

Tribhuvan University  
Teaching Hospital  
Maharajgunj, Kathmandu



Technical Specifications of Fully Electrical Battery Operated SUV- 1 Unit

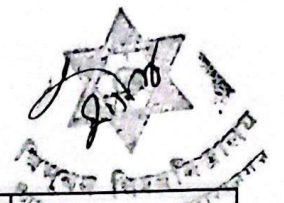
S.N	CRITERIA	REQUIREMENT	OFFERED SPECIFICATION  <i>Mention with 'Fully comply' / 'partial comply'</i>
1	General	Right Hand Drive (RHD), all electric battery-operated Electric car , 5 seater including driver, suitable to operate even in the rough, hilly road with steep slope/ sharp bends road condition of Nepal at ambient temperature varying between -5 to 50 degree centigrade and altitude range up to 3000 m and GVW of car not less than 2000 kgs. Ingress protection level not less than IP 67.	Make:  Model:  Country of Origin:  Make year:
2	Drive System/ Motor	Heavy duty, Single Drive Permanent Magnet Synchronous Motor (PMSM) having high power and torque equipped with integrated controller for optimization of car operation.  Maximum power: Not less than 99 kW  Maximum Torque : Not less than: 300 Nm  Maximum speed : Not less than 100 Km/hr	
3	Battery / Energy Source	Energy storage on board the car shall be adequate for intended application, to be equipped with Battery Management System (BMS) for optimization of Battery performance, status detection/ analyzing, energy control and constant monitor the Battery condition and ensure high level of safety protection.  Battery type: Lithium iron phosphate blade battery or better approved chemistry  Battery Capacity: Not less than 49 kWh  Driving range (In single full charge): Not less than 300 KM	
4	Power train	Electric motor drive with efficient traction control system, enabling the reverse drive.	
5	Chassis/ Frame structure	Chassis and frame structure to be of manufacture's "proven design standard", suitably designed on E platform (should be declared by manufacturer's letter) for maximum durability, high strength and corrosion resistance and fabricated for the same. High impact resistant front and rear bumpers.	

6	Cab	4 side door, all metallic cab with insulated roof, laminated/tinted glass Wind screen washers and wiper, comfortable and adjustable seats for driver and co-passenger, two sun visor, rear view mirror and two side view mirror	
7	Overall and other dimensions	Overall Length: Not less than 4400 mm Overall Width: Not less than 1800 mm Overall Height: Not less than 1550 mm Wheelbase: Not less than 2600 mm Ground Clearance : Not less than 175 mm Boot capacity: Not less than 300 Ltrs.	
8	Steering	Power steering	
9	Brakes	Service brake: Dual circuit hydraulic system, front ventilated disc and rear disc type brake. Parking brake: Electric Braking system to be equipped with Anti-Lock Braking System (ABS).	
10	Wheels & Tires	Standard wheels with radial tires.	
11	Suspension system	Front: Double wishbone coil spring / torsion bar / McPherson Strut Rear: Coil springs/ torsion beam/ multi-Link Suspension system with shock absorbers.	
12	Instrumentation / Display unit	All necessary gauges, display unit to be equipped for monitoring performance, efficient operation and maintenance of vehicle that includes; Battery health status, Motor performance, Fault warning and Safety feature etc.	





13	Essential / Safety Accessories	<ol style="list-style-type: none"> <li>1. Head lights, Fog lamps, Tail and Rear lights ,Reversing lights and Turn signal lights</li> <li>2. Cabin Lights</li> <li>3. Heavy duty bumpers</li> <li>4. Spare wheel with tire</li> <li>5. Suitable Jack</li> <li>6. Seat belt for driver, co-passenger</li> <li>7. Touch screen infotainment system with Radio AM/FM, USB, Bluetooth connectivity</li> <li>8. Steering mounted audio control</li> <li>9. Electric foldable and adjustable ORVMs(outside rear view mirror)</li> <li>10. Sun roof</li> <li>11. Key less entry, Central locking</li> <li>12. Reverse assist system with camera and display</li> <li>13. Automatic heating ventilation and air conditioning system</li> <li>14. Power window front and rear</li> <li>15. At least six air bags which includes front, side and curtain airbags</li> <li>16. Antilock braking system(ABS) with Electronic brake force distribution (EBD) system</li> <li>17. Automatic emergency braking system</li> <li>18. Traction control system (TCS)</li> <li>19. Electronic stability program (ESP)</li> <li>20. Hill start assist</li> <li>21. Adaptive cruise control system</li> <li>22. Collision warning system</li> <li>23. Lane departure warning</li> <li>24. Lane keeping assist system</li> <li>25. Regenerative braking system</li> <li>26. Tire pressure monitoring system (TPMS)</li> <li>27. Electric retractable ORVMs</li> <li>28. Suitable standard Plug in AC charger for charging at home</li> <li>29. Additional accessories other than standard production of vehicle: Rubber floor mats. Car cover. Door visor Door Guards</li> </ol>	
14	Instructions Manuals	<p>All signs and instructions in the car shall be in English.</p> <p>One copy of standard brochure, operator's / Owner's Instructions and Maintenance manual in English shall be supplied</p>	
15	Tools	A set of tools as required for general maintenance shall be supplied.	
16	Color	Standard, as per selection of employer	
17	Proven performance	<ol style="list-style-type: none"> <li>1. The vehicle offered shall be a current make and model of 2025 under standard production by the manufacturer (should be declared by manufacturer's letter) for at least one year.</li> <li>2. The bidder shall provide standard brochure, the manufacturer's data of the performance of the unit.</li> </ol>	
18	Warranty	Manufacturer shall provide warranty of the car for at least 3-year or 150000 km after acceptance and at least 6 years of warranty for battery pack.	



19	Initial/ After sales services	Bidder is required to supply all necessary spare parts and service for regular servicing and all repair and maintenance work.	
20	Delivery	In the premises of TU Teaching Hospital, Maharajgunj, Kathmandu	

In the capacity of Authorized person

Name:

Signature:

Stamp: