

# A & A Engineering

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## 1 Amp Smart Battery Charger



This **SMART BATTERY CHARGER** can be used with **LEAD ACID**, **GEL-CELL** or **AGM** batteries. Based on the Unitrode UC3906 chip which has three distinct operating states; **BULK**, **ABSORPTION** and **MAINTENANCE**. Initially the charging current is limited to a pre-set bulk value. When the battery voltage reaches a specific level the charger enters the absorption mode and tops off the battery with an elevated voltage. After top off, it enters maintenance mode where it maintains the battery at a precision float level value.

An important feature of this charger is a precision temperature tracking voltage reference. This reference is specifically temperature compensated to track the temperature characteristics of lead-acid cells.

If a load is applied to the battery while the charger is connected, the charger will contribute its bulk current to the load. If the load discharges the battery sufficiently, the three state process described above occurs when the load is removed. The charger can be connected to the battery **indefinitely, it will not overcharge** the battery.

Standard unit is 115 VAC input, 12V @ 1 A out. If you build the KIT, you can set the current either to 1/2 or 1 A. 230 VAC input is available only for the 12V @ 1 Amp or 6V @ 1 Amp units. Add \$5.00 per KIT or assembly

The complete charger weighs 3 pounds and measures 4" W x 6 1/2"D X 5 3/4"H. Six foot AC cord and six foot battery cord are included. Both input and output are rear panel fused. Output is reverse polarity protected.

**Various cables and Anderson Power Pole options available - see website for details.**

This kit is 100% complete, there is nothing else to buy! The kit includes a pre-punched, painted and silk-screened metal enclosure. All hardware, wire, cables, electronic components, and the circuit board are included.

**KIT (Order #150-KIT)**

**\$ 64.95**

**ASSEMBLED (Order #150-ASY)**

**\$ 84.95**

**Above prices are for STANDARD 12V 1 Amp or 6V 1 Amp unit. Specify voltage.  
For other output voltage (4, 8, 14, 18 or 24) Add \$ 5.00 per KIT or \$ 10.00 per ASY  
Switchable current level QRP version available - see website for details**

Shipping and insurance is extra. \$9.50 for US 48 destinations. California residents must add 8.75% sales tax. Foreign orders require special treatment, please contact us for details. We accept PayPal, Checks, Money Orders, VISA and MC. NO COD.

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