

# **EI Residential Solar Solution (EU)**

# **BMS/EI Battery Quick Start Guide (QSG)**

• Qualified personnel must install all components according to applicable electrical codes.

Improper installation will cause damage not covered by the warranty.

Use this QSG with the Tigo EI Inverter and EI Link QSGs. Detailed installation manuals for all Tigo products are available on the tigoenergy.com **Downloads** page.

### BMS/EI Battery boxes include:

- BMS-inverter 2 m charging cables (2)
- BMS-inverter 2.2 m COM cable
- BMS-battery 0.15 earthing wire
- BMS-battery 690 mm power cable
- BMS-battery 0.12 m power cable
- BMS-battery 0.2 m COM cable
- Battery-battery 0.6 m COM cable
- Battery-battery 0.45 m earthing wire
- Base/cover/mounting hardware

#### Locate the battery:

- On a level, flat surface against a solid, plumb wall.
- At least 300 mm from another battery or system enclosure.

Connect power cables precisely as instructed on the back page. Making connections out-of-order will damage the battery and void the warranty.

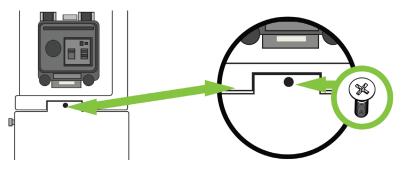
### **Place the Battery**

- 1. Place the base 20 mm from the wall and adjust levelers.
- 2. If single battery: attach the battery bracket to the top of the battery and the wall.
- 3. If second battery: attach to first battery and attach bracket.
- 4. If separate stack of batteries: Attach two cover brackets on the top-most battery and place top cover.



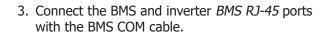
### Place the BMS

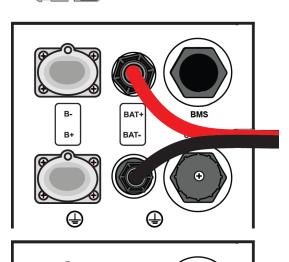
Attach the BMS to the top-most battery with screws on each side.

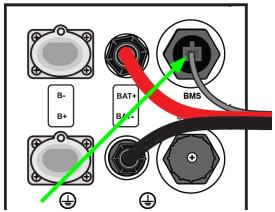


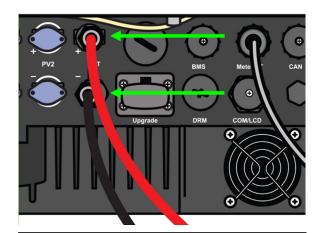
### Connect the BMS to the EI Inverter

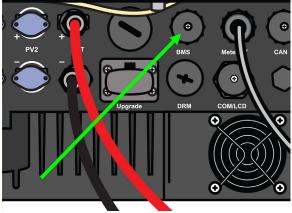
- 1. Crimp provided MC4 connectors to the battery charging cables found in the BMS box.
- 2. Connect the BMS and inverter BAT+ and BATports with the battery charging cables.





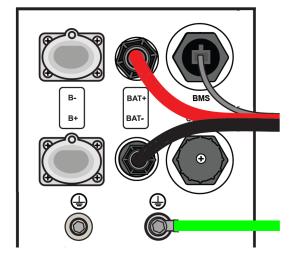


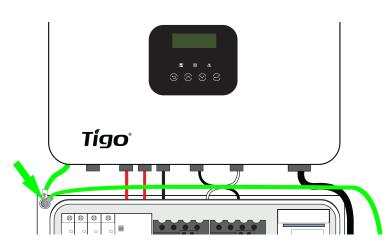




### **Connect the BMS to the EI Link**

Three-phase systems only: connect an earthing wire to the link.







# **EI Residential Solar Solution (EU)**

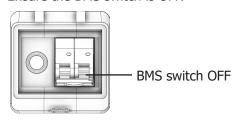
# **BMS/EI Battery Quick Start Guide**



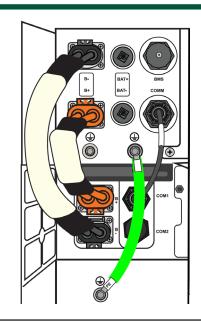
- Qualified personnel must install all components according to applicable electrical codes.
- Improper installation will cause damage not covered by the warranty.

# **Connect the BMS to the Battery**

1. Ensure the BMS switch is OFF.



- 2. Connect an earthing cable from the BMS to the battery.
- 3. Connect a battery module power cable from the BMS B+ port to the battery B+ port.
- 4. Connect a battery module power cable from the BMS *B*–port to the battery *B* port.
- 5. Connect the BMS *COMM* port and the battery *COM1* port with a COM cable.



### **Connect Two or More Batteries in Series**

Connect power cables precisely as instructed below. Making connections out-of-order will damage the battery and void the warranty.

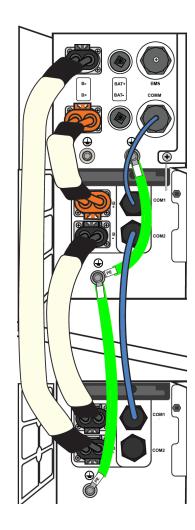
Connect earthing cables between all enclosures and ensure the BMS switch is OFF.

#### Connect power cables:

- 1. Connect the shortest power cable between the BMS *B+* port and the first battery *B+* port.
- 2. Connect a power cable between the first battery *B* and the next battery *B*+ port.
- 3. Repeat for each subsequent battery.
- 4. Connect the longest power cable between the BMS *B* port and the last battery *B* port.

### Connect COM cables:

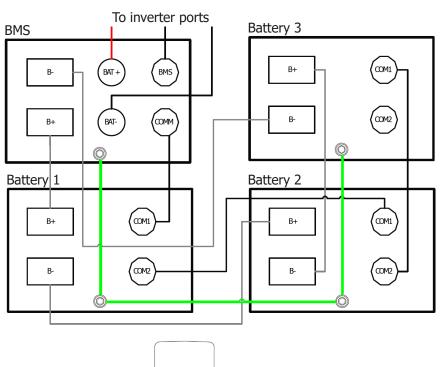
- 1. Connect a COM cable between the BMS *COMM* port and the first battery *COM1* port.
- 2. Connect a COM cable between the first battery *COM2* port and the next battery *COM1* port

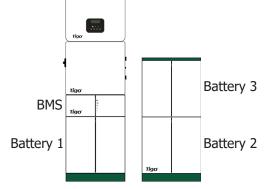


# **Three-Battery Wiring**

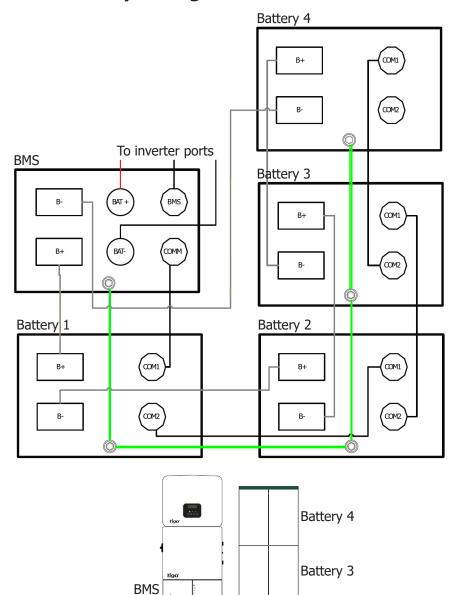
If connecting to three or four batteries in a separate stack, order the accessory kit (Tigo p/n 707-100000-0001) that has an additional base, wall bracket, cover, and longer cables.

Place a separate stack ≥300 mm from the main system.





## **Four-Battery Wiring**



### Resources











## Tigo Energy Italy

Battery 1

Srl Via Calamandrei 36 52025 Montevarchi Tuscany, Italy 00800 2255 8446

Battery 2