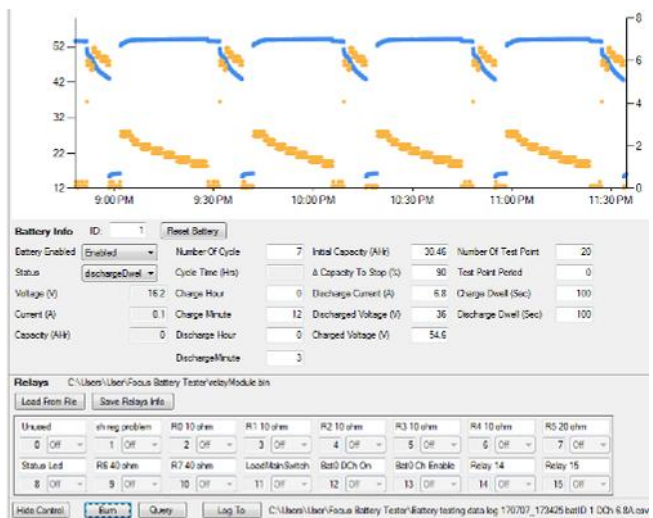


Electric Vehicle Battery Test System EVBT

This Battery Life Cycle Tester allows testing of Electric Vehicle Batteries of up to 300A and 300V. Tests can be constant current, or drive-cycle current profiles. Batteries are discharged to the large air-cooled resistor bank until the BMS shuts down, or the battery reaches its designated stop voltage. Battery capacity is calculated continuously. The battery pack is then recharged with the product's native battery charger, incusing proper charging every time. Charging is cycled by stand-alone controller, which continues even after line power interruptions. Data can be logged for analysis, and displayed, or the system can be operated "stand alone" with out a computer present. Accelerated battery testing can also be done, allowing faster testing with the appropriate acceleration factors. The system allows pre-set life pass/fail limits, and Charge Capacity measurement. The single load unit can operate up to 3 separate battery packs simultaneously (one loading while other two are in charging modes).



Features:

- Continuous currents of up to 150A
- Voltage of up to 300V
- 200mA Current Control Resolution
- Automated Tester operates "Stand Alone"
- Automatically continues after power glitch
- Free computer software for Graphic Display
- 1 Year Warranty Included

Overview

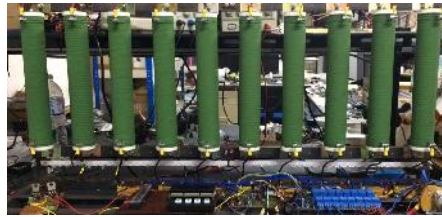
A large resistive load bank is connected to the discharging battery via contactors, and/or power transistors. The transistors adjust the duty cycle to maintain constant current even as battery terminal voltage drops. Battery capacity is calculated by integrating the current over time of the test. End of test can be defined by a number of cycles (eg. 300 or 1500), battery capacity, or % degradation of battery capacity. After discharging battery is connected to charger while another battery pack is discharged (if running multiple battery packs). Data can be displayed and monitored via computer, or the system can operate alone.

Electric Vehicle Battery Test System

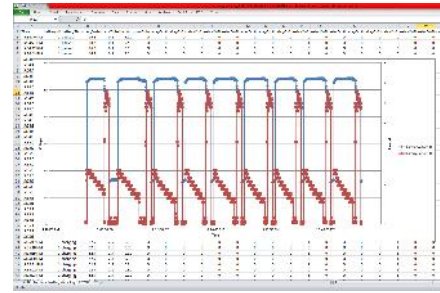
EVBT



Load Cabinet

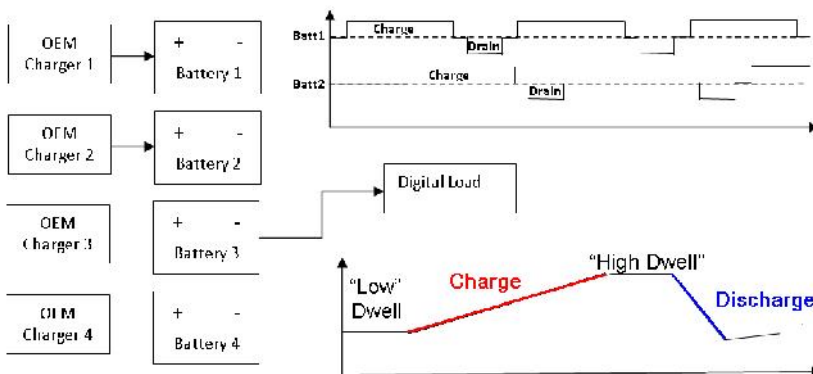


Exposed Load Resistors



Typical Data

The Electric Vehicle Battery Test System is used to measure the batteries charge capacity under controlled loads. The battery is tested together with the BMS and charger as a single system to characterize the systems longevity in terms of charge/discharge cycles. Charger and Battery Charging current can be measured for Charger and Charge/Discharge efficiency calculations. As the charging time is longer than the discharge time, a single load unit can be used with up to 4 different battery packs simultaneously. Only one battery pack is discharged, while the others are either being charged, or in a “high” or “low” dwell period.



OPTIONS

- Temperature monitoring and recording
- Charge/Discharge Efficiency Measurement
- Charger Efficiency Measurement

SPECIFICATIONS

PHYSICAL

Weight: 60kg (approx)
LxWxH: 130 x 95 x 40 cm

BATTERY TESTING

Current 0 to 300A
Voltage 10 to 250V
Temperature 0 to 200C
Cycles Unlimited
End Of Test

Fixed # of cycles
Battery Capacity
Discharge Time
Battery Temperature

LOAD BANK

Air Cooled
Digitally Controlled to +/-0.2A

ALARMS

Battery Temperature Over Limit
Battery Voltage Over/Under Limit
Excessive Voltage “droop” @ Dwell
Battery Current Over/Under limit
Charge/Discharge Time High/Low

ENVIRONMENTAL

Temp:10 to 40°C Operational
0 to 50°C Non-Operational
Humidity:5 to 90% Non-condensing
Shock/Vibe:<10g

