Drive supplies high power LEDs from low power sources

Standard LED drivers (buck topology) require the input voltage be higher than the output voltage which can cause problems when working with the newest high power LEDs and powering them from low voltage sources like solar cells or batteries. Buck driver solutions, which must always have a higher input voltage than an output voltage, typically result in a design that requires multiple drivers for multiple led strings with lower forward voltages. This problem is solved with the introduction of RECOM Lightings buck/boost LED driver which can deliver high voltages (up to 40V) from a low voltage source (as low as 8V), simplifying the lighting system with the use of a single driver and a long single string of LEDs.

The new RBD-12 series supplies LEDs from 3 to 20 watts with input voltages from 8 to 36V providing constant currents of 350mA or 500mA. The output voltage can be above or below the supply voltage by a factor 2 (500mA) or by a factor 3 (350mA), within the range from 2 to 40VDC. These new buck/boost models are digital (PWM + Remote On/Off) and analog dimmable and cover the temperature range -40°C to +75°C. Dimensions are 32.6 x 16.6 x 11.1mm (L x W x H), and weigh only 13 grams. Depending on the application the drivers can be supplied with wires or with standard pins for PCB mounting.

Buck/boost drivers such as the RBD-12 series are ideal for mobile, solar and battery driven LED-systems for transport and traffic applications (i.e. mobile homes, E-cars, street lighting, traffic signs, etc.) as well as for use in marine and air traffic lighting –

that is wherever universal, long life LED-supplies are a must. They comply with all relevant safety standards such as EN/UL60950-1 and carry a 5 year warranty.

RECOM Lighting

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