



# Kingsong S22 Pro

## Introduction

# A Brief History...

Utilizing the experience of the S18 combined with the understanding of the demand of the current market we started work on the S22 Eagle Pro.

To reach new heights, after the production of the S18 we worked hard and relentlessly start prototyping and designing a new wheel that will tackle the most extreme, all the hard work and dedication allowed us to achieved what we set out to do with the S22 Eagle Pro.

In comparison, the S22 is 23% larger, with doubled the amount of battery capacity, upgraded to a professional suspension with 30% longer suspension travel. Through countless designs, the study of the human body on an electric unicycle we became the first company to integrate built in 'powerpads' all in the pursuit of the best experience possible.



# Design

After the introduction of the suspension electric unicycle, we started asking ourselves where the limit was.

Hovering high above the land, spreading its wings, there's nowhere it can't go!

Through the clouds, overlooking the vast rivers and mountains, standing on the peak. Despite the long day, the Eagle's irresistible power can only be gazed upon by other birds. To countless flights, the King Song S22 Eagle Pro.



# Features

- **Long Travel** Suspension System
- **Customizable** Power Pads
- **Tiltable** Headlights
- **Smart** BMS
- **126V** High Voltage
- **Max Speed** 70km/h
- **Built In** Kickstand
- **Spiked** Pedals
- **Modular** Motherboard
- **Hollow** Motor



# Contents

## Suspension System

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- Suspension Theory
- Suspension Model
- Suspension Travel

## Power System

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- Hollow Motor
- Nominal Voltage
- Peak Voltage
- Max Speed
- Climbing Grade

## Electrical System

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- Battery Model
- Assembly
- Battery Capacity
- Range
- Fast Charging

## Other

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- Controller Design
- Light Systems
- Kickstand
- Bumper
- Trolley Handle
- Display
- Power Pad
- Spiked Pedals

**1776 Wh**  
Battery



**BMS**  
Smart BMS



**10A**

Supports Fast Charge\*



**126v**

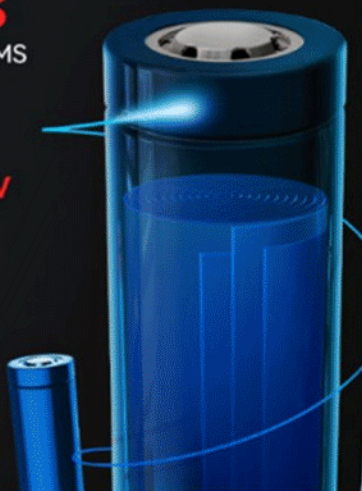
Voltage



**SAMSUNG**

40T Cell battery pack

\* 6A charger as standard.



**20inch**

Inflatable Tire



**2.75-14**

Rim Size



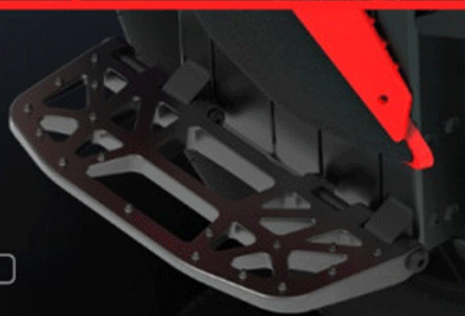
**Kickstand**

Fully Integrated



**10.9" \* 5.12"**

Spiked Pedals



# Kingsong S22 Pro

Ride with power, go the distance.



**4000W**

Rated Power



**43.5 MPH**

Max. Speed



**130mm**

Suspension Travel



**75mm**

Spring Travel



**5w\*8**

Bright LEDs

**15°**

Tiltable Headlights



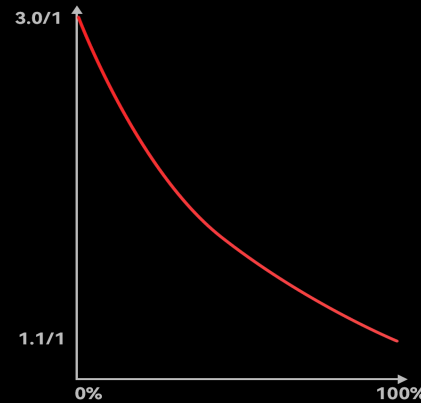
**Customizable**

Power Pads



## ★ Suspension System★

Unique cross suspension system adopts a racing grade lever structure to achieve the best support and a soft linear dampening experience. Through the linkage, the force becomes non-linear, thereby designing an ideal suspension that is soft on flat roads and strong on tough terrains.



- **130mm Suspension Travel**

S22: Suspension Travel 130mm, Spring Travel 75mm

S18: Suspension Travel 100mm, Spring Travel 57mm

- **240-75 Spring Suspension**

- **Adaptable to any Terrain**

Tackle gravel roads, dirt roads, and asphalt.



# Power Systems

- **Custom Hollow Bore Motor**

Not a hollow bore motor you'll find on the market. 60mm opening means smaller resistances, custom bearing seal for protection against the toughest weather conditions. Motor bracket is made from aluminum alloy and the temperature is monitored in real time protecting the rider at all times.

**4000W**

Nominal Voltage

**7500W**

Peak Voltage

**40°/84%**

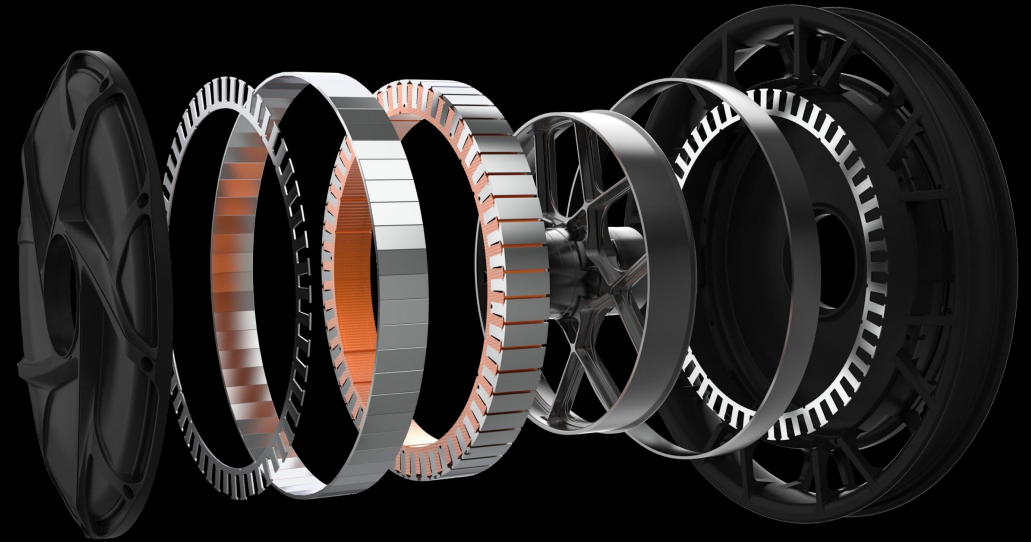
Climbing Ability

**70km/h**

Max Speed

**105km/h**

Lift/Free Spin Speed



Power Output



Efficiency



Range





# Battery System

- **Samsung 40T Cells**

1,776Wh/126V battery pack

- **Dual Battery Packs**

Paired with Smart BMS system, check the battery health levels and ensure the safety of the packs.

**1776**

Battery Capacity

**~200km**

Range

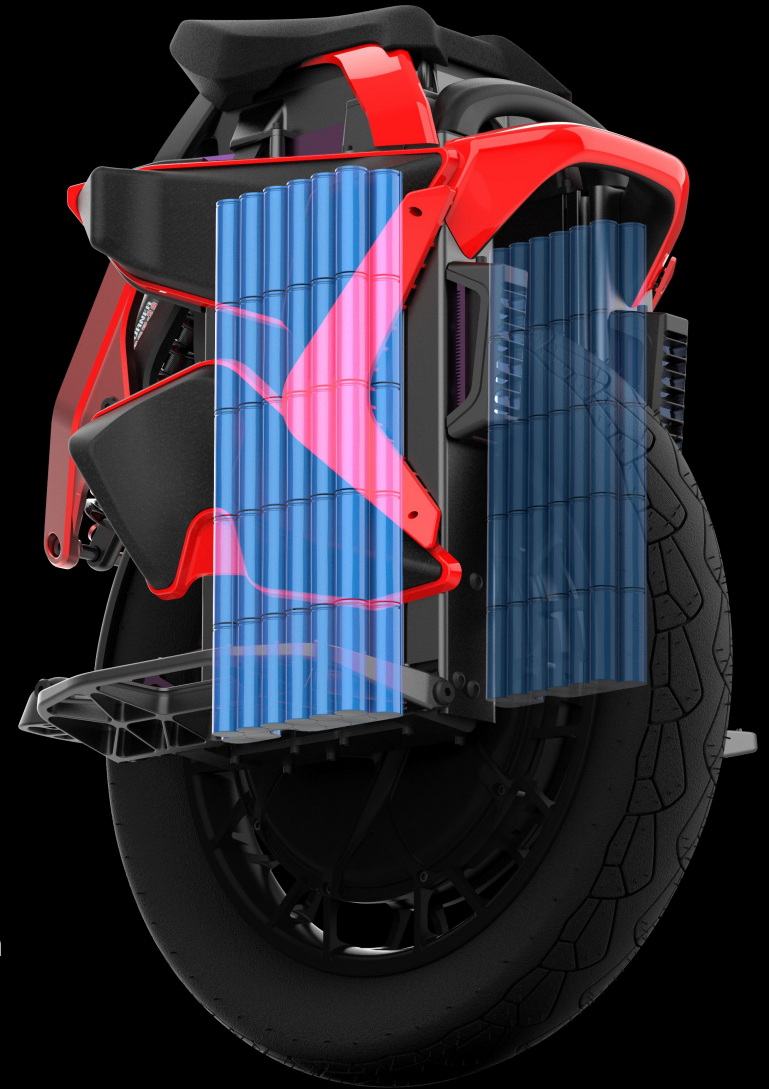
**~4h**

Charge Time

**90-126v**

Output Voltage

\*Range test conditions: under full power, 60kg load, ambient temperature of 25°C, measured at a speed of 20km/h on a flat hardened road at a constant speed, the actual range varies according to speed, number of starts, stops, ambient temperature, etc...



# Charging Systems

## ● Charger Stats

2 x GX16-6 charge socket supports dual charging. Controller detects the charging parameters in real time, and can quickly and actively cut off the power supply in the case of overcurrent, overvoltage, etc., to ensure the safety of charging. to

## ● Charger Specs

Input: AC 100-240V

Output: DC 126V 6A

**Supports 10A fast charging**

\* Standard 6a charger included.



# Controller Design

- **Brand New Modular Controller**

Controller integrates rear lights, charger, on/off, display, all within one for easier.

- **4 Layer Design**

Cool temperatures even with high current output. The anti-interference ability of the S22 Pro is stronger and is more stable.

- **TO-247 MOS**

A total of 12 high voltage MOS to supply the 4000W motor with the highest performance possible.

- **Heat Sink Control**

MOS are connected to the aluminum frame for the best heat conductivity. 16 heat sink columns ensure fast heat dissipation to provide riders with the utmost stability.



# Lighting Systems

- **5W\*8**

Adjust the lights angle, have 15° of freedom.

- **Rear Light**

Rear bright LED with integrated turn signals.



# Other Features



**Kickstand**



**Front Bumper**



**Trolley**

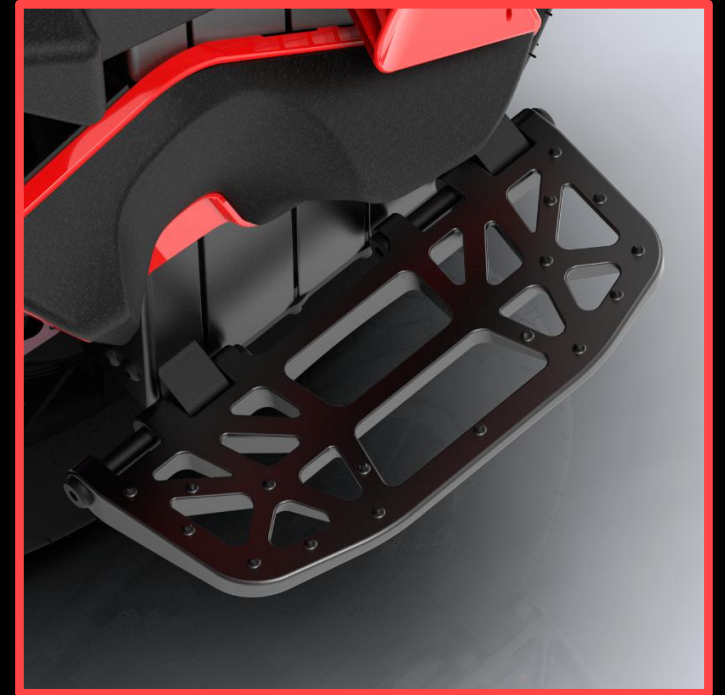
# Other Features



**Display and Seat**



**Adjustable Power Pads**



**Spiked Pedals**