



Overview

The DCDC18R Boost Regulator accepts an 11 to 16 Vdc input and boosts it to 18 Vdc, allowing a vehicle to recharge CR3000, CR5000, or CR23X sealed rechargeable batteries. The DCDC18R

conveniently attaches to the side of the sealed rechargeable base next to the charger input.

Detailed Description

Supply voltage from the vehicle is connected to the DCDC18R's Vin terminals. Regulated voltage to charge the data logger's sealed rechargeable power supply are sourced from the Vout terminals.

Maximum Input Current

The boost regulator implements a soft-start circuit and typically starts regulating for input voltages greater than 10 V. Supply voltages below 10 V pass directly to Vout (through two Schottky diodes dropping the voltage by ~0.6 V). With the DCDC18R operating at the maximum output current (18 V * 1 A = 18 W), the input power required is up to 18 W / 0.8 efficiency = 22.5 W; that is a maximum current of 2.25 A at 10 V.

Specifications

Maximum Input Current	2.25 A
Input Voltage	11 to 16 Vdc
Output Voltage	18 Vdc ±5%
Quiescent Current	4 mA
Output Current	up to 1.0 A

Power Conversion Efficiency	80 to 90%
Operating Temperature Range	-40° to +60°C
Dimensions	6.4 x 8.6 x 2.8 cm (2.5 x 3.4 x 1.1 in.)
Weight	91 g (3 oz)

For comprehensive details, visit: www.campbellsci.com/dcdc18r 