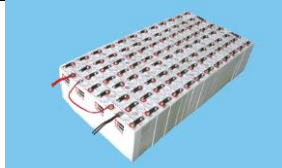











# UG HEV Conversion Project




## Part List Version 1.0 RC





| A. EV Batteries <span style="float: right; color: red;">Total Around 6900USD</span><br><a href="http://hipowergroup.com">http://hipowergroup.com</a><br><a href="mailto:info@hipowergroup.com">Email: info@hipowergroup.com</a><br><a href="mailto:support:tech@hipowergroup.com">Support: tech@hipowergroup.com</a><br>Phone (International): +8 6731 8 513 1841<br>Phone (Domestic, China): 400-6402 099<br>Fax : +8 6632 8 010 289 |               |   |                                  |      |  |  |   |
|---|---------------|---|----------------------------------|------|--|--|---|
| No  | Part Name     | Spesification/<br>Features  | Brand<br>Name/Type<br>/Model     | Item | Price/<br>item                             | Total Price  | Remark  |
| 1   | Power Battery | Nominal voltage: 3.2V/Capacity:<br>100AH<br>Discharge: 2C continuous / 4C burst<br>Weight: 3.14 kg/Size:169*57*220 mm | LiFePO4<br>HP-CT-100AH           | 45   | FOB<br>Shenzhen<br>USD 1.2/AH              | FOB<br>Shenzhen<br>USD 5400<br>(ready in<br>45days after<br>payment) | <br>Battery Pack 144V 45pcs |
| 2   | BMS & Charger | Output DC: 24 ~ 400 DC<br>Power offer: 1500 ~ 8000 W<br>IP 46/LED Indicator/ CAN<br>communication                     | HipowerChar<br>ger<br>(on-board) | 1    | Confirm<br>Price bsk.<br>Kira" 1500<br>USD |  |                            |



| <p><b>B. EV Car Kit</b><br/> <a href="http://goldenmotor.com">http://goldenmotor.com</a><br/> <b>Mr. Johnson Liu</b><br/>                 Phone: 86-519-81004258<br/>                 Mobile: 86 186 5198 4825<br/> <b>Mr. Philip Yao</b><br/>                 Phone: 86-519-82080666<br/>                 Mobile: 13775620111</p> <p style="text-align: right;"><b>Lead Time 20 days. (total 2301 USD)</b></p> |                          |  |  |      |                |             |  |
|---|--------------------------|--|--|------|----------------|-------------|--|
| No  | Part Name                | Spesification/<br>Features   | Brand<br>Name/Type<br>/Model                     | Item | Price/<br>item | Total Price | Remark   |
| 3   | Integrated<br>GearBridge | Electric car kit/Gear bridge and brake<br>Gear Ratio:1:8 or 1:12.5<br>Bridge length: 1270 mm (+Backpole)<br>Capacity: 2 Ton  | Electric Car<br>Kit/<br>Gear Bridge<br>and brake | 1    | 422            | 422         |   |
| 4   | BLDC Motor               | Voltage:48V/72V/96V/120V<br>Rated Power:8KW-20KW<br>Efficeincy: 91%<br>Phase Resistance (Milliohm): 3.1/48V;<br>6.0/72V; 18.0/120V<br>Phase Induction(100KHZ): 34uH/48V;<br>77uH/72V; 252uH/120v<br>Speed: 2000-6000rpm<br>Weight:17Kgs Casing: Aluminium<br>Length (height): 170mm Diameter:<br>206mm | HPM-10KW<br>120V 10KW<br>Air Cooling             | 1    | 765            | 765         |  |





|   |                                |  |                                       |   |     |     |   |
|---|--------------------------------|--|---------------------------------------|---|-----|-----|---|
| 5 | BLDC Controller                | Voltage Ranges: 48V (~60V) / 72V (~90V) / 96V (~140V)<br>Rated Current (Max): 840A / 700A / 560A<br>Weight: 5.7Kgs Dimensions: 200x276x85mm<br>Features: Programmable via USB port, Fuse breaker, Regen Braking, Temperature sensing | HPC700H Series<br>96V (~140V) 560A    | 1 | 920 | 920 |    |
| 6 | Contactor                      |  |                                       | 1 | 35  | 35  |    |
| 7 | HPC Controller Wiring Harness  | 23-pin Water-Resistant Connector<br>Dynamic Monitoring Connector   | CA-201--HPC Controller Wiring Harness | 1 | 30  | 30  |    |
| 8 | HPC Controller Programming Kit | Easy Installation for PC/laptop with Windows OS Easy USB Port Connection<br>Setup Parameters without Power-on<br>Controller Monitor Motor Performance Dynamically  | PI-400                                | 1 | 80  | 80  |   |
| 9 | Foot Throttle                  | Output Voltage: 0-5V<br>Material: casted aluminium<br>Weight: 0.9Kgs<br>Features: Water resistant  | Model: FSC-010 -- Foot Throttle       | 1 | 49  | 49  |  |

| C. Controller Kit  |            |                            |                              |                        |  |             |   |
|--|------------|----------------------------|------------------------------|------------------------|--|-------------|---|
| <a href="http://kellycontroller.com">http://kellycontroller.com</a><br>Phone: (001) 224 637 5092<br>Mail: <a href="mailto:sales@kellycontroller.com">sales@kellycontroller.com</a> |            |                            |                              | <b>total 15,653RMB</b> |  |             |   |
| No   | Part Name  | Spesification/<br>Features | Brand<br>Name/Type<br>/Model | Item                   | Price/<br>item                                     | Total Price | Remark  |
| 10   | BLDC Motor | 144V 12KW BLDC Motor       | 144V 12KW<br>BLDC Motor      | 1                      | 10700RMB<br>(ready in 2<br>weeks after<br>payment) | 1070RMB     |  |


|    |                                       |  |  |      |  |         |   |
|----|---------------------------------------|--|--|------|--|---------|---|
| 11 | KBH BLDC Motor Controller             | <p>Frequency of Operation: 16.6kHz.</p> <ul style="list-style-type: none"> <li>•Standby Battery Current: &lt; 0.5mA.</li> <li>•5V Sensor Supply Current: 40mA.</li> <li>•Controller supply voltage range, PWR, 10 to 30V (24V preferred).</li> <li>•Configurable battery voltage range, B+, 18V to 180V.</li> <li>•Analog Brake and Throttle Input: 0-5 Volts. Producing 0-5V signal with 3-wire pot.</li> <li>•Reverse Alarm, Main Contactor Coil Driver, Meter.</li> <li>•Full Power Operating Temperature Range: 0°Cto 50 °C(controller case temperature).</li> <li>•Operating Temperature Range:-30°Cto 90 °C, 100°Cshutdown (controller case temperature).</li> <li>•Motor Current Limit, 1 minute: 400A.</li> <li>•Motor Current Limit, continuous: 200A.</li> <li>•Max Battery Current : Configurable.</li> </ul> | KHB14401,24 -144V,400A, Opto BLDC Controller/W ith Regen | 1    | 7360RMB<br>(ready in 7 days after payment) | 7360RMB |  <p>with:<br/>CAN Bus: (+\$79.00)<br/>High Speed Motor Option: (+\$99.00)<br/>Stick Shift Throttle Firmware: (+\$29.00)<br/>Ultra High Speed Motor Option: (+\$199.00)</p> |
| 12 | KHB Wiring Terminal                   |  |  | 1set | 68RMB<br>(ready)                           | 68 RMB  |    |
| 13 | Single Controller Control Box(KHB/HP) |  |  | 1    | 220RMB(re ady)                             | 220RMB  |    |



|    |  |   |  |   |                |         |  |
|----|--|---|--|---|----------------|---------|--|
| 14 | KHB Assembly                               | with Reversing contactor and Free Ammeter |  | 1 | 1290RMB(ready) | 1290RMB |   |
| 15 | KHB J1 Cable                               |   |  | 1 | 100RMB(ready)  | 100RMB  |   |
| 16 | J2 Cable                                   |   |  | 1 | 100RMB(ready)  | 100RMB  |   |
| 17 | Kelly 0-5V Throttle Pedal for Electric Car |   |  | 1 | 560RMB(ready)  | 560RMB  |  |

|    |   |   |                                |   |   |         |  |
|----|---|---|--------------------------------|---|---|---------|--|
| 18 | Main Contactor<br>ZJW 144VDC Coils<br>400Amps | Insulation Resistance 100Mohm Min.<br>Dielectric strength Between Contacts 2000VAC.<br>Between coil and contacts 1500VAC.<br>Environment temperature and attitude - 40C - +85C; 0-20000m<br>Max relative humidity 98%<br>The shocking of fixed point 1<br>Frequency(11Z) 10-200<br>Acceleration(g) <3.5<br>Shocking Speed(time/min.) 60-100<br>Acceleration(g) 4<br>Constant acceleration 8<br>Operation regulation Continue<br>Installation direction Random | ZJW 144VDC<br>Coils<br>400Amps | 1 | 447RMB(re<br>ady)                       | 447RMB  |   |
| 19 | Charger<br>for LiFePO4<br>Battery             | dimensions:<br>290mm(L)*215mm(W)*110mm(H)<br>Input voltage: AC 220V 50/60Hz<br>Max input current: 14A<br>Max output current: 15A<br>Battery voltage: 144V<br>Charge mode: six segments type.<br>Output Power: 2.16KW<br>Operating temperature: -10C - +40C<br>Humidity: less than 80%   | HWC4-<br>144V/15A              | 1 | 3330RMB(2<br>weeks<br>after<br>payment) | 3330RMB |  |

|     |   |  |   |   |  |   |   |
|-----|---|--|---|---|--|---|---|
| 20  | DC/DC Converter   | Dimensions:<br>172mm(L)*120mm(W)*66mm(H)<br>Input voltage: DC 144V<br>Output voltage: DC 12V<br>Operating voltage range:112V-195V<br>Output current: 25A<br>Operating temperature: -10C - +40C | HWZ Series<br>DC/DC<br>Converter<br>144V to 12V<br>300W | 1 | 730RMB(re<br>ady)  | 730RMB  |    |
| 21  | Accessories:<br>Pin connector:<br>waterproof<br>Aviation Plug with<br>Pin<br>Cable with<br>Terminations<br>Wiring Nose 100<br>A |  |   |   | 50RMB<br>28RMB<br>68RMB<br><br>85RMB<br><br>34RMB<br><br>All ready | 50RMB<br>28RMB<br>68RMB<br><br>85RMB<br><br>34RMB |    |
| 21a | Fuse  | ANE 100A   |   |   | ready28RM<br>B   | 28RMB   |  |
| 21b | Power Fuse  | Power Fuse Holder  |   |   | 85RMB(rea<br>dy)   | 85RMB   |  |



| <p><b>D. AC Induction Motor</b></p> <p>Web: <a href="http://www.china-electricmotor.com">http://www.china-electricmotor.com</a><br/>         China Electric Motor Association<br/>         GuangDong M&amp;C Electric Power Co.,Ltd<br/>         Add:3/f Dizhi Building No.739 Dongfeng Rd.E Guangzhou China<br/>         Tel: 86-20-89660216<br/>         Fax: 86-20-89660219<br/>         Post: 510080<br/> <a href="mailto:mcmotorcn@gmail.com">Email: mcmotorcn@gmail.com</a> (recommended to use)</p> <p>Office:<br/> <a href="http://ev-motor.cn">http://ev-motor.cn</a><br/>         GuangDong M&amp;C Electric Power Co.,Ltd<br/>         Add:Rm.606,Building 24,Jin Hao Street,Yi Jing Road,Hai Zhu District,<br/>         Guang Zhou,Guang Dong,China<br/>         Tel : 86-20-89660013<br/>         Fax: 86-20-87674413<br/>         Post: 510080<br/> <a href="mailto:info@ev-motor.cn">Email: info@ev-motor.cn</a></p> |                    |  |                              |      |  |             |  |
|---|--------------------|--|------------------------------|------|--|-------------|--|
| No  | Part Name          | Spesification/<br>Features   | Brand<br>Name/Type<br>/Model | Item | Price/<br>item   | Total Price | Remark   |
| 22  | AC Induction Motor | <ul style="list-style-type: none"> <li>• air-cooled AC induction motor</li> <li>• Sealed motor and gearbox casings</li> <li>• DSP-based control• Regenerative braking• Space Vector PWM and Field Oriented Control• Internal contactor with pre charge circuitry• Lightweight aluminum chassis• Waterproof, rugged construction• Trenchgate IGBTs for maximum efficiency• Over voltage and under voltage protection• Three-level over current protection• Inverter over temperature protection</li> <li>• Motor over temperature protection</li> </ul> | AIM15 144V                   | 1    | 2500USD<br>with<br>Controller<br>(ready in<br>10days<br>after<br>payment ) | 2500USD     |  |

|    |                            |  |                     |   |                 |        |   |
|----|----------------------------|--|---------------------|---|-----------------|--------|---|
| 23 | Induction Motor Controller | 144V   | AC35                | 1 | With AIM15 unit | -      |  <p>controller</p> |
| 24 | DC-DC Converter            | <p>Output Voltages 13.5V/25.2V<br/>                     Input Voltages: 60-400V<br/>                     Output Power: 300-750W<br/>                     Efficiency: 85-90%<br/>                     Current Peak @12V: 60A<br/>                     Weight: 2.6-5kg<br/>                     Dimensions (with fan): 329mm x 109mm x 187mm<br/>                     Operating Temperatures: -25°C to +65°C</p> | M&C DC-DC Converter | 1 | 400USD          | 400USD |                    |