

**ELECTRIC  
DIRT BIKE**



[WWW.RFNBIKE.COM](http://WWW.RFNBIKE.COM)

ZHEJIANG APOLLO SPORTS TECHNOLOGY CO., LTD.

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■ *Two-in-one crossover*

## **RFN ARES ELECTRIC DIRT BIKE**

Each ARES can easily deal with various road conditions such as rocks, mountain roads, quagmire, etc. We provide speed, precision and confidence to inspire your desire to challenge.

We bring together expertise and decades of off-road experience in 2 and 4 stroke engines to create a new high-end, extremely light and powerful dual purpose electric off-road motorcycle. eliminating the need for old fashioned carburettor tuning or worry about climate or altitude. Ready to race or recreational ride, ready to tackle the most extreme terrain and tracks on earth.

# CONVERTIBLE



FOREST TRAIL OFF-ROAD

CLIMBING ROCK STUNTS

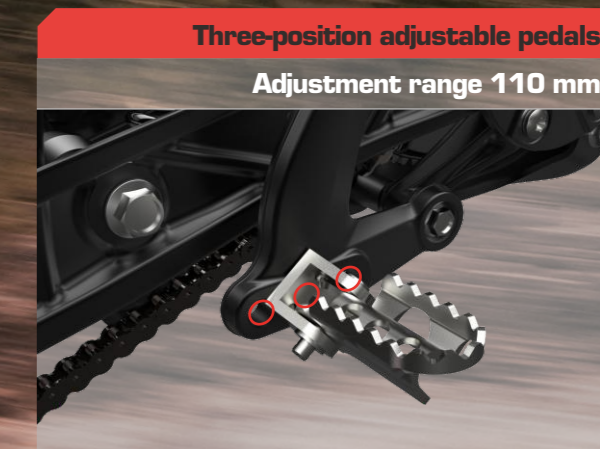
## **INNOVATIVE CONVERTIBLE SYSTEM**

Unlock the lock, and remove the seat unit, it only takes **3 seconds** for this dual-purpose dirt bike to convert from an off-road vehicle to trials machine enabling you to reduce the centre of gravity and make the full use of the high ground clearance to tackle obstacles and hill climbs



# ERGONOMIC DESIGN

**Axle load ratio 1:1**  
**Wheelbase ratio 1:1**  
**Drag distance 111 mm**



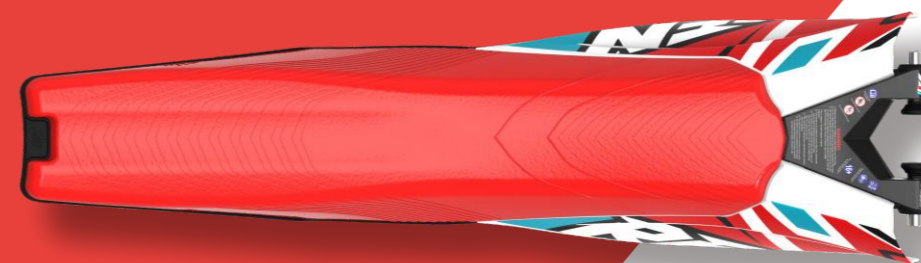
※The shock-absorbing rocker arm after seat height adjustment function is optional



## Full Protection Design

The waterproof level of the whole vehicle reaches **Ip67**

## PATENTED ONE-PIECE MULTIFUNCTIONAL SEAT UNIT



**5L**  
STORAGE SPACE



# Powerful POWER OUTPUT



## ORIGINAL FOUR-DIMENSIONAL CONTROL MODE

The original four-dimensional control mode is adapted to different riding levels and use environments, And can be switched between off-road and climbing at will



**ENERGY-SAVING MODE**  
20% power, driving distance 20KM



**STANDARD MODE**  
0-50KM acceleration in 5 seconds



**HIGH-ENERGY MODE**  
0-50KM acceleration in 4 seconds, automatically reset to standard mode in 9 seconds



**REVERSE MODE**  
Speed limit protection  
Vehicle speed  $\leq 9$  km/h



※When the motor is still or continuously reversing, The reversing button is valid. And it is invalid at any other time.

**RFN**

**WELL-DESIGNED  
DIRECT DRIVE  
TRANSMISSION  
SYSTEM**



**Powerful power output**

Speed up to 50KM/H in 5 seconds, maximum speed up to 70KM/H, no-load speed: 2600rpm, standard 420DS chain



**RFN**  
Racing Fears Nothing

**BATTERY SYSTEM**  
**MODULAR PACKAGE DESIGN FOR FAST CHARGING**

**Charging system**

**Multi-scene charging support**

5A/10A Adjustable Voltage  
CAN Protocol  
Support IPX5

**Modular battery system**

**Safe Reliable**

Protection class IP67  
BMS security protection  
Module  
FSS flame retardant system  
Smart software version  
Battery monitoring system





**SELF-DEVELOPED  
FORGED  
ALUMINUM  
WHEEL**



**LIGHTER, FASTER AND  
MORE PRECISE**

**STRAIGHT-PULL SPOKES  
REINFORCED 7-SERIES ALUMINUM  
WHEELS  
LIGHTWEIGHT FRONT AND  
REAR DISC BRAKES**

# ELECTRONIC HALL SENSOR THROTTLE





## Battery

74V / 2590Wh, LG Premium 21700 lithium cells, removable, can be charged in bike or separately.

## Brakes

Front and Rear 4-piston hydraulic disc, 210mm

## Charging

2-3h with Quickcharge Function

## Controller

Sine wave, Best-in-class power density and state-of-the-art motor control algorithms.

## Drivetrain

### Electric motor

Air cooled Permanent Magnet Synchronous Motor, energy regeneration function, Direct drive, 420 chain with DX

### Sprocket

11-58T

### Rated power

5 kW

### Peak power

12.5 kW\*\*

### Max Torque of motor

58N·m

### Max Torque of rear wheel

260N·m

## Dimensions

### Fork angle

24°

### Ground clearance

340mm - 13.39"

### Offset

15mm in triple clamps, 45mm in forks.

### Seat height

860mm - 33.86"

### Trail

111mm - 4.37"

### Wheel base

1330mm - 52.36"

## Fenders & Bodywork

### Material

PP/ABS plastic

## Frame

### Build

6082 aluminum extruded, forged, CNC machined and steel frame.

## Front suspension

Upside Down, 200mm travel, Fully adjustable

## Handlebar

6061 aluminium, 760mm length

## Rear suspension

Mono-Shock, 74mm travel, adjustable

## Regulatory

### Certificate

CE

## Ride modes

### Mode 1 🐢

Tortoise mode: The ultimate mode energy conservation exploration. Limited to 25 km/h with 3.5hrs battery range.

### Mode 2 🐇

Rabbit mode: Enduro or active trail riding. 1-2 h riding time.

### Mode 3 🚀

Rocket mode: Track and race mode, maximal torque and speed, riding time up to 1h.

### Mode 4 Ⓜ

Reverse mode: Limited to 9 km/h.

## Speed & Range

### Range

160 Km  
(Test data Load: 75 Kg, 20 Km/h uniform speed, ambient temperature: 25 °C, flat pavement, standard tires, standard tire pressure)

### Top speed

65km/h (variable on optional gear choice)

## Weight

### N.W of Battery

15 kg

### N.W of whole bike

68 kg

### Max load

120kg

## Wheels & Tires

### Hubs

Forged and CNC aluminium RFN hubs with 20mm axle.

### Rims

F 19"/ R 18" (Motorcycle standard) re-inforced, triple chamber, 7050 aluminium.

### Tires

F: CST CM721 70/100-19 off-road , R: CST CM722 90/100-18 off-road

TECHNICAL  
DETAILS



**CARBON FIBER  
ULTRA-LIGHTWEIGHT HELMET (BLACK)**

One-piece molding, non-removable  
25 vents for heat dissipation while keeping  
the helmet lightweight and ventilated



**CARBON FIBER  
ULTRA-LIGHTWEIGHT HELMET (WHITE)**



**PERIPHERAL  
PRODUCT**



**FRONT SPROCKET: 13 T STEEL SPROCKET**  
Rear sprocket: 53 T Ladle Aluminum Sprocket



**FRONT SPROCKET: 13 T STEEL SPROCKET**  
Rear sprocket: 53 T Steel Sprocket



**ORIGINAL ACCESSORIES WITH RICH COLORS  
SUPPORT CUSTOMIZATION**