ENERPOWER

Product Specifications

Product Details

Product Description	Rechargeable Li-Ion Battery for electric bikes
Brand	ENERpower
Product Name	DP-4C / ENERpower Jericho 36V
Model	Jericho 720Wh
Specifications	36V / 20Ah / 720Wh



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1. Scope

This specification applies to the rechargeable lithium-ion battery pack TCRFD391005YW.

2. Product Images



3. General Specifications

No.	Item	Specification	Notes
1	Rated Voltage	36V	—
2	Open-Circuit Voltage at Shipment	38 ± 0.5V	—
3	Rated Capacity	24.7Ah	**Standard Charging:** CC-CV (3A, 54.6V, 0.025C cut-off) **Standard Discharge:** 0.2C constant-current discharge to battery protection cut-off
4	Minimum Capacity	24.6Ah	**Standard Charging:** CC-CV (3A, 54.6V, 0.025C cut-off) **Standard Discharge:** 0.2C constant-current discharge to battery protection cut-off
5	Internal Resistance	≤ 150 mΩ	Measured at AC 1 kHz after standard charging
6	Cell Configuration	10S5P	Cell matching criteria: Internal resistance difference ΔR ≤ 3 mΩ; Voltage difference ΔV ≤ 3 mV
7	Overall Dimensions	See dimension drawing for details	—
8	Weight	Approx. 3.76 kg	Weight of a single battery pack
9	Charge Cut-off Voltage	42V	—
10	Standard Charge Current	3A	CC-CV (constant current / constant voltage) charging method
11	Maximum Charge Current	4A	CC-CV (constant current / constant voltage) charging method

12	Discharge Cut-off Voltage	27V	—
13	Standard Discharge Current	4A	—
14	Maximum Discharge Current	30A	—
15	Operating Temperature	Charging: 0°C to 45°C Discharging: -20°C to 45°C	—
16	Storage Temperature	**1 year:** -20°C to 25°C **3 months:** -20°C to 45°C **1 month:** -20°C to 60°C	
17	Charging Port Reverse Polarity Protection	Charging port voltage: 0V	
18	No Discharging During Charging	Not supported	
19	Battery Level Indicator	Included	
20	Power Switch	Included	
21	Charging Port Wiring	DC 2.1 mm (center positive)	
22	Discharge Port Wiring	4-pin connector Pin 1: P+ Pin 2: P+ Pin 3: P- Pin 4: P-	

			Pin order: P+ | P+ | P- | P-

4. BMS (Battery Management System)

Protection Function	Parameter	Min.	Typical	Max.	Unit
Overcharge Protection	Protection Voltage	-	4.250	-	V
	Release Voltage	-	4.150	-	V
	Protection Delay	500	-	1500	ms
	Recovery Method	Automatic			
Over-Discharge Protection	Protection Voltage	-	2.70	-	V
	Release Voltage	-	3.000	-	V
	Protection Delay	500	-	1500	ms
	Recovery Method	Connect charger			
Overcurrent Protection	Protection Current	72	80	88	A
	Protection Delay	1200	-	2800	ms
	Recovery Method	Disconnect load			
Short-Circuit Protection	Protection Function	Enabled			
	Protection Delay	-	600	-	µs
	Recovery Method	Disconnect load			
Temperature Protection	Discharge Temperature Protection	70	75	80	°C

	Recovery Temperature	65	70	75	°C
	Recovery Method	Automatic recovery when temperature returns to normal range			
Cell Balancing	Balancing Start Voltage	-	4.18	-	V
	Balancing Current	-	-	55	mA
Quiescent Current	Standby Current Consumption	-	-	≤80	μA
Internal Resistance	BMS Main Loop Resistance	-	-	≤40	mΩ

5. Main Components

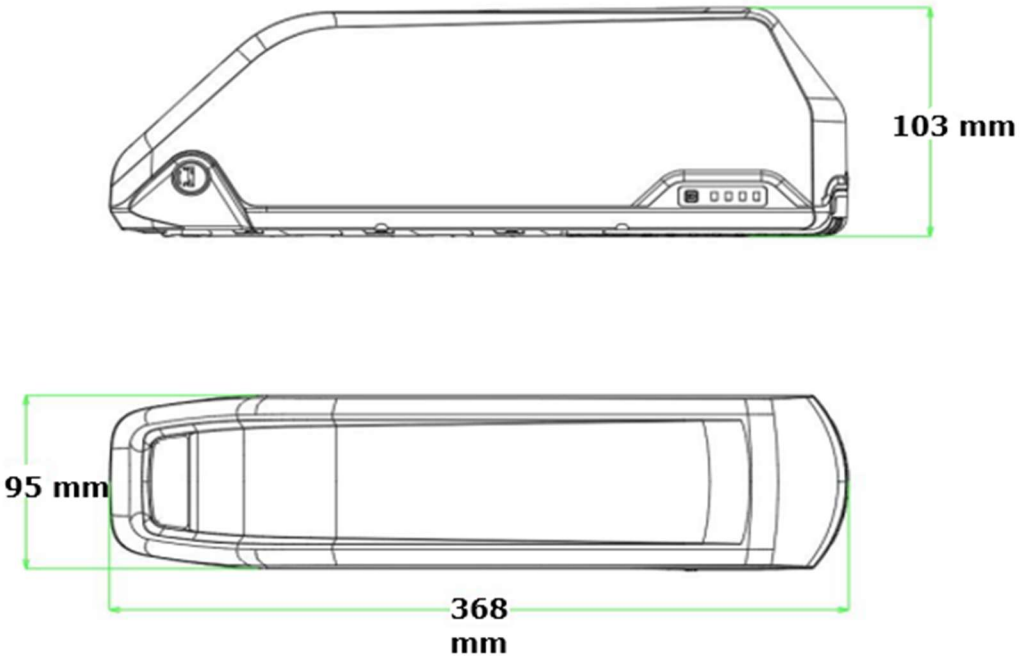
No.	Component	Model	Specification
1	Battery Cell	INR21700-50GB	Samsung 50GB, 3.66V, 5000mAh
2	Battery Management System (BMS)	BSH14S011-10FS30WJR-PT	10S, 30A, separate charge/discharge ports
3	Battery Housing	DP-4C	Black

Accessory illustration:



6. Dimensions

Units: mm



7. Labels

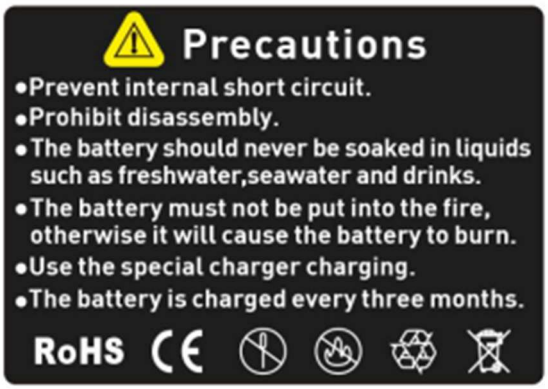
Product Label

50 × 30 mm silver label



Warning Label

50 × 35 mm gloss black label



Label Illustration



8. Packaging

- Shipping cartons shall be marked appropriately.
- Each battery shall be individually packed in a protective bubble bag.
- Inner protective padding shall be used inside the carton.
- Cartons shall be sealed and secured with packing straps.
- Pallets and corner protectors shall be used where applicable.
- Stacking height must comply with carton load-bearing limits.

9. Operating Instructions

General

This document applies only to battery packs manufactured by ENERdan GmbH..

Intended Use

If the battery is to be used in applications or operating conditions not covered by this specification, additional testing may be required. Please contact the supplier before use.

Liability

The manufacturer assumes no responsibility for damage, injury, or accidents caused by use outside the conditions specified in this document.

Product Updates

The manufacturer reserves the right to provide written updates regarding correct operation and handling procedures.

Charging Requirements

- Do not exceed the maximum charging current specified in this document.
- Do not exceed the specified charging voltage.
- Use only chargers designed for lithium-ion batteries.
- Charge only within the specified temperature range.
- Observe correct polarity at all times.
- Reverse charging is prohibited.

Discharging Requirements

- Do not exceed the maximum discharge current.
- Discharge only within the specified temperature range.
- To prevent over-discharge during storage, recharge the battery at least every three months.
- Batteries stored for more than six months should undergo a full charge/discharge cycle before use.

Storage Requirements

- Store at 10°C to 25°C.
- Recommended humidity: 60 ± 20% RH.
- For storage periods longer than three months, remove the battery from the equipment.
- Store in a cool, dry environment.
- Recharge every three months to maintain approximately 50-70% state of charge.

10. Safety Precautions

- Do not use or store the battery near heat sources or open flames.
- Use only approved chargers.
- Do not reverse battery polarity.
- Do not connect directly to wall outlets or vehicle power sockets.
- Do not expose the battery to fire.
- Do not short-circuit the terminals.
- Do not transport or store together with metal objects.
- Do not puncture, crush, strike, throw, or deform the battery.
- Do not solder directly to the battery terminals.
- Do not disassemble or modify the battery.
- Do not place the battery in a microwave oven or pressure vessel.
- Do not mix with primary batteries or batteries of different types, capacities, or brands.
- Stop using the battery immediately if it emits odor, heat, smoke, discoloration, or deformation.
- Do not leave the battery connected to a charger for extended periods.
- Keep out of reach of children.
- Do not expose the battery to direct sunlight or excessive heat.
- If electrolyte enters the eyes, rinse immediately with clean water and seek medical attention.

11. Specification Revisions

This specification may be revised without prior notice.

12. Other Matters

Any matters not covered by this specification shall be agreed upon between the supplier and customer.

13. Contact Information

For technical questions, product information, or support, please contact:

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