

# Instructions for upgrading an existing RCT Power Battery with 1 tower (max. 11.5 kWh) to a RCT Power Battery with 2 towers (max. 23 kWh)

#### **Use Case**

Your customer wants to extend his existing RCT Power Battery to a capacity >11.5kWh and is using a RCT Power Storage DC 8.0 or 10.0 hybrid inverter- refer to <a href="https://www.rct-power.com/de/download-bereich-en.html">https://www.rct-power.com/de/download-bereich-en.html</a> → TD25 RCT Power compatibility matrix for detailed information.

In case a Power Battery BMS Master with art.-no. 210-0001 is in use, we will replace it cost neutral see 2.

## 1. Requirements for an upgrade to 2 towers

- The battery system needs to be connected to a Power Storage DC 8.0 or 10.0.
- There are 2 Power Battery BMS Master+ (art.-no. 210-0003, one per tower) available for the extension.
  - Recognizable by the permanent connected DC cables to the Power Storage DC
  - Recognizable by the 5<sup>th</sup> digit of the serial number being a "B"
- The RCT Power Battery BMS Master+ needs to be updated to the latest software version (refer to Manual Power Storage DC 8.0/10.0 chapter 8.8 "Software updates for inverter and battery", page 78).

# 2. Requirements for a cost neutral replacement of a Power Battery BMS Master

- Please fill out our online service form: https://www.rct-power.com/en/technical-service.html.
  - o Please state: "Battery upgrade to double tower" in the error description.
  - o Please state the name of the plant operator and provide the address for the new BMS.
- Please send us the replaced Power Battery BMS Master back within 3 weeks after our shipping with the given return label and the packaging of the new Power Battery BMS Master+, otherwise we are obliged to charge you with the price of the replacement.

Shipping address:

**RCT Power GmbH** 

Line-Eid-Straße 1

DE 78467 Konstanz

### 3. Quick guide for upgrading the existing RCT Power Battery from 1 to 2 towers

- Please only use the base frame from the Power Battery BMS Master+ for all battery towers
- Replace the existing Power Battery BMS Master of the preinstalled tower with the new Power Battery Master+ and follow the steps for battery extension → refer to Manual RCT Power Storage DC 8.0/10.0 chapter 8.6 "Increase battery capacity with additional battery modules (series/ parallel connection)", page 71.
- Separate the existing battery tower together with the new modules into two towers, so that both contain the same number of RCT Power Battery Stacks.
- Execute an update for the new BMS, please refer to the information regarding software updates in the Manual RCT Power Storage DC 8.0/10.0 chapter 8.8 "Software updates for inverter and battery", page 78.
- Turn off both battery towers and back on again, now after a few minutes the system will automatically switch into compensation mode and the battery extension is finished.