

PowerPuck 700mA

5mm & High Output LED Applications

The PowerPuck can be used to drive single or multiple High Output LEDs such as the Luxeon I, Luxeon III, Luxeon V, Cree Moon, Io Moon, Leda Moon or the Osram Golden Dragon. Depending upon the input voltage the PowerPuck can drive up to 6 LEDs in series.

	6V	12V	18V	24V
Number of Luxeon Is	2	6	10	12
Number of Luxeon IIIs	1	3	5	6
Number of Luxeon Vs		1	2	3



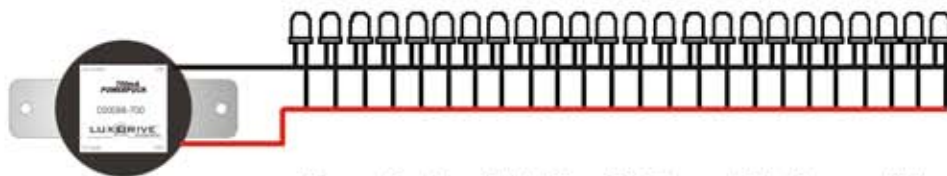
PowerPuck unit driving 4 Luxeon III LEDs in series
(VIN >= 16VDC)

5mm LEDs must be connected to the PowerPuck in parallel, or in a series parallel combination. The output current from the PowerPuck is divided by the number of parallel strings of 5mm LEDs connected to it. Thus, the amount of current that flows through each LED or series string of LED is determined by the number of LEDs in parallel. It is important to have enough LEDs so that the current flowing through each LED does not exceed the rated maximum.

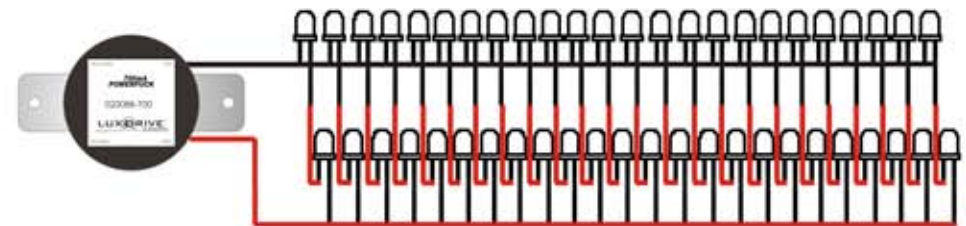
$$\text{Number of LEDs (or Number of Strings)} = \text{PowerPuck Output Current} / \text{Current through each parallel LED (or String of LEDs)}$$

24 LEDs = 350mA / 30mA 48 LEDs (2 LEDs per string) = 350mA / 30mA

	30mA per LED	25mA per LED	20mA per LED	15mA per LED	10mA per LED
all LEDs in parallel	24 LEDs	28 LEDs	35 LEDs	47 LEDs	70 LEDs
series parallel comb (2 LEDs per String)	48	56	70	94	140
series parallel comb (3 LEDs per String)	72	84	105	141	210



PowerPuck unit driving 24 5mm LEDs in parallel
(VIN >= 5VDC)



PowerPuck unit driving 48 5mm LEDs in a series/parallel
(VIN >= 9VDC) (2 LEDs per string)