# 35286-PS
Constant Voltage/Constant Current Converter

NOTE: Depending on In/Out Voltage difference & Load Current Unit can get Hot

Non Isolated, adjustable DC/DC Buck (Step Down) constant voltage or constant current, Driver, Charger. (Supplies constant voltage until set current is reached then changes to constant current)

Adjustable compliance Output Voltage and adjustable Constant Current output for charging batteries or driving LEDs

Input Voltage: 5-32VDC

Output Voltage: ~0.8-30VDC

Min. Input/Output Voltage Differential: <1V.

Input Voltage must be higher than required output voltage

Rated Current: 5A (Fan needed above 3A)

Max Current: 5A

Current Adj.: sets the available charging/driving current

L: 2"   **W:** 1"   **H:** 5/8"   **WT:** .04
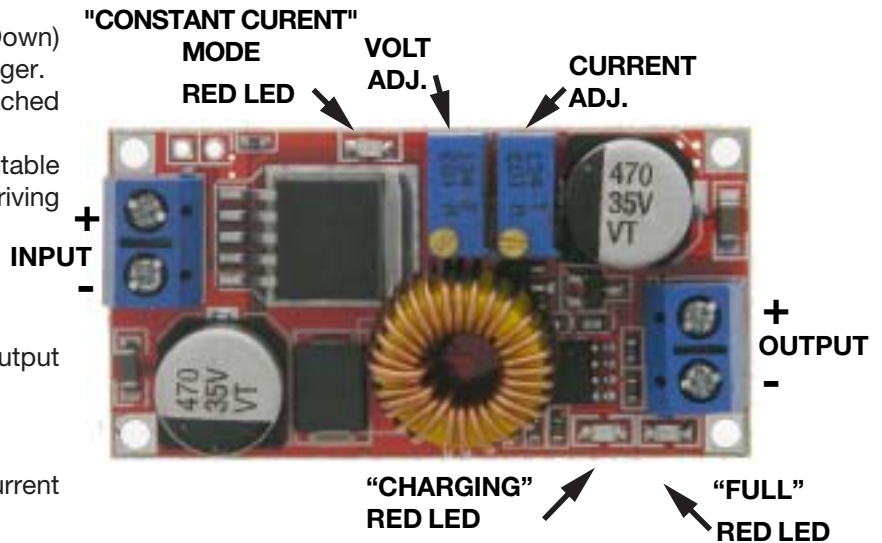
☆General Information☆			
Type	Nonisolated Buck	Mode	Asynchronous Rectifier
Vin	5V-32V	Vout	0.8V -30V
Iout	Adjustable up to 5A	Efficiency	95% (Max)
Frequency	300KHz	Output ripple	50mV (Max) 20MHzbandwidth
Load Regulation	±0.5%	Voltage regulation	±2.5%
Operating Temperature	-40°C to +85°C	Size	51*26.3*14 (L * W * H) (mm)

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★ Ꝓu'Opno'J|yyl u{'(3A+) or High Input/Output Differential; A Heatsink should be used

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1. Determine the float voltage and charging current of the rechargeable battery.
   Module Input Voltage must exceed the Charging Voltage by ~1V

2. Adjust the constant voltage adjustable pot and set the output Voltage to ~ 5V

3. Short circuit the Output.
   Use a Multimeter set to the 10A range to measure the output short-circuit current. NOTE: For low current Batteries; The Use of a lower Meter range is recommended for final adjustments.

   Adjust the constant current pot to make the output current equal the recommended battery charging current.

4. The charging LED indicator is set by default to 0.1 X the Charging current (Constant Current value)

5. Remove short and Readjust the constant voltage pot to make the output voltage equal the recommended float voltage.

6. Connect the battery to charge. (Some minor adjustments may be needed)

★ LED Constant Current Drive:
NOTE: LED is Not Connected During Setup (Steps 1-4)

1. Determine the Recommended Forward current and maximum Forward voltage of the LED.

2. Adjust the constant voltage adjustable pot to a voltage slightly higher than the recommended LED Forward Voltage.

3. Short circuit the Output.

   Use a Multimeter set to the 10A range to measure the output short circuit current.
   NOTE: For low current LEDs; Use of a lower Meter range is recommended for final adjustments
   Adjust the constant current potentiometer to equal the recommended LED Forward Current.

4. Remove short circuit. Connect the LED. (Some minor adjustments may be needed)