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› [Varstrom](#) /

› Varstrom 52V 20Ah Lithium Ebike Battery User Manual

Varstrom 52V 20Ah Downtube Yingwu Shark Battery Kit

Varstrom 52V 20Ah Lithium Ebike Battery User Manual

Model: 52V 20Ah Downtube Yingwu Shark Battery Kit

1. INTRODUCTION

This manual provides essential information for the safe and efficient use of your Varstrom 52V 20Ah Lithium Ebike Battery. Please read this manual thoroughly before installation and operation to ensure optimal performance and longevity of your battery.



Image 1.1: The Varstrom 52V 20Ah Lithium Ebike Battery, showing its main body, the detachable mounting plate, and an electric bicycle in the background, illustrating its intended use.

2. PRODUCT FEATURES AND PARAMETERS

The Varstrom 52V 20Ah Shark Battery is designed for electric bike motors ranging from 500W to 1500W, offering robust performance and advanced safety features.

- **High Compatibility:** Compatible with 500W-1500W electric bike motors.
- **Powerful Discharge:** Max constant discharge current of 30A.
- **Integrated BMS Protection:** Equipped with a robust 30A Battery Management System (BMS) board for comprehensive safety.
- **Durable Design:** Features an integrated battery holder for safe and shock-resistant usage.
- **Long Cycle Life:** Designed for longevity with a charge cycle count exceeding 1000 cycles.
- **User-Friendly Features:** Includes a mounting bracket for easy installation, a battery lock for theft protection, an On/Off switch, and LED indicator lights for power management.

BATTERY PARAMETER



Voltage/Current

52V 20AH

Energy

1040WH

BMS

30A

Weight

5KG

Cycle Life(Time)

1000 TIMES

Install Position

DOWNTUBE

Battery Cell

SAM*-*SUNG 21700 5000MAH



SIZE:368*95*125MM

Image 2.1: Detailed diagram illustrating the key parameters of the Varstrom 52V 20Ah battery, including its 52V 20Ah voltage/current, 1040WH energy, 30A BMS, 5KG weight, 1000 cycle life, downtube installation position, and dimensions of 368x95x125mm.

MULTIPLE PROTECTION

52V 20AH



BMS BOARD-30A

Protect the Safety and Life of the Battery



Overcharge
protection



Over discharge
protection



Short circuit
protection



Overcurrent
protection



Overvoltage
protection



Temperature
protection

Image 2.2: An exploded view of the Varstrom 52V 20Ah battery highlighting its internal components like the cell holder and BMS board, along with icons representing multiple protection features such as waterproof, dustproof, vibration protection, 1000 times cycle life, 30A BMS, overcharge, over-discharge, short circuit, overcurrent, overvoltage, and temperature protection.

3. SAFETY INFORMATION

Adhering to these safety guidelines is crucial for preventing damage to the battery and ensuring user safety.

- The battery must be fully charged before its initial use.
- Store the battery in a cool, dry place, away from water and fire sources.
- Always follow the charging method specified in the technical documentation.
- Avoid battery separation, extrusion, or collision.
- Charge and discharge the battery monthly, even during periods of non-use, to maintain its health.
- Do not cut open the battery shell or remove its jacket tube.
- Do not attempt reverse charging. Ensure correct polarity when connecting the battery.
- Do not disassemble or modify the battery without authorization.

4. PACKING LIST

Please verify that all items listed below are included in your package:

Item No.	Description	Quantity
1	52V 20Ah Downtube Yingwu Shark Battery Kit	1
2	Battery Fix Plate (Mounting Bracket)	1
3	XT60 Extension Cable	1
4	Screws	4
5	Keys	2
6	Charger	1



Image 4.1: Visual representation of the contents included in the Varstrom 52V 20Ah battery kit package, clearly labeling each component

such as the battery, fix plate, XT60 line, screws, keys, and user manual (represented by a booklet).

5. SETUP AND INSTALLATION

The battery is designed for easy installation on most bike frames equipped with water bottle screw holes.

1. **Mounting the Battery Fix Plate:** Align the battery fix plate with the water bottle screw holes on your bike frame. Secure the plate using the provided screws. Ensure it is firmly attached to prevent movement during riding.
2. **Attaching the Battery:** Slide the battery onto the mounted fix plate until it clicks securely into place.
3. **Using the Anti-Theft Lock:** Utilize the integrated battery lock to secure the battery to the frame. This provides theft protection and ensures the battery remains in place during operation. The key is used to lock and unlock the battery for removal or replacement.
4. **Connecting to Motor:** Connect the XT60 female port of the battery to your e-bike motor's XT60 male connector. Ensure a secure connection.

RELIABLE QUALITY



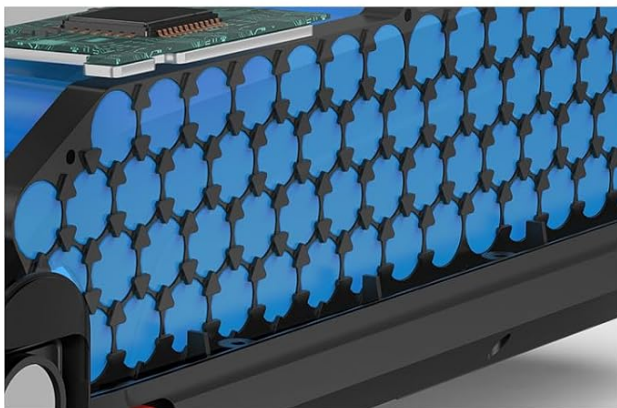
POWER SWITCH

Switch the battery power on and off. "O" represents turning the power off, while "-" indicates turning the power on



ANTI-THIEF LOCK

The E-bike battery Safe Lock&key,make sure that security,use to lock the battery on the frame also unlock to remove or replace easily



BETTER CRAFTSMANSHIP

High Rate Low
Internal Resistance



LED BATTERY POWER INDICATOR

Press the button,you can
get the battery power level and voltage
from the indicators

Image 5.1: Detailed views of the Varstrom battery's key features: the power switch (showing "O" for off and "I" for on), the anti-theft lock with keys, an internal view suggesting better craftsmanship, and the LED battery power indicator lights.

UNIVERSAL COMPATIBILITY



1. Suitable with the hub motor kit (Need confirm the connector is XT60 male)



2. Suitable with the Bafang mid drive kit



3. Suitable with the e-bike (Need confirm the connector is XT60 male)

Image 5.2: Examples of the Varstrom battery's universal compatibility, showing its suitability with hub motor kits (requiring XT60 male connector), Bafang mid-drive kits, and other e-bikes (requiring XT60 male connector).

6. OPERATION

Operating your Varstrom battery is straightforward. Follow these steps for proper use:

- **Power On/Off:** Locate the power switch on the battery. Switch to "I" to turn the battery power on, and "O" to turn it off.
- **Checking Battery Level:** Press the button next to the LED indicators to view the current battery power level. The LED lights will illuminate to show the remaining charge.
- **Charging the Battery:**
 - a. Ensure the battery is turned off before charging.
 - b. Connect the charger to the battery's charging port.
 - c. Plug the charger into a standard 110-240V AC outlet.
 - d. The charging time is approximately 7 hours for a full charge. Refer to the charger's indicator lights for charging

status.

- e. Disconnect the charger once charging is complete.

7. MAINTENANCE

Proper maintenance extends the lifespan of your battery:

- **Regular Charging:** Even if not in use, charge and discharge the battery at least once a month to prevent deep discharge and maintain cell health.
- **Storage:** Store the battery in a cool, dry environment, away from direct sunlight, extreme temperatures, and moisture.
- **Cleaning:** Keep the battery and its connectors clean and free from dust and debris. Use a dry, soft cloth for cleaning.
- **Inspection:** Periodically inspect the battery for any signs of damage, swelling, or unusual odors. If any issues are detected, discontinue use immediately and contact support.

8. TROUBLESHOOTING

This section addresses common issues you might encounter. For problems not listed here, please contact customer support.

Problem	Possible Cause	Solution
Battery not turning on	Battery switch is off; Battery is fully discharged; Loose connection.	Ensure the power switch is in the "I" position; Charge the battery fully; Check all connections for tightness.
Battery not charging	Charger not connected properly; Faulty charger or outlet; Battery issue.	Ensure charger is securely plugged into battery and wall outlet; Test charger with another device or try a different outlet; Contact customer support if issue persists.
Reduced range/power	Battery not fully charged; Battery degradation over time; Extreme temperatures.	Ensure battery is fully charged before each ride; Battery capacity naturally decreases after many cycles; Operate within recommended temperature ranges.

9. SPECIFICATIONS

Detailed technical specifications for the Varstrom 52V 20Ah Lithium Ebike Battery:

Battery Material: Lithium

Nominal Voltage: 52V

Rated Capacity: 20Ah

Energy: 1040WH

Max Constant Discharge Current: 30A

BMS: 30A

Charger Current: 3A

AC Input (Charger): 110-240V, 50/60Hz

Max Charging Voltage: 52V-58.8V

Charging Time: Approximately 7 hours

Cycle Life: About 800-1000 cycles

Weight: 5KG

Dimensions (L*W*H): 14.4" * 3.74" * 4.9" (368mm * 95mm * 125mm)

Discharge Port: XT60 Female Port

Battery Base: 5 Pin

Install Position: Downtube

Battery Cell: Samsung 21700 5000mAh

10. WARRANTY AND SUPPORT

For warranty information, technical support, or any inquiries regarding your Varstrom 52V 20Ah Lithium Ebike Battery, please contact Varstrom customer service through their official website or the retailer where the product was purchased. Please have your purchase details and product model number ready when contacting support.

Manufacturer: Dongguan CZM Technology Co., Ltd

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ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question