

English

# Li-Ion E-Bike Battery INTEGRATED DOWNTUBE BATTERY V8

Operating Instructions | Rev. 1-5







**SYSTEMS** 



ENERGY STORAGE SYSTEMS









INDUSTRIAL

MEDICAL

#### **IDENTIFICATION**

#### **PRODUCT**

Model: UR V8 10S:

→ Art. No.: 31600-[...]

→ Art. No.: 35600-[...]

→ Art. No.: 37240-[...]

→ Art. No.: 37242-[...]

Model: UR V8 13S:

→ Art. No.: 32600-[...]

→ Art. No.: 37225-[...]

→ Art. No.: 37230-[...]

→ Art. No.: 38546-[...]

→ Art. No.: 38617-[...]

→ Art. No.: 39325-[...]

→ Art. No.: 607213

Model: UR V8 13S passive:

→ Art. No.: 33600-[...]

Country of Origin: Germany

Mark: CE

#### **MANUFACTURER**

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#### **CUSTOMER SERVICE**

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#### **DOCUMENT**

Operating Instructions Integrated Downtube

Battery V8

Revision: 1-5 (11/3/2021)

MAN-10044

Subject to change.

#### IMPORTANT NOTES ON THIS **MANUAL**

#### Carefully read the operating instructions before using the e-bike battery.

These operating instructions contain necessary information on the correct use of the rechargeable e-bike battery. They do not contain information on the use of the complete drive system (battery + motor + display) and are directed towards the end user.

Keep these instructions accessible to all battery users.

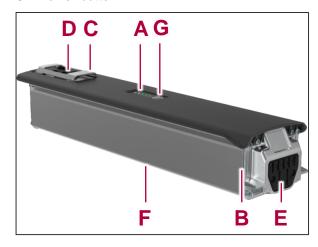
#### **DESCRIPTION OF NOTICES**

SIGNAL WORD	DESCRIPTION
<b>▲</b> WARNING	Non-compliance can lead to severe injury or death.
<b>▲ CAUTION</b>	Non-compliance may lead to slight or less severe personal injury.
NOTICE	Non-compliance can lead to property damage.
i	Tips, additional information

#### 1 PRODUCT DESCRIPTION

#### 1.1 OVERVIEW

- A State of charge display
- B Warranty seal
- C Dismounting latch
- D Charging socket
- E Discharging socket
- F Product label
- G Power button



#### 1.2 INTENDED USE

The battery supplies the e-bike's drive system with power. It may only be used with compatible, designated drive systems and chargers.

Any other use is not in compliance with the intended application. Warranty will cease in case of non-compliant use.

If the warranty seal is defective or missing, warranty and guarantee become void.

#### 1.3 TECHNICAL DATA

	10S5P	13S4P
Nominal capacity	17.0 Ah	13.6 Ah
Energy	625.0 Wh	650.0 Wh
Max. permanent discharge current	25 A	25 A
Max. permanent charge current	5 A	5 A
Voltage	36 V	48 V
Max. charging voltage	42.0 V	54.6 V
Weight	4.1 kg	
Dimensions (W x H x L)	3.78 x 3.31 x 17.72 inches 96 x 84 x 450 mm	

#### 1.4 SAFETY FEATURES

An integrated safety relay protects the battery from overcharging, deep discharging, overcurrent, short circuit, and operation outside the safe temperature range.

#### 1.5 LED DISPLAY

LED DISPLAY WITH POWER BUTTON



#### **DESCRIPTION OF SYMBOLS**

SYMBOL	MEANING
•	LED on
0	LED off
*	LED blinking

#### STATE OF CHARGE DISPLAY

Shortly press the power button to display state of charge.

LED 1, 2, 3, 4, 5	CHARGE LEVEL
•••••	10080 %
••••	7960 %
•••00	5940 %
••000	3920 %
•0000	1910 %
*0000	90 %
	Re-charge within two days to avoid permanent damage to the battery.

#### 1.6 COMPATIBLE CHARGERS

BAT- TERY	CHARGER			
₽	24555-14 4.0 A	28555-14 4.5 A	27143-4 4.0 A	37064-1 3.0 A
10S	✓	✓		
13S			✓	
13S passive				<b>√</b>

#### 1.7 LABELING AND SYMBOLS

#### **LABEL**



**SYMBOLS** 

## **SYMBOL DESCRIPTION** Lithium-ion battery symbol (contains recyclable materials) Conformity with relevant European directives Warning of hot surface General warning symbol Danger of explosion and fire, caused by short circuit, overheating, or other electrical/mechanical abuse Do not expose to open flame, fire, open ignition source. Danger of explosion and fire. Do not immerse in liquid. Follow operating instructions. Do not dispose in domestic or industrial waste.

#### 2 SAFETY

When misused, lithium-ion batteries pose a threat of explosion and fire. Adhere to safety advice to minimize risks and to avoid misuse.

#### 2.1 SAFETY ADVICE

#### **⚠** WARNING

### Non-compliance with safety advice can lead to personal injury.

Non-compliance with safety advice can lead to fire and/or severe personal injury. Injury through chemical substances is also possible.

- → Follow safety instructions.
- → Remove battery from e-bike for handling (i. e. maintenance), transportation or storage. Unintentional activation of the e-bike poses risk of injury and/or damage.
- → Use the battery and equipment only if in proper condition.
- → Never use a damaged or broken battery.
- → Only use the battery that is approved for your e-bike.
- Use this battery only in e-bikes with BMZ systems. Your battery is only protected from dangerous overloading if used in the intended application.
- → Charge the battery before use. Only use the supplied charger which was part of your delivery scope.
- → Keep the battery and its contacts clean and dry. Remove any dirt with a clean and dry cloth.
- → Do not use any solvents (i. e. dilution, alcohol, oil, anti-corrosives), detergents, or running water to clean the battery.
- → Persons (including children) with reduced physical, sensory or mental abilities or lack of experience and knowledge may not use the battery, unless they are supervised and instructed by a person responsible for their safety.
- → Do not expose the battery to strong mechanical impacts. It poses a risk of damage to the battery.
- → Do not allow children to play with the battery.
- → Do not open or dismantle the battery.
- → Do not expose the battery to drastic temperature changes.
- Protect the battery from temperatures above 140 °F (60 °C), direct sunlight, and fire.
   Excessive heat may result in battery leakage and damage to the casing.
- → Do not immerse the battery in any liquid. Do not clean with high-pressure cleaner.

Do not use the battery if contacts are damaged. Do not use with damaged power cables.

#### 2.2 EMERGENCY INFORMATION

#### 2.2.1 FIRST-AID MEASURES

Medical aid will be required in case of symptoms caused by combustion gases or leakage.

#### **AFTER INHALATION**

In case of damage or improper use chemical gases may leak. Leave area immediately and breath fresh air. Seek medical advice in case of any symptoms. Gases may cause respiratory irritation.

#### **AFTER SKIN CONTACT**

Remove solid parts immediately. Flush affected areas with plenty of water (at least for 15 min). Carefully pad dry affected areas—do not rub. Remove contaminated clothes immediately. Seek for medical attention if skin shows redness or irritation.

#### **AFTER EYE CONTACT**

Flush eye gently with plenty of water (at least for 15 min). Shield unaffected eye. Seek for medical assistance immediately.

#### **AFTER INGESTION**

Drink plenty of milk or water and induce vomiting. Seek medical attention immediately.

#### 2.2.2 FIRE FIGHTING MEASURES

#### **⚠** WARNING

Fire gases can cause damage to health. Extinguishing water can react to extremely toxic gas.

- → Use self-contained breathing apparatus and appropriate protective clothing.
- 1. Alert the fire department and report a lithium fire.
- 2. If possible, carefully remove other batteries.
- 3. Evacuate all personnel from the immediate fire area.
- 4. Use plenty of water to extinguish the fire.

#### 3 OPERATION

#### 3.1 SAFETY ADVICE

Only use a battery that has been approved for use in your e-bike. Check if the battery and housing are intact before use.

Turn off the battery before inserting or removing it. Check if the battery is properly locked in place and securely attached before each ride.

#### 3.2 SWITCHING ON THE BATTERY

Shortly press the power button to switch on the battery. LEDs will sequentially light up and go out again.

#### 3.3 CHARGING THE BATTERY



Only use the charger that was supplied with your e-bike. The battery can be charged inside or outside the frame.

If the battery won't charge or if it is damaged do not use it and contact BMZ Germany GmbH.

Blinking LEDs change to solid green light as the charging process progresses:

LED 1, 2, 3, 4, 5	CHARGE LEVEL
*0000	019 %
•*000	2039 %
••*00	4059 %
●●●*○	6079 %
••••*	8099 %
•••••	100 %

**DISPLAY SHOWS STATE OF CHARGING LEVEL** 

#### 3.4 SWITCHING OFF THE BATTERY

To switch off the battery keep power button pressed until all LEDs have turned off.

Battery will turn off automatically if not in use.

## 3.5 INSERTING AND REMOVING THE BATTERY

#### 3.5.1 INSERTING THE BATTERY

#### **NOTICE**

Battery may drop out of the frame. Latch may release itself due to heavy motion.

→ Lock battery in place with key.



- Insert turned off battery with display facing down.
- 2. Push battery in until it locks in place.
- 3. Secure battery by locking it with key. Remove key and store it safely.

#### 3.5.2 REMOVING THE BATTERY

#### **NOTICE**

Battery may drop when it is released from the frame.

→ Use both hands to remove battery from the frame.



- 1. Switch off battery.
- 2. Open lock.
- 3. Pull latch to release the battery.

#### 3.6 TROUBLESHOOTING

PROBLEM	POSSIBLE SOLUTION
All LEDs blinking and error code on display.	Battery is non-operational. Please contact Service Center.
One LED is blinking	Charge battery.
Latch is stuck	Apply small amount of bike chain lubricant spray.
Defective cover	Contact Service Center.
Lid of charging socket is torn off.	Do not use the battery. Socket may be loose.

PROBLEM	POSSIBLE SOLUTION
Battery is not working	→ Press power button to switch battery on
	→ Battery is too cold. Allow it to warm up slowly in warmer environment.
	→ Battery is too warm. Allow it to cool down slowly.
	→ Battery is deeply discharged due to inadequate storage. Contact your vendor.
Limited range	→ Low temperatures. Decreased battery range during winter is normal.
	→ Loss of capacity due to inadequate storage or natural aging: Replace battery.

If no suitable solution is listed, please contact your dealer.

#### 3.7 CLEANING

If necessary, clean latch and lightly apply bike chain lubricant spray.

If necessary, clean battery with dry and clean cloth.

Keep battery contacts and sockets clean. Wipe with clean and dry cloth, if necessary.

## 4 STORAGE AND TRANSPORTATION

#### 4.1 STORAGE

#### **SAFETY PROVISIONS**

- → Remove battery from e-bike or charger when it is not in use.
- → Do not store battery near hot or inflammable objects. Danger of explosion.
- → Temperatures above 140 °F (60 °C) may lead to leakage and damage to battery's casing. Avoid contact with leaked substance.
- → Do not store battery near heaters. Protect battery from direct sunlight.
- → Store battery in a dry place away from flames and food.
- → Keep small metallic objects away from the battery. They may accidentally bridge contacts.

#### RECOMMENDATIONS FOR BEST LIFE SPAN

- → Store battery with a charge level of 50 %. Check charge level every three months (if not in use) and recharge to 50 %, if necessary.
- → Store battery protect from freezing temperatures.
- → Avoid drastic temperature changes.
- → Recommended storage temperature: 72...79 °F (22...26 °C)

#### 4.2 TRANSPORTATION

#### 4.2.1 DISPATCH

The battery is categorized as a dangerous good and may only be packaged and dispatched by especially trained personnel. Contact your vendor for more information.

#### 4.2.2 TRANSPORT ON PUBLIC ROADS

Private users may transport their battery on public roads without any restrictions.

Commercial users or third parties transporting lithium-ion batteries need to adhere to respective dangerous goods regulations.

#### 5 DISPOSAL

Do not dispose your old battery with your household waste. In EC countries it is mandatory to return batteries. Returning old batteries is free of charge. To avoid a short circuit, fully discharge the battery and cover its poles with adhesive tape.

If batteries are not disposed of properly, they pose a risk of fire, health and environmental hazards.

#### **DROP-OFF POINTS**

- → Manufacturer
- → E-bike vendor
- → Local recycling centers

# More information?





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