

Battery Boss - FS75

Fast Charger, 3.3V and 5V Regulator & Battery Protection System

Index Designs

Features

- 75 Watt 8 Amp CC/CV Battery Charger.
- Power FET Switch provides direct connections between load and Battery or input.
- Provides uninterruptible DC outputs.
- Built in 5V @ 4 Amp regulator and direct Battery Feed with electronic circuits breaker.
- Outputs are Short Circuit Safe.



Applications

- Vehicle based monitor systems
- UPS for Industrial Equipment

- Ship Board Electronic Systems
- Solar Power Systems
- Remotely Controlled Power Supply

General Description

The Battery Boss FS75 is a multi-function power controller / UPS with built in battery charger, output regulators and electronic circuit breakers with remote control operation and monitoring. A 75 watt input regulator accepts a 2:1 input voltage range and provides CC/CV battery charging. A built in Real Time Clock provides weekly or monthly condition cycles as required by battery type.

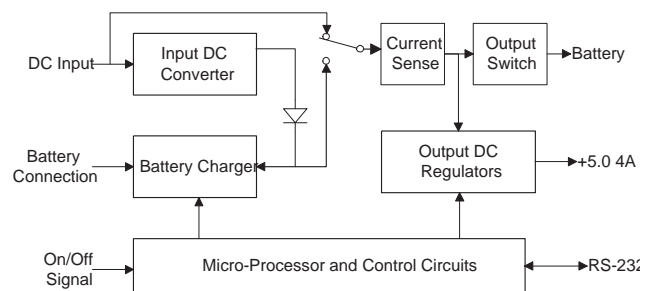
An internal DC DC converters provides a 5.0 Volt output at 4.0 amps each. Battery voltage is output through an electronic circuit breaker providing short circuit current limiting. A fast acting power switch allows the user load to be operated directly from the DC input. This architecture frees the input converter from handling load power and allow full power for fast battery charging.

Battery and Operating Options

The FS75 can be configured to control various battery chemistries, capacities and operating conditions. Charging current, voltage limits, load current limits and various timers can all be configured via EEPROM constants.

A built in RS-232 serial port allows a remote processor to read time and date, set "Auto-Wake Up" timers, monitor voltages and currents, activate a built in Watch Dog Timer and control overall system power. Power and battery failures are monitored and reported.

Block Diagram



The above block diagram shows input power, battery and basic output connections. Also shown are the On/Off control signals and RS-232 channel. Mechanical Information

Input Voltage Ranges	9-20V; 16-36V; 32-60V
Output Voltage	Battery Feed, 5@4A
Max. Charging Power	75 Watts or 8 Amps
Size and Mounting Hole Location (Inches)	Size: 5.25 x 3.75 x 1.25 Inches 0.125 Mounting Hole with 4x40 Threads Hole Centers: 4.70 x 3.40 Inches

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