

B&K Precision 8500 series DC Loads

BATTERY APPLICATION

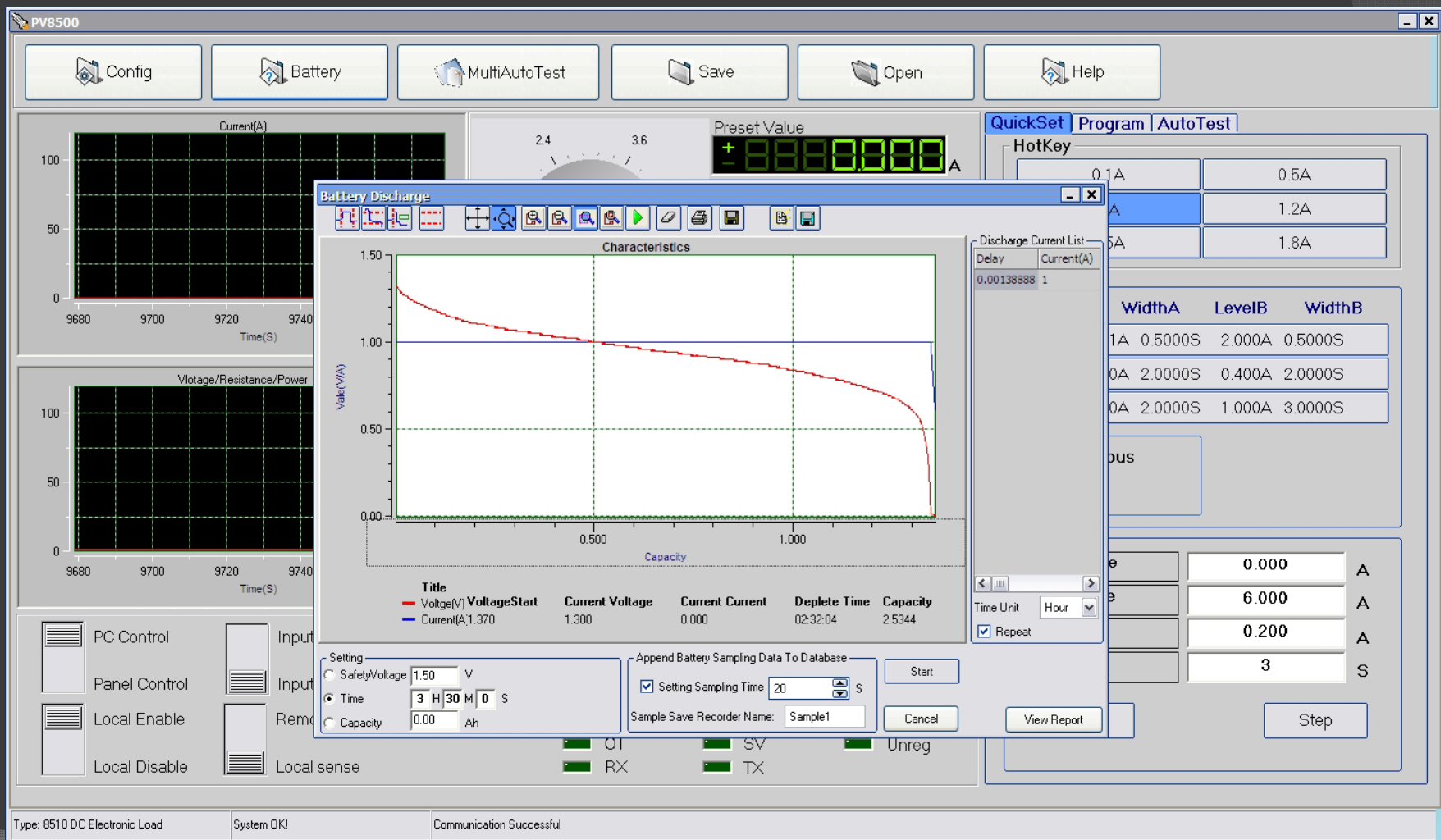
11/4/2008

MODES OF OPERATION

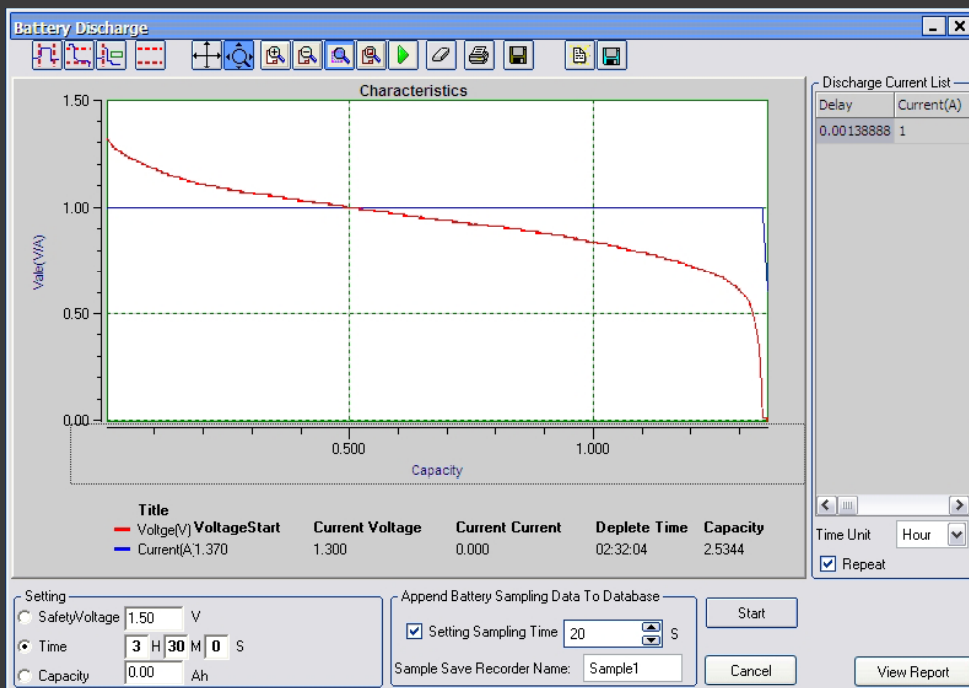
- CC (Constant Current)
- CV (Constant Voltage)
- CW (Constant Power)
- CR (Constant Resistance)



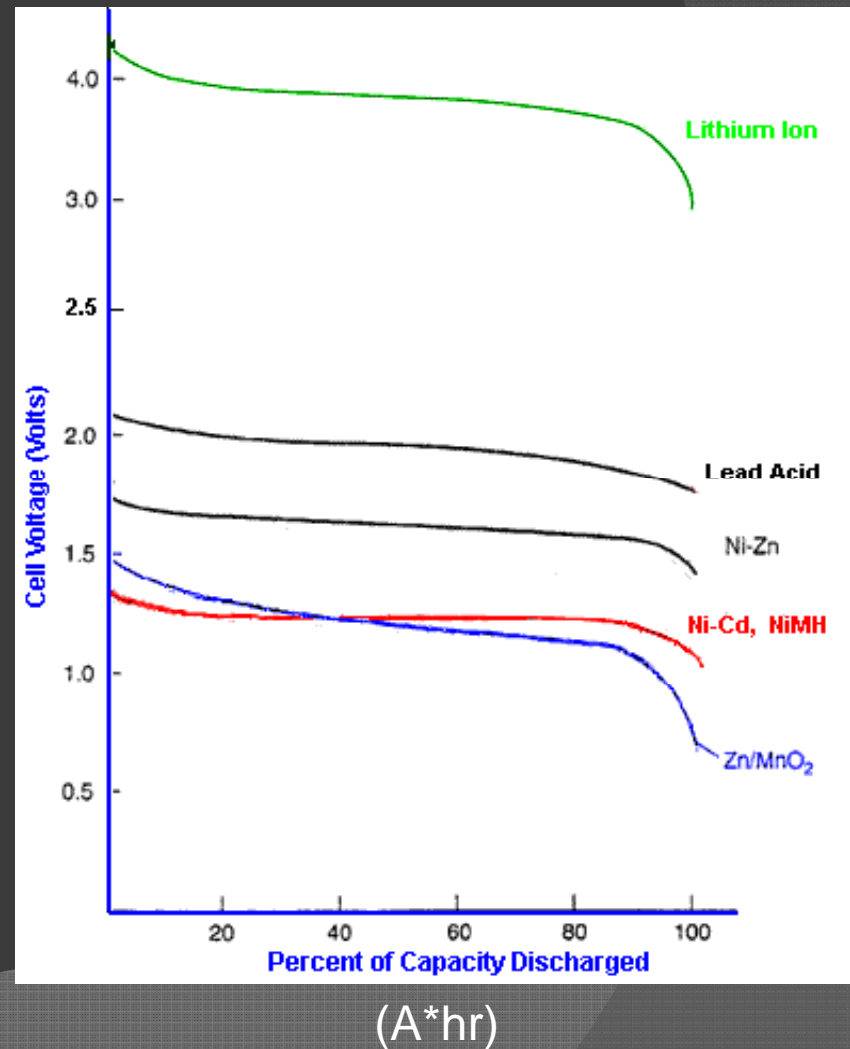
Battery Testing: CC mode



Sample Battery Discharge



- Step 1:** Set current to draw constantly
- Step 2:** Set when to end (time, voltage, capacity)
- Step 3:** Run test



What the modes do

- ⦿ CC mode
 - Battery discharge characteristics
 - Battery life
- ⦿ CV mode
 - Battery capability to produce max. current
- ⦿ CW mode
 - Tests under constant power
 - Changing voltage and current characteristics
- ⦿ CR mode
 - Battery internal resistance characteristics
 - Voltage & current linearly changing

Applications

- Battery testing
 - (consumer, Li-ion, Ni-MH, Lead Acid, rechargeable, etc..)
- Battery chargers
 - Charging behaviors, trickle characteristics
- Solar cells
 - Test their power capabilities and stability
- Fuel cells
 - Hydrogen vehicles
 - Laptop and cell phone power
 - Extensive time discharge
- UPS
 - Backup power, power regenerators
- Super capacitors
 - Electrical Vehicles
 - Cycle efficiencies
- Power supplies
 - Testing power supplies
 - Computer power supplies
 - Power adapters / wall-warts
- Smaller/quick applications
 - Voltmeter
 - Circuit fuse