

**binay**  
**LED-based POWER DISTRIBUTION SEMAPHORE INDICATOR**

***The BINAY LED (Light Emitting Diode) Semaphore Indicator is a highly reliable solid-state replacement for the conventional electromechanical semaphore indicator unit***

In power distribution panels, semaphore indicators are normally provided to give a visual indication of the condition of a circuit.

The conventional semaphore consists of a rotating mechanical disc with inscribed pointers, which is actuated by relays. As it is an electromechanical device, the current consumption is quite high (100mA to 200mA). More importantly, the disc is liable to jam during rotation; this causes the relays to burn out, leading to frequent failure of the unit.

The BINAY LED Semaphore unit has been designed with long-life LEDs. To simulate the rotating disc, a row of red LEDs is placed to intersect with a row of green LEDs in the form of a cross (see diagram below). Three input terminals are provided; common, red input, and green input. In the neutral condition, the LEDs are not energised. Either of the red or green LED rows light up depending on the condition of the circuit ('ON' or 'OFF').

The unit provides high reliability, since it contains no moving parts and the life of the LED is normally 11 years (we guarantee for three years). Current consumption is very minimal, at around 25mA. Finally, the LED Semaphore unit provides easier and greater visibility, since the LED rows are illuminated.

The BINAY LED Semaphore Indicator has a panel-flush housing, with the front of the unit flush with the surface of the panel. It has the exact external dimensions of the conventional English Electric mechanical semaphore unit (which it replaces). It is available in both 38.5mm (1½") and 63.5mm (2.5") diameters.

A third type is also available in a projected type housing, in which the front end protrudes about 10mm from the surface of the panel. The bezel diameter of this type is about 35mm, and it fits in a panel cutout of 30.5mm diameter.



***BINAY LED Semaphore unit for 30.5mm diameter panel cutout  
(Construction for 1.5" and 2.5" types is similar)***



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