EPROPULSION

E Battery Solar Charger
48V 1600W

Model： MD4830N06

Introduction

Thank you for purchasing ePropulsion E Battery Solar Charger 48V-1600W.

The E Battery Solar Charger 48V-1600W is a product designed for the E-Series Battery.

Declaration of conformity

Object of the Declaration:Product:

Product:DC & Solar Charge Controller

Model: MD4830N06

We Guangdong ePropulsion Technology Limited, hereby, declares that this equipment is compliance with the applicable Directives and European Norms, and amendments.

The object of the declaration is in conformity with the following directives:

Electromagnetic Compatibility (EMC)   2014/30/EU

DirectiveLow Voltage Directive (LVD)   2014/35/EU

Applied Standards:

EN IEC 61000-6-3:2021

EN IEC 61000-6-1:2019

EN IEC 61000-3-2:2019+A1:2021

EN 61000- 3- 3:2013+A1:2019+A2:2021

EN 62109-1: 2010

EC REP

Name: REP Europe GmbH

Address: Werner-von-Siemens-Str. 264319 Pfungstadt Germany

Phone: +49 157 51253212

info@rep-europe.de

Manufacturer

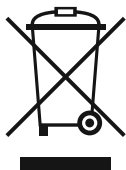Name: Guangdong ePropulsion Technology Limited

Address: Room 801, Building 1, 11 Daxue Road, Songshan Lake, Dongguan, Guangdong Province, China

Signature: 陶师正   Date: 2023/10/18

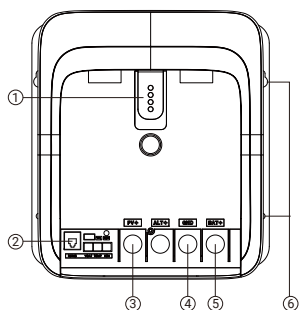Shizheng Tao, Chief Executive Officer & Cofounder of

Guangdong ePropulsion Technology Limited

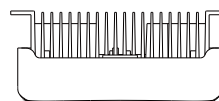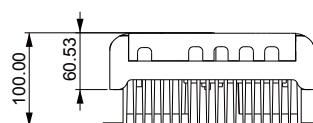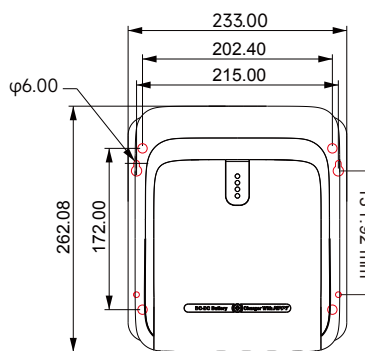**Correct Disposal of this product**

This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

Interface description

No.	Item
1	LED indicator light
2	Battery communication interfaces
3	Positive interface for Solar Panel
4	Common negative interface
5	Positive interface for Battery
6	Fixed hole

Dimensions

Product dimensions： 233*262*100mm
Mounting dimension： 215*132mm
Fixing hole position： φ6mm

Specifications

Specifications		PV Input		Protection	Environment		Dimension	
Rated voltage	51.2 Vdc	Power	1600W	Overcharge protection, overcurrent protection, overtemperature protection, reverse connection protection of solar panel, reverse charging protection at night. No reverse connection protection for backup battery (external fuse is needed)	Operating temperature	-35°C to 65°C	Weight	5.3 kg
Charging Voltage Range	41.6 -57.6 Vdc	Maximum input current of PV	50A		Altitude	≤3000m		
		Maximum PV input voltage	60 Vdc		Protection grade	IP65	Dimen-sions	233*262*100 mm
Maximum CC Charging Current	30A	Efficiency	> 99%		Certification	CE、RoHS		

Packing List

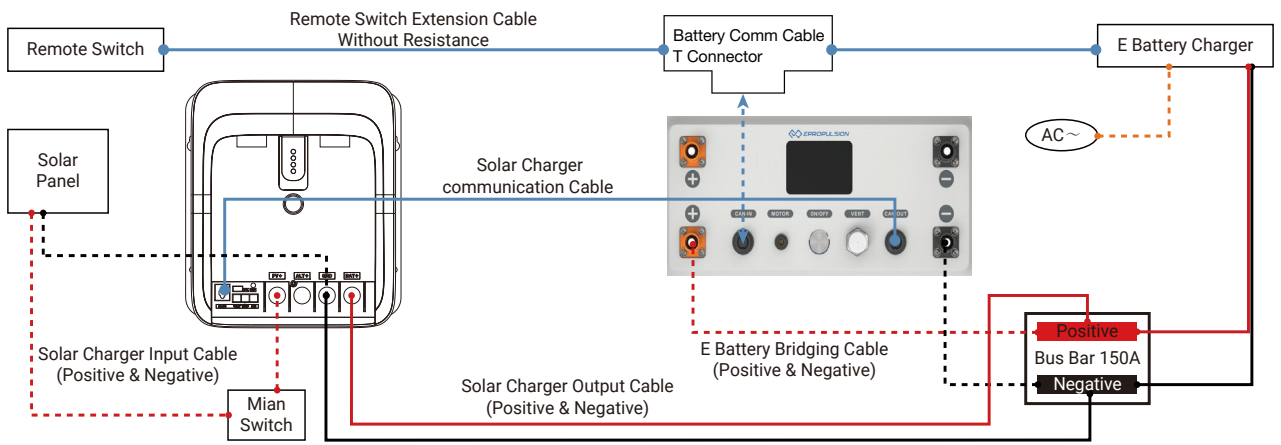| Item	Qty.	Note
E Battery Solar Charger 48V-1600W	1 pcs	/
Ring Terminals SC35-8	6 pcs	/
Ring Terminals RNB5.5-8	4 pcs	/
Solar Charger Output Cable (Positive)	1 pcs	Connect Solar Charger to E Battery or Busbar
Solar Charger Output Cable (Negative)	1 pcs	
Solar Charger Input Cable (Positive)	1 pcs	Connect Solar Charger to Solar Panel
Solar Charger Input Cable (Negative)	1 pcs	
Remote Switch Extension Cable Without Resistance	1 pcs	When connecting multiple devices, connect the Remote Switch to E60/E163
MC4 Parallel Connector 4 in 1	1 set	Contains positive and negative
E Battery Solar Charger 48V-1600W Manaul	1 pcs	/
MC4 Connector Spanner	1 pcs	/
Solar Charger communication Cable	1 pcs	Suitable for E60/E163

Notes

⚠ Do not reverse the input and output cable.

⚠ Do not reverse the positive and negative poles of the Solar Charger.

⚠ Use the Solar Charger within the specified voltage range.

⚠ The Solar Charger Input Cable (Negative) and the Solar Charger Output Cable (Negative) are both connected to the GND of the Solar Charger.

⚠ When paralleling multiple solar panels, please ensure that the specifications of the solar panels are consistent.

⚠ Before connecting the E Battery Solar Charger 48V-1600W with the third party product, please contact ePropulsion authorized distributor.

💡 If the E battery is charged by the solar charger without a communication cable, it may not be fully charged to 100%.

Installation process requires the following tools: Phillips screwdriver, wire crimping pliers (1- 5mm²).

Operations

1. Please follow the wiring diagram below to perform wiring operations without power on.

2. After connecting the wires, please turn on the battery system to power on, and then close the switch between the solar charger and the battery

💡 Before connecting, please prepare following products:Main Switch（>50A）、Solar Panel

💡 If there are more complex parallel operating conditions, please contact ePropulsion Technology's authorized dealers.

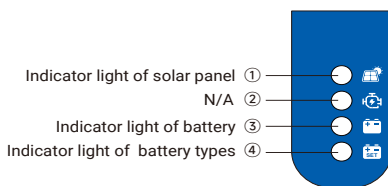**When the solar charger is connected to E60/E163 and other devices as well, E60/E163 will prioritize charging using the E battery charger. In this case，you will need to purchase the following additional materials:**

Item	E Battery Bus Bar 150A	E Battery Bridging Cable	Battery Comm Cable T Connector	Remote Switch	E Battery Charger
Qty.	1 set	1 set	1pcs	1pcs	1 set

LED Indicator

Status description of indicator lights

Indicator light of solar panel ①
N/A ②
Indicator light of battery ③
Indicator light of battery types ④

Indicator light of solar panel

Color of indicator light	Red					
Indicating method	Normal ON	Slow flash	Single flash	Fast flash	Double flash	OFF
Description	MPPT charging	Boost charging	Floating charging	Equalizing charging	Current-limited charging	Not in charging

Indicator light of battery

Color of indicator light	Green	Yellow	Red	Indicating method	Description
Indicating method	Normal ON	Normal ON	Normal ON	Slow flash	Fast flash
Description	Battery fully charged	Normal battery voltage	Battery undervoltage	Battery over-discharge	Battery overvoltage/battery over-temperature

If the indicator light of battery types remains in a steady cyan state, indicating that the connection to the E Battery is normal.

Warranty

ePropulsion E Battery Solar Charger 48V-1600W is guaranteed against any manufacturing defects for TWO years from date of delivery of products to end customers.

Free warranty is only validated upon the presentation of legal serial number, Warranty Card, and evidence of purchase from an authorized ePropulsion dealer.

Conditions

Valid date of purchase should be established by the first-hand purchaser with original sales slip.

Free warranty is not transferable and will not be reissued.

The warranty is valid only when the information is correct and complete.

Warranty does not cover

Minor faults producing no influence on the intended function of the product.

Faults resulting from any improper operation that contradicts the user manual.

Accessories supplied with the product.

Damage caused by accident, misuse or unauthorized repair.

Damage caused by dropping, improper care or storage.

If warranty expires, users can still enjoy maintenance services from ePropulsion authorized dealers with minimum maintenance charge.