



## **PowerMini Power Management system With USB**

**£159.95**

### **DESCRIPTION**

The POWERmini is described as a DC Power Management System, but what is that? Most Amateur Radio gear is designed to be operated directly from a 12V DC power source. For a radio with 100W output that amounts to an input current around 25A. That provides a lot of convenience for mobile and portable applications but operation is not quite as simple as plugging into a wall outlet. Batteries require attention to maximize their life and solar panels need to be managed to prevent overcharging. Simply put the Power Management system looks after the health of the DC battery powering the system for both the charge and discharge cycles, but also keeping an eye open to protecting your radio too. From the charging perspective, a dedicated solar panel input allows the connection of a solar panel with up to 11A of current to charge the system battery. This functions not only as a charger, preventing reverse current flow into the panel and ensuring that the battery is not overcharged, but it also provides monitoring of the panel indicating how much charge has been delivered to the battery and reports the panel power output to provide a view of how well the panel has been working. With regard to the discharge cycle, the system monitors the battery voltage and provides warning of low battery voltage helping to avoid damage to the battery due to deep discharge. It can even automatically disconnect the battery from the radio in case you forget to do so. The POWERmini supports both Lead Acid and Lithium-Ion batteries. Power output up to 32Ah total is provided by dual output connectors. Both are protected by an automatic disconnect in case of accidental over-current such as a short circuit. The output is also protected by a voltage monitor that automatically disconnects your expensive radio from too high of an input voltage. System monitoring is provided by a real-time reporting system indicating the battery and solar panel voltages, the load current and solar panel current as well as the amount of energy used by the battery and what was replenished by the solar panel. Visual and audible alarms warn of power-related issues such as over-voltage, low battery voltage or over-current.