



## 48V CONVERSION KIT WITH GEARED MOTOR

After years of trying out different components and kits Motorino has sourced a very solid conversion kit. The motor is high speed brushless with incredible resilient nylon gears. Its small size and light weight may mislead you about its performance. You must try this kit to believe the high torque it provides. Its neodymium-iron-boron (NdFeB) magnets motor, coupled with sophisticated controller works at 5400 rpm which after 15 times reduction increase the torque of the motor up to 74 Nm. And all this is achieved with only 17Amp current consumption from the battery. It comes with programmable console from which you can select five levels of assistance with maximum speed of 40kph. The speed can be independently controlled by a twist throttle as well. High discharge rate Samsung batteries are enclosed in aluminum box that slides in to a rear rack. The color coded waterproof connectors makes installation very straightforward. The overall quality of this

kit makes us confident to guarantee it for two years.

## **Features**

Extremely high torque, over 74Nm at stall Geared motor provides efficient acceleration and hill-climbing

More power and range than direct drive system Reliable and backed-up by a 2 year warranty Simple and intuitive to operate Easy to install rear wheel kit

Range: 25-35km (15-22 miles) per charge without pedaling

and up to 100km Power Assisted range

Speed: 32 km/h on Power-On-Demand and 40 km/h on Power Assist mode (governed speeds)

## **Component Parts**

Brushless geared 500W motor laced into a 26" wheel Battery - slide in/out Lithium Ion battery on cargo rack Motor controller - waterproof externaly mounted Control console - 3 buton programmable Split-twist hall-effect throttle and matching grip Cable style brake levers with integrated microswitches Mounting hardware for battery rack and motor Cadence sensor (PAS) Magnetic speedometer



## **Specifications**

Weight - Motor 4.42Kg , Battery 6.3Kg, Controller 0.6Kg, total - 12.4kg
Motor - 74Nm (54 foot-pounds) torque at stall,120 degree phase angle
12A (570W nominal power) continuous current rating
25A (1300W peak power) peak rating Maximum current
High density original Nylon planetary gears
Mounting lugs for ISO 6-bolt disc brake

Controller - 12 MOSFETs 12x International Rectifier F1010E

Nominal Voltage: 48V, Minimum Operating Voltage: 42V

Current Limit: 25A, Continuous rating: 12A

Phase Angle: 120°, Throttle Type: Hall-Effect

Case - waterproof with HIGO waterproof color coded connectors

Battery - Samsung ICR 18650-22P 13S5P pack with 60A max PCM/BMS
Typical/Minimum capacity- 2150 mAH/2050mAH per cell
Max charge/discharge current - 2.15A/10A per cell

Cycle life - 80% after 300 full cycles, 70% after 500 full cycles Display/control unit - eight power assistlevels via up/down buttons

Programmable will size, assistance speed

Dysplay - batt capacity, distance, speed, ass level, power, error codes

Charger - Bulk charging current: 2.5/1.5A, Chemistry: Li-ion CV output/input voltage: 54.6V/115/230VAC, Hz 60/50







