

## RAPTOR 2

FRPTR-XX0XX-G2







#### **FEATURES**

- IP65 protection rating
- Smart BMS with auto-cell balancing
- LED capacity meter
- RS485 communication protocol
- M8 connection terminals

#### **SYSTEM PARAMETERS**

**Note:** Bulk, Absorption, Float, and Equalize are not applicable to lithium batteries but are included here with the correct numbers to input into your charge controller as they are our most commonly requested parameters.

SKU	FRPTR-36038-G2	FRPTR-72076-G2
System Voltage	36V	72V
Charge Voltage	44V	87.6V
Bulk Voltage	44V	87.6V
Absorption Voltage	44V	87.6V
Absorption Time	0 minutes	0 minutes
Float Voltage	43V	85V
Equalize	Off	Off
Low Voltage Cutoff	36V	72V
High Voltage Cutoff	43.8V	87.6V
Suggested Inverter Low Voltage Setting	38.1V	76.2V

### **CONTACT US**

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**Hours:** Monday - Friday, 9:00 AM - 5:00 PM PST **Address:** 21314 Lassen St. Chatsworth, CA 91311



## FREQUENTLY ASKED QUESTIONS

### How do I connect this battery into my existing system?

These batteries use a standard M8 terminal. This battery can be connected directly to the onboard wiring system. You may also purchase additional cables from BigBattery.

### How many times can I put this battery in parallel/series?

These batteries are not series capable but can be connected in parallel up to eight times. Make sure that the total amount of these batteries in your configuration never exceeds eight total batteries. When connecting batteries in parallel, ensure all batteries are within I volt of one another.

# How long will my battery last, and what do I do at the end of its life?

Lithium iron phosphate (LiFe-PO4) batteries can be cycled from 3500 - 5000 times. If you cycle the battery daily then you can get more than 10 years of use from your battery. When your battery is at the end of its lifespan, contact us and we'll recycle it for you, free of charge!

# **BATTERY SPECIFICATIONS**





SKU	FRPTR-36038-G2	FRPTR-72076-G2
System Voltage	36V	72V
Nominal Voltage	38.4V	76.8V
Chemistry	LiFePO4	LiFePO4
kWh Capacity	3.84 kWh	7.68 kWh
Ah Capacity	100 Ah	100 Ah
Charging Voltage Range	41V - 43.8V	85.2V - 87.6V
Max Charge Voltage	44V	87.6V
Operating Voltage Range	36V - 43.8V	72V - 87.6V
Suggested Low Voltage Cutoff	36V - 38.1V	72V - 76.2V
BMS Cutoff Range	31.5V - 35.25V	66V - 70.5V
Cell Configuration	12S	24S
Max Continuous Discharge Current	150A	150A
Max Continuous Power	3840W	7680W
Max Discharge Peak Current	300A (Max 5 seconds)	300A (Max 5 seconds)
Max Charge Current	100A	100A
Charge Temperature Range	32°F - 113°F (0°C - 45°C)	32°F - 113°F (0°C - 45°C)
Discharge Temperature Range	-4°F - 131°F (-20°C - 55°C)	-4°F - 149°F (-20°C - 65°C)
Optimal Discharge Temp. Range	59°F - 95°F (15°C - 35°C)	59°F - 95°F (15°C - 35°C)
Storage Temperature Range	23°F - 95°F (-5°C - 35°C) (Max 3 months, SoC >50%)	23°F - 95°F (-5°C - 35°C) (Max 3 months, SoC >50%)
Dimensions (DxWxH)	15.3 x 18.3 x 7.4 in (387 x 465 x 188 mm)	14.1 x 31.2 x 7.4 in (358 x 792.5 x 188 mm)
Weight	79.3 lbs (36 kg)	143 lbs (64.9 kg)
Protection Rating	IP65	IP65
Communications	RS485	RS485

Last Revision Date: 10/27/2023