumens. A semi-mirror ALNOD reflector assists in reflecting any stray rear light emission. A baffle or holographic film diffuser can be provided as desired.

The internal LED Driver outputs constant current to the LEDs, ensuring stable light output irrespective of voltage variation from 90V- 260VAC.

The current range consists of the following models (2' x 2'):

**Model 600<sup>2</sup>-18L** (power consumption 22W approx.)

*Replaces 2 x 36W CFLs having a total consumption of 86 watts with ballast*

**Model 600<sup>2</sup>-30L** (power consumption 38W approx.)

*Replaces 4 x 20W T8 tubelights having a total consumption of 96 watts with ballast*

**Model 600<sup>2</sup>-36L** (power consumption 45W approx.)

*Replaces 3 x 36W CFLs having a total consumption of 130 watts with ballast*

***These luminaires are also available in 300mm x 300mm (1' x 1') versions, in both recess-mount and surface mount options:***

**Model 300<sup>2</sup> MiniATM-1x1/9-L** (power consumption 12W approx.)

*Replaces 2 x 18W CFLs having a total wattage of 44W with ballast*

**Model 300<sup>2</sup> MiniATM-1X1/16-L** (power consumption 22W approx.)

*Replaces 2 X 26W CFL having a total consumption of 60W with ballast*

**Model 300<sup>2</sup> MiniATM-1X1/25-L** (power consumption 33W approx.)

*Replaces 2 x 36W CFLs, 2 x 40W FTLs (T12), or 2 x 36W FTLs (T8)*

**Main Applications** General office lighting, Conference rooms; General Hospital lighting; Reception and public service areas, corridors and staircases; Recreational areas (restaurants, cafeterias); Department stores, retail outlets; School lighting; ATM kiosks



***BINAY Model 600<sup>2</sup> (2' x 2') PowerLED-based Recess-Mount Luminaire***



***BINAY Model 300<sup>2</sup> (1' x 1') PowerLED-based Recess-Mount Luminaire***



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