



Advanced Electric Bicycles

eZee SA

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Technical specification of eZee kit

The eZee Kit features the same powerful electric drive system as on our complete electric bikes. Various options such as hub wheels sizes (front or rear), battery types and battery rack mounts make the eZee Kit adaptable to a wide range of regular and specialized bikes. It is easy to install, requiring basic bike tools and bike mechanical knowledge.

Hub Motor Wheel

1. Nominal 250W / 500W Front or Rear Hub Motor with peak power around 800W
2. Available in 20" , 26" , 700C" Weinmann Rigida Double Wall Al. Alloy Rims,
3. Schwalbe Marathon Plus Tyres,
4. Stainless steel Sandvik 13g Spokes.
5. 7,8,9,10 speed freewheel for RWD
6. Torque Plates
7. Max speed – restricted 25km/hr; derestricted 35km + km/hr

Battery

8. Li+ 36V 11Ah with BMS and Sony 18650
9. Available in eZee vertical pack casing, or flat pack casing.
10. Option: 36V 11Ah / 36V 14.5Ah down tube battery
11. Option for MTB seat post battery rack.
12. 4 Amps Smart Charger.

Controller

13. 36V / 48V – PCB integrated in weather proof housing. Max Amps: 20 Amps, Mosfet: IRFB4110, Die cast Aluminium casing

Interface

14. eZee Battery gauge and power assist level selection. 37V nominal, 5 level Power Assist. Programmable throttle / PAS / Bimodal modes

Power Control

15. Left or right Handed Half-grip throttle.
16. Option: L or R, Full grip throttle
17. Bottom Bracket mounted Magnetic Disc Motion Sensor (for PAS system),

E-Cut Off Brakes

18. Mechanical Electric Cut Off Brakes with mechanical switch.

Note 1: Weighing at 3.78kgs, our brushless PMDC motor with inbuilt planetary reduction gears and freewheel is built in-house with exceptional technical specifications. With minimal drag, a freewheel spins freely like a normal hub when the motor is not on. Contrarily, a Direct Drive motor with similar output is

heavier and has a high drag when not powered. We use N35UH Neodymium magnets that retains magnetic properties up to 180°C, fitted in optimum size with min. air gap to the stator. eZee's motor uses state-of-the-art Honeywell SS41 Hall sensors. The planetary star gears are machined from cast Nylon 6 rods for high strength and durability. The motor hub covers are die cast and CNC machined from high grade Al alloy ADC 5, providing good corrosion resistance.

Note 2: eZee's controller is engineered with the best and most reliable electronic components in the market, delivering ultimate performance and reliability. Operating at 36V and 48V, it has an overload protection at 20amps, using IRFB 4110 mosfets that take high amps and voltage. The circuit board is sprayed with conformal coating and then a layer of silicone potting compound is applied for further corrosion resistance. Die cast Al. casing.

Note 3: While Li+ cells from reputable brands have managed to make cells with a very high degree of stability, a high quality BMS is just as important to prevent short circuit and provide cell management. Our packs are fully tested to comply with safety standards written in UN38.3.



