What is claimed is:

1. A conversion circuit device connecting at least one lithium based battery to a standard inverter/charger for lead-acid batteries, the conversion circuit device translating the state of the at least one lithium based battery into signals that correspond to the state of a lead-acid battery pack in order to charge or discharge the at least one lithium based battery using the standard inverter/charger for lead-acid batteries.

2. A conversion circuit device as defined in claim 1 wherein the signals received by the inverter/charger are voltage levels.

3. A conversion circuit device as defined in claim 2 wherein the conversion circuit device includes a DC-DC converter adapted to transform and convert a charge current of the inverter/charger from one voltage level to another voltage level.

4. A conversion circuit device as defined in claim 3 wherein the DC-DC converter of the conversion circuit device transforms a constant charge current from the inverter/charger into a higher or lower constant charge current.

5. A conversion circuit device as defined in claim 1 wherein the conversion circuit device is connected to an ECU of the at least one lithium based battery which relays various states of the at least one lithium based battery to the conversion circuit device and the conversion circuit device translates the various states of the at least one lithium based battery into voltage readings to the inverter/charger.

6. A conversion circuit device as defined in claim 5 wherein the various states of the at least one lithium based battery include voltage level of each individual electrochemical cell of the at least one lithium based battery and temperature of the at least one lithium based battery.

7. A conversion circuit device as defined in claim 6 wherein, in a discharge mode, in the event that a single electrochemical cell of the at least one lithium based battery reaches its minimum voltage threshold before the at least one lithium based battery is fully discharged,

the ECU relays the voltage level of the individual electrochemical cell to the conversion circuit device which in turn simulates to the Inverter/charger that the at least one lithium based battery is fully discharged thereby shutting off the discharge current from the at least one lithium based battery.

8. A conversion circuit device as defined in claim 6 wherein, in a discharge mode, in the event that the temperature of the at least one lithium based battery exceeds a maximum threshold or falls below a minimum threshold, the ECU relays the temperature reading to the conversion circuit device which in turn simulates to the Inverter/charger that the at least one lithium based battery is fully discharged thereby shutting off the discharge current from the at least one lithium based battery.

9. A conversion circuit device as defined in claim 1 further comprising a bypass parallel circuit wherein in a discharge mode, DC current flowing from the at least one lithium based battery bypasses the conversion circuit device and flows directly to the Inverter/charger to prevent overheating of the conversion circuit device.

10. A conversion circuit device as defined in claim 1 wherein the conversion circuit device is integrated into an electronic control unit (ECU) of the at least one lithium based battery.

11. An Uninterruptible Power Supply (UPS) system for homes and facilities comprising a standard inverter/charger for lead-acid batteries, at least one lithium based battery, and a conversion circuit device connecting the at least one lithium based battery to the standard inverter/charger; the conversion circuit device translating the state of the at least one lithium based battery into signals that correspond to the state of a lead-acid battery.

12. An Uninterruptible Power Supply (UPS) system as defined in claim 11 wherein the conversion circuit device includes a DC-DC converter adapted to transform and convert a charge current of the inverter/charger from one voltage level to another voltage level.