

Applicable to T7 / T10 / T14 / T17/ T21

# Parallel Scheme of Tower



## Important:

The parallel connection of the Tower series and all other related work are only allowed by professional and qualified electricians.

This scheme is a brief instruction for Tower parallel connection, and cannot replace the original user manual.

The total voltage difference between clusters is less than 10V; SOC of each cluster should be 100% and time interval between newly added cluster and existing cluster should be less than 6 months.

Maximum 4 tower clusters are allowed to be connected in parallel.

### 1 Parallel scheme introduction

In order to meet the market demands, Dyness has developed parallel function for Tower series. This parallel scheme is applicable to all tower models.

### 2 Main Equipment required



BDU-2G + Battery module + base

Combiner box  
DCB-TW

### 3 Parallel wiring

The general configuration diagram of the Towers in parallel connection is as under:

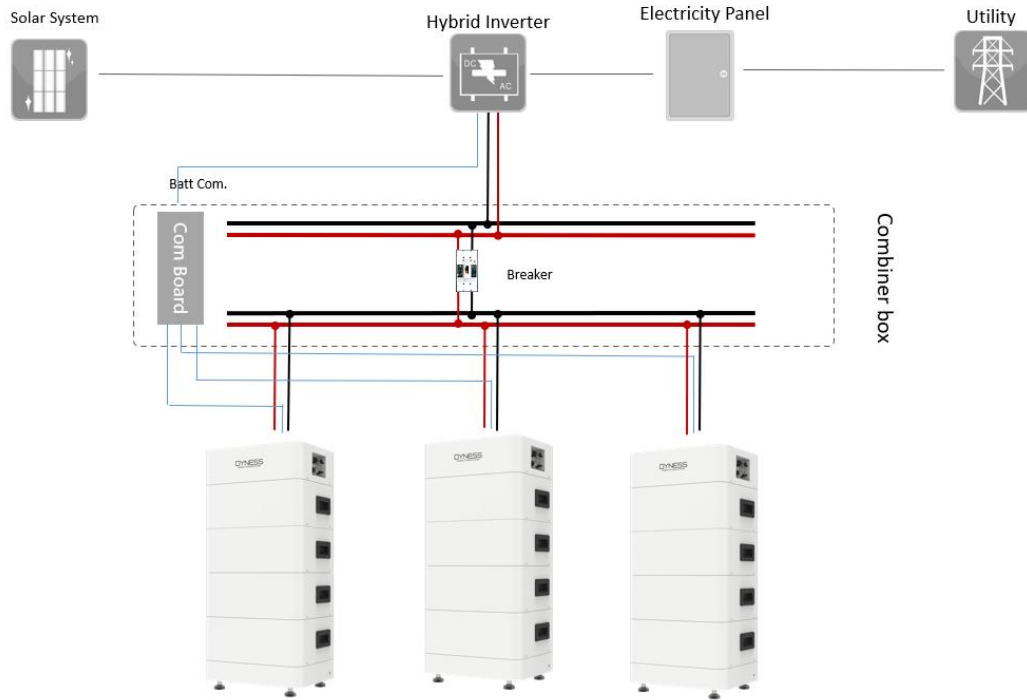


Figure 3-1 The general configuration diagram of the Towers

Connection between Towers and combiner box

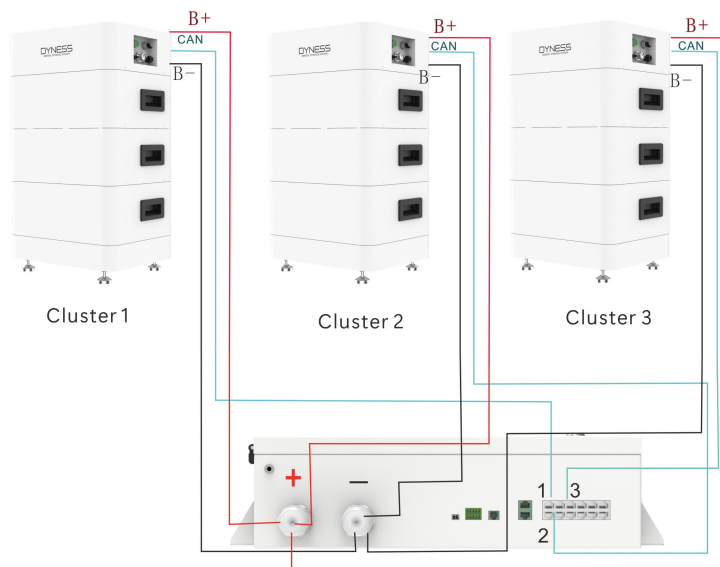


Figure 3-2 Tower and Combiner Box connection diagram

Power line connection:

Standard power lines are connected from the BDU-2G to the DC circuit breaker inside the Combiner box (DCB-TW) through the Gland head.

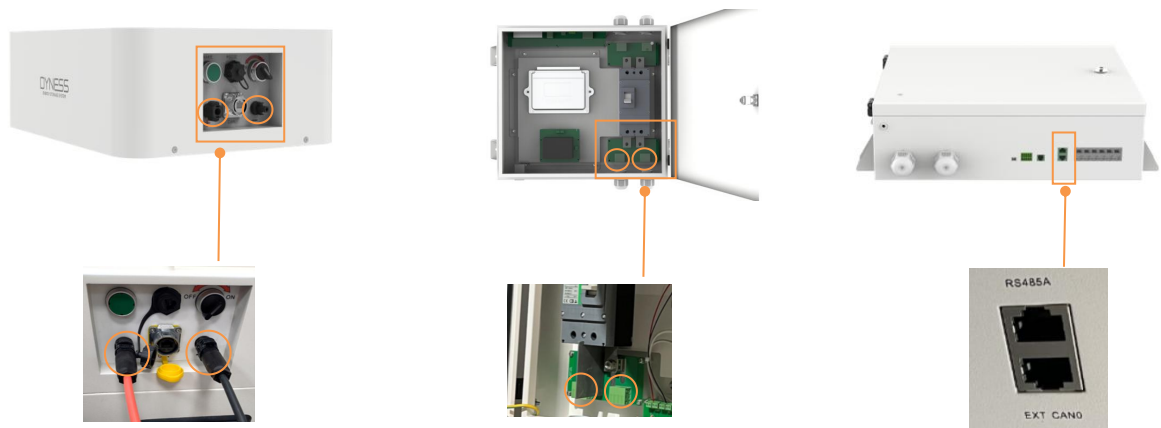


Figure 3-3

**Communication network cable connection: standard network cable**

Communication network cables are connected from communication port of the BDU-2G of tower 1, 2, 3 and 4 to the communication hub port 1,2,3, 4 of the combiner box. Please note don't connect other ports of communication hub.



Figure 3-4

**Connection between inverter and combiner box**

**Power line connection:**

Below is the illustration of standard power cable laying out from the combiner box. The connection at inverter side is subject to the ports of specific inverter.



Figure 3-5

**Communication network cable connection: standard network cable**

Communication network cable is connected from communication port CAN or RS485 of the combiner box to the communication port of the inverter. whether using CAN or RS485 depends on the communication mode of inverter



Figure 3-6

#### 4 Compatible list of inverters

Please refer to Dyness compatible list. Please contact Dyness for details if needed.

#### 5 Attention

- DCB-TW is IP20. Client has to use the combiner box indoors
- The label on BDU box is yellow, and the label on packing box is named as BDU-2G.
- The Towers in parallel must be of the same model and same capacity.
- The time interval between the newly added modules and the existing modules in single Tower is not more than 6 months. During capacity expansion, make sure SOC of each module is 100%.



---

**Power You Day and Night**



Official Website



Digital version access

Address: No. 511 Chenzhuang West Road, Sanshui Street, Jiangyan District,  
Taizhou City

Email: [service@dyness-tech.com](mailto:service@dyness-tech.com)

Tel: +86 400 666 0655

Web: [www.dyness-tech.com](http://www.dyness-tech.com)