



## **Powermetrix Division**

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### **Battery FAQ's**

#### **Powermite 310**

**Q. What kind of battery does the 310 use?**

A. The 310 uses a 12V NiCad battery (part# EP29-100-0310). Powermetrix does not recommend using any other battery other than the model provided by the manufacturer.

**Q. What kind of battery charger does the 310 use?**

A. The 310 uses a 18VDC, 67mA, unregulated battery charger (part# EP75-100-0011). Powermetrix does not recommend using any other battery charger other than the model provided by the manufacturer.

**Q. How long should the battery last in the field?**

A. With a full charge, the battery should last between 6 to 8 hours.

**Q. How long is the battery life?**

A. A battery should last more than 1-2 years with heavy use.

**Q. When should I charge the battery?**

A. Only charge the battery when the gauge goes below 10%.

**Q. Where do I find the battery gauge?**

A. The battery gauge can be found on any screen that is actively updating. For example, Site Detail and System Power are active screens.

**Q. How long should I charge the battery?**

A. When the battery gauge goes below 10%, plug in the charger for no more than 12-14 hours. Never charge the battery over the weekend.

**Q. Can a battery be replaced in the field?**

A. Yes. There are two screws that can be removed from the back of the 310 plastic case. Carefully remove the back of the plastic case, and disconnect the battery that lies at the bottom. Disconnect the old battery, connect the new battery in its place, then place the battery into the case. Carefully place the screws back into the plastic case. NOTE: Remember to download all data beforehand since replacing the battery will delete any saved data.

**Q. My battery won't last for more than a few minutes, even after a full charge. What's going on?**

A. Either the battery needs to be replaced or the battery has a memory. To test (and possibly fix) the battery for memory, refer to the "Powermite 310 Battery Cycling Procedure."

**Q. What causes battery memory?**

A. Battery memory is caused by not allowing the battery to be fully discharged between cycles, so the battery remembers the shortened cycle and thus reduces the length of use per charge. In other words, always allow the battery to discharge as much as possible (< 10%) before re-charging the battery.

## **Powermite 310 Battery Cycling Procedure**

The best way to eliminate the “battery memory effect” is to cycle the battery. The following procedure explains how to do this. Following this procedure should lengthen the time between charging cycles and lengthen the lifespan of your battery. Note that this procedure will eliminate the memory effect in the battery, but will not tell the user how long the battery will last for its charge cycle.

### **DAY 1**

1. Allow the Powermite 310 to fully discharge the battery by turning on the unit and letting it run. The unit will turn itself off when fully discharged.
2. Connect the charger overnight (12-14 hours) to allow a full recharge.

### **DAY 2**

1. Remove the charger and place it aside.
2. Turn on the Powermite 310.
3. Allow the Powermite 310 to fully discharge the battery by turning on the unit and letting it run. The unit will turn itself off when fully discharged.

### **DAY 3**

1. Connect the charger to start the recharging process.
2. After 12-14 hours, the battery will be fully charged and any memory effect should be eliminated.