



NIUBIKE EEV - PEDAL ELECTRIC HYBRID IPAS FOR SCHOOL RACING PROJECTS

Niubike Integrated Power Assist System (IPAS) offers customised design and fitting to suit each individual racing purpose. The Standard Pedal - Electric Hybrid IPAS includes components below, fitted on Greenspeed GT1 without fairing as an example.



3 King Meter ebike computer with LCD display & switch



4 Pedal assist sensor & 12 magnet target wheel



5 LS Controller



- 1. Hub geared motor
- 3. King Meter ebike computer with LCD display & switch
- 5. LS Controller

- 2. Battery box fitted on trike frame
- 4. Pedal assist sensor & 12 magnet target wheel
- 6. Speed sensor

STANDARD PEDAL-ELECTRIC HYBRID IPAS SPECIFICATION

Motor	36 Volt BLDC hub geared motor, rated power 350 Watts, with high RPM for racing purpose
Wheel Size	16 to 26 inch as required
Controller	36 Volt 7 - 15Amps programmable
eBike Computer	Programmable King Meter ebike computer with 5 preset power/speed levels, selectable on the run
Activation	Pedal assist with quick start / quick stop sensor and 12 magnet target wheel
Charger	36Volt 2Amp standard, higher capacity options available for racing condition
Battery	Lithium Iron 36Volt 15Ah (approx. 4kg), other options available
Weight	Total additional weight added to a trike by the kit is approx. 7Kg

Battery Requirement Guide

The current RACV EB rules allow 30Kg of Lithium Batteries and that would equate to about 7 x 36V15 Ah Batteries. We recommend having at least 3 batteries, one on vehicle, one on standby and one on charge. Due to restrictions on charging batteries we recommend a 12 Amp charger for the 36V15 Amp Hour Batteries. Swapping the batteries at 10 Ah discharge allows time for recharging. This way the batteries are performing at their higher energy level.

In practice using a Wattmeter can help determine actual power consumption per hour to work out change over intervals.

Battery and charging rules are set by the various racing authorities and often change so please discuss these with us.