

1. General Information - Specifications

⚠ ATTENTION - READ FIRST

1. This document is for general guidance only. Refer to the Energy Intelligence (EI) Inverter Installation & Operations Manual for more detail.
2. Before installing the system, verify that the package contents are intact and complete as per the packing list. Contact your dealer if there is equipment damage or missing components.

⚠ ATTENTION - Use the appropriate QSG's to perform the physical installation of the EI system in the following order:

1. EI Battery
2. EI Inverter
3. EI Link
4. EI BMS



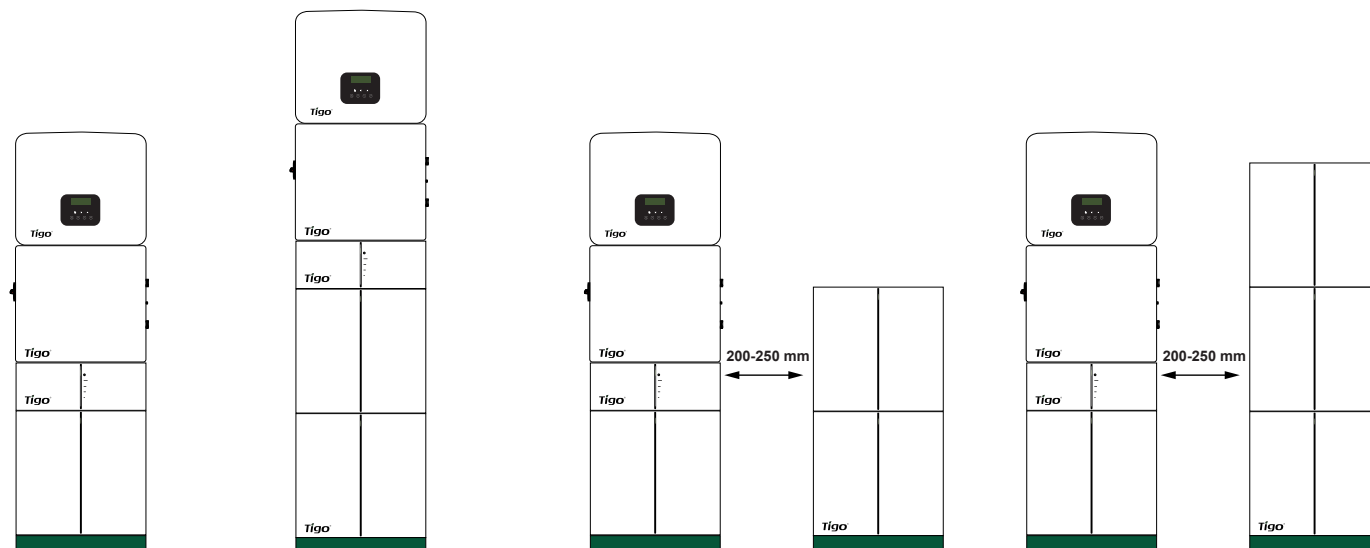
1.1 Package Contents

BMS:			Battery Module:		
Index	Item	Quantity	Index	Item	Quantity
1	BMS	1	1	Battery Module	1
2	BMS to Inverter Charging Cable (+) (2.0 m)	1	2	Battery Module Power Cable (690 mm)	1
3	BMS to Inverter Charging Cable (-) (2.0 m)	1	3	COMM Communication Cable (600 mm)	1
4	BMS to Battery Module Power Cable (120 mm)	1	4	M4 Screw	2
5	BMS Communication Cable (2.2 m)	1	5	Grounding Wire (450 mm)	1
6	COMM Communication Cable (200 mm)	1	6	Quick Start Guide	1
7	Tightening Wrench	1	Accessories:		
8	Wall Mounting Bracket	1	Index	Item	Quantity
9	M5 Screw	4	1	Battery Module Power Cable (1200 mm)	1
10	Flat Washer	2	2	Battery Module COMM Communication Cable (1200 mm)	1
11	Grounding Wire (150 mm)	1	3	Grounding Wire (1200 mm)	1
12	Lag Bolt	2	4	Battery Base	1
13	Wall anchor	2	5	Cover Plate	1
14	Wire protector	2	6	Wall Mounting Bracket	2
15	Mounting Base	1	7	Wire Protector Ring	4
16	Safety manual	1	8	M4 Screw	8
			9	Wall Bracket Accessories	1
			10	Battery Module to BMS Power Cable (2500 mm) [optional]	1

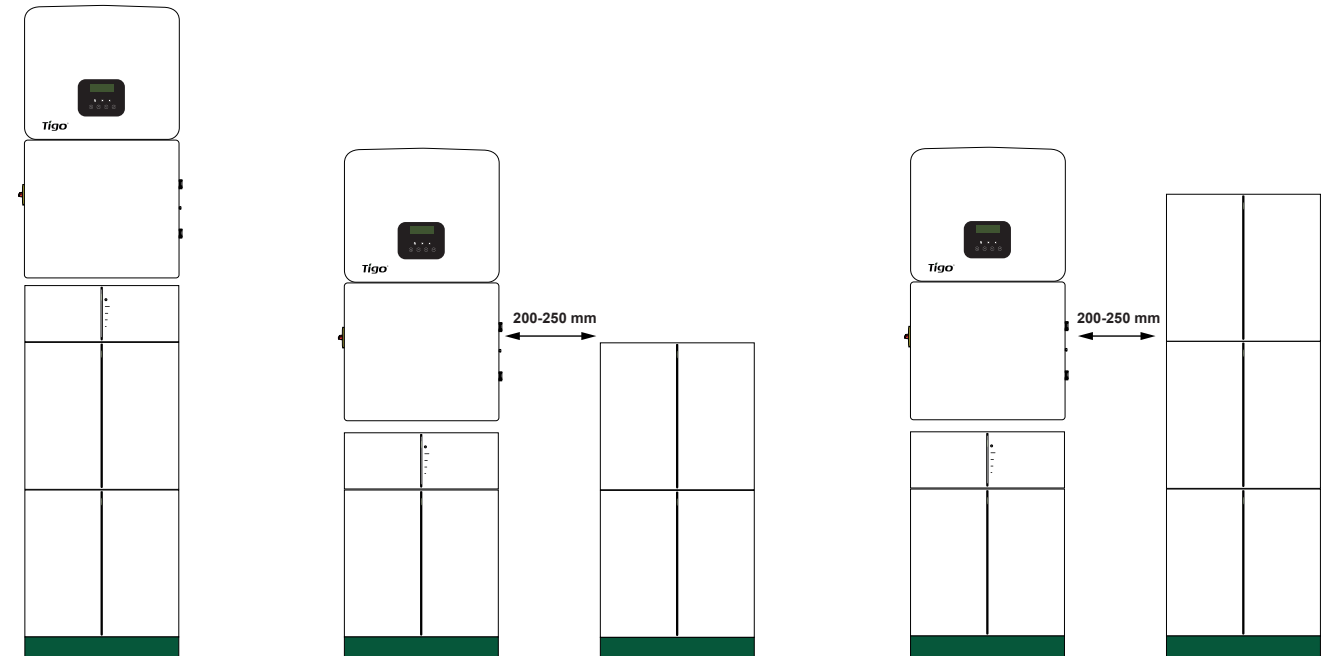
1.2 System Configuration

The EI Solution is ground mounted. All components stack together to form a complete unit. Extension batteries are installed to the right side of the main cabinet as shown below.

1.2.1 Single Phase energy storage configuration examples:



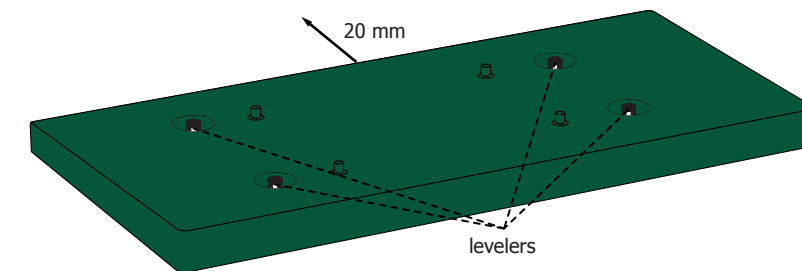
1.2.2 Three phase energy storage system configuration examples:



2. Installation

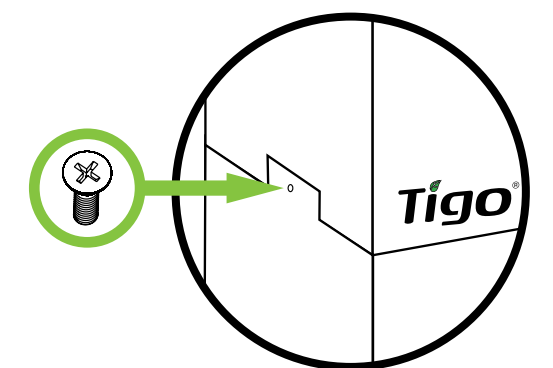
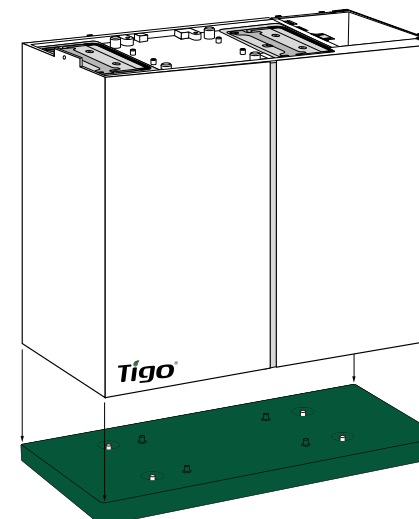
2.1 Battery Base

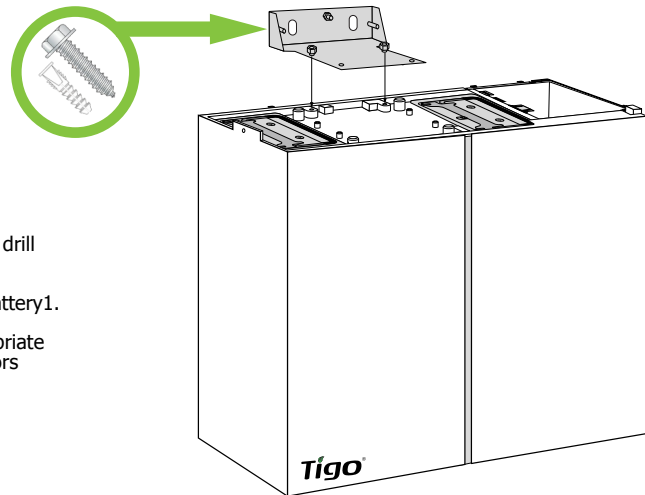
1. Place the battery base 20 mm away from the wall.
2. Adjust the battery base levelers if needed. Verify using spirit level.



2.2 Battery Module(s)

1. Load the battery modules on the base as per Section 1.2.
2. Secure the batteries on the left and right sides using the provided M4 Screws as shown.

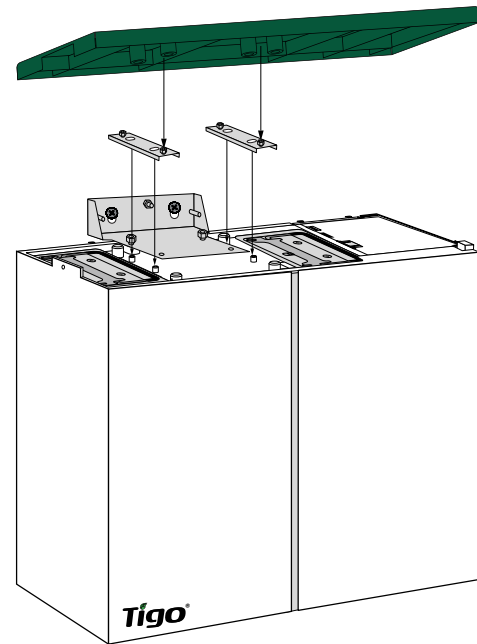




1. Secure battery bracket on top of Battery1.
2. Mark mounting holes on wall.
3. Remove mounting bracket from Battery1 and drill out the holes.
4. Reinstall the battery bracket and secure to Battery1.
5. Secure mounting bracket to wall using appropriate mounting hardware. Lag bolts and wall anchors provided.

Battery1 is the battery that connects to the EI BMS.

2.4 Extension batteries (if applicable)

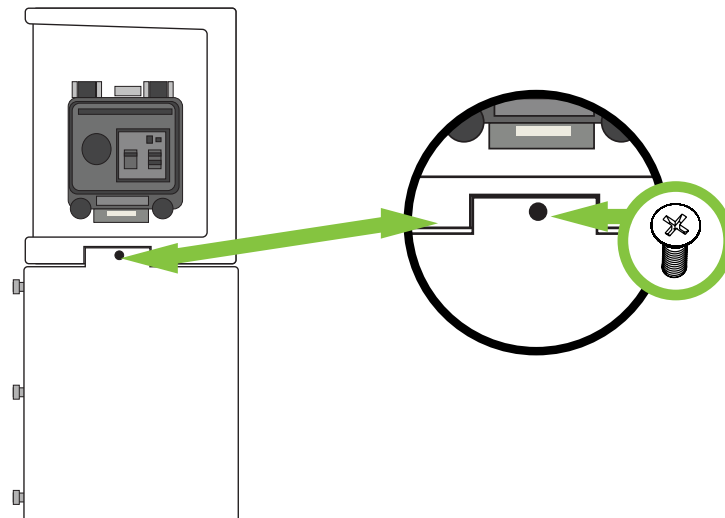


1. Follow the same procedure as above to install the battery base and the wall mount bracket.
2. Install the two smaller cover brackets on top of the battery module.
3. Press down and secure the top cover onto the battery.

2.5 EI BMS Installation

Note: This step is provided for reference. Continue to the EI Inverter Quick Start Guide to proceed with the rest of the installation. Come back to this step once the EI Inverter and EI Link have been installed.

1. Place the BMS on the top of Battery1.
2. Secure the BMS with M4 Screw on left and right side.



3. Electrical Connections

CAUTION - Check that all Disconnect switches are OFF before wiring. For personal safety always wear appropriate PPE.

Note: Ensure all prior steps are completed before making electrical connections.

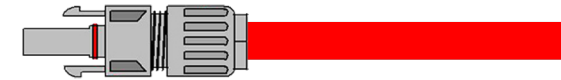
3.1 Battery Wiring

Open the BMS and all Battery wiring panels. Screws are located on the rear right side.

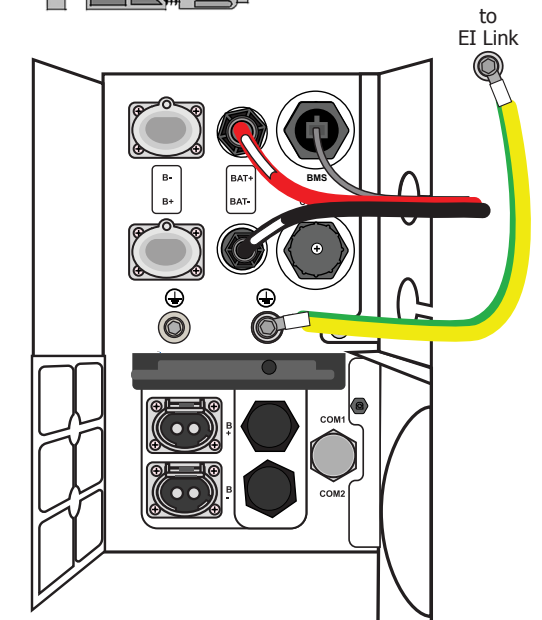
3.1.1 BMS to Inverter

1. Strip 15mm of insulation off the Charging Cables and crimp the connectors from inverter accessories package onto the ends.

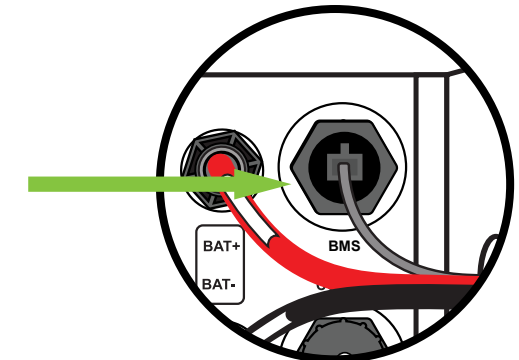
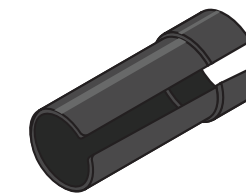
Note: Crimp the male connector to the red (+) cable. Crimp the female connector to the black (-) cable.



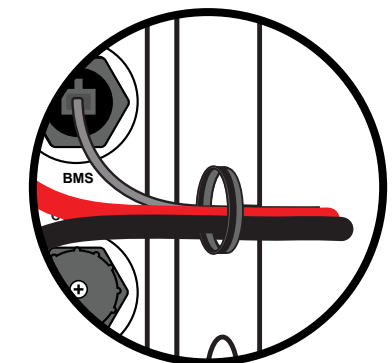
2. Connect the BMS to EI Inverter Charging Cables to the BAT+ and BAT- ports on the BMS.
3. Connect the other end of the BMS to EI Inverter Charging Cables to the corresponding BAT+ and BAT- ports in the EI Inverter.
4. Connect one end of the BMS Communication Cable (RJ45 ends) to the BMS port and the other end to the EI Inverter BMS port.
5. Connect BMS and EI Link grounding terminals with a properly sized (installer made) grounding cable.



6. Tighten the BAT+, BAT-, and communication cable connectors using the provided tightening wrench.



7. Place the wire protector ring around the BAT+, BAT-, and COM cables and then snap the ring into the BMS upper knockout.

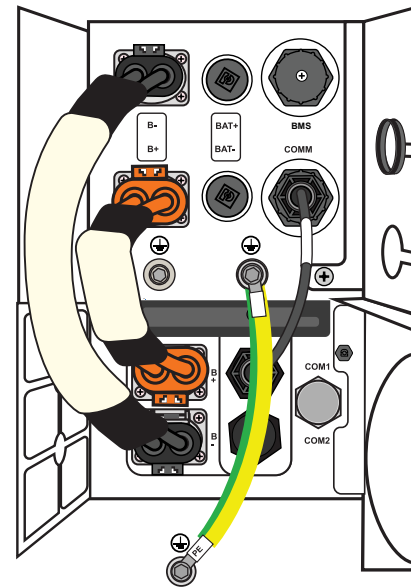


3.1.2 Battery Connection (One Battery)

Note: Previous step's wiring not shown

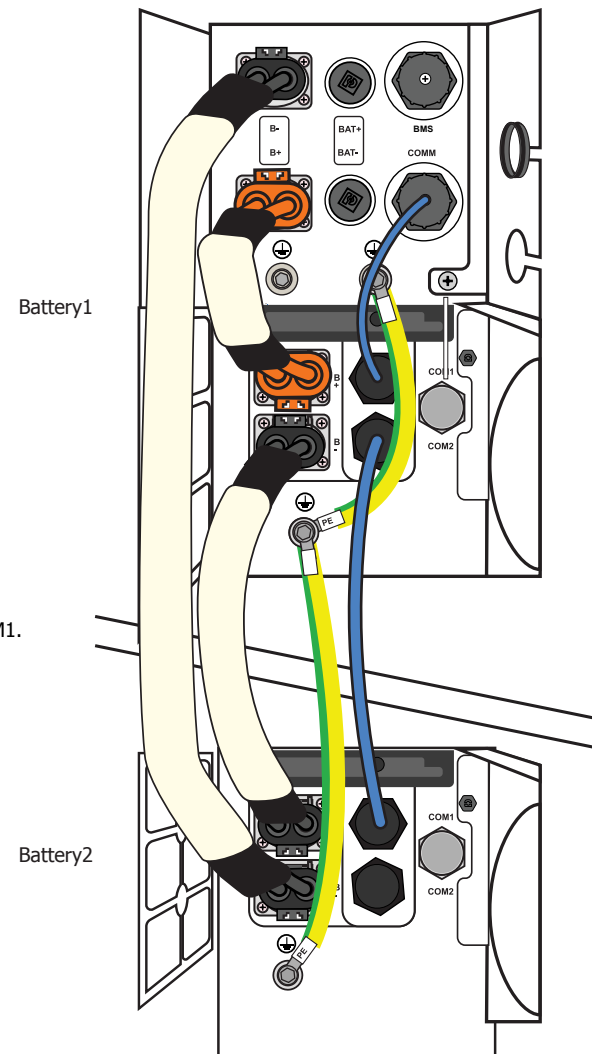
Connect the following ports between the BMS, EI Inverter, and Battery1:

1. Connect Battery Module Power Cable from BMS B+ to Inverter B+ port.
2. Connect Battery Module Power Cable from BMS B- to Inverter B- port.
3. Connect Battery COMM cable from BMS COMM to Battery1 COM1 port.
4. Connect BMS Ground wire from BMS ground screw to Battery1 ground screw.



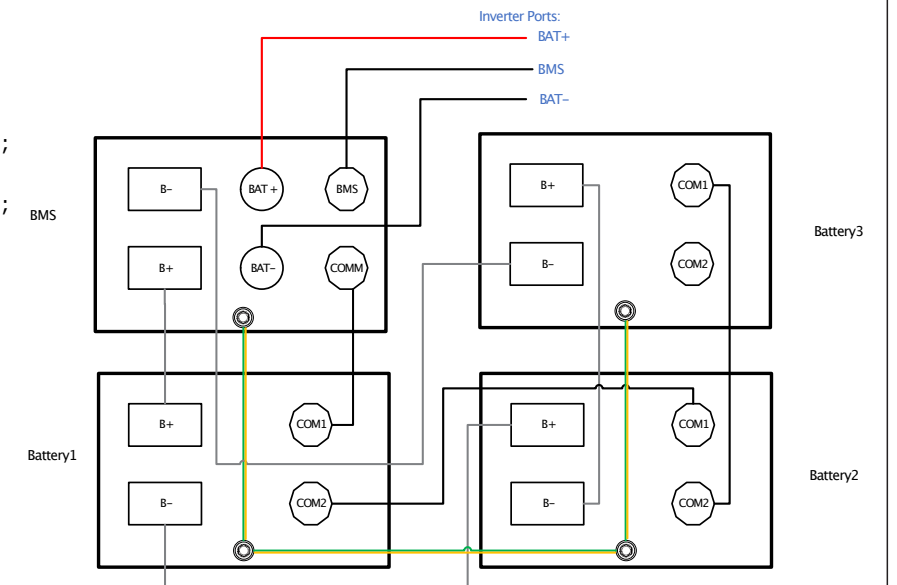
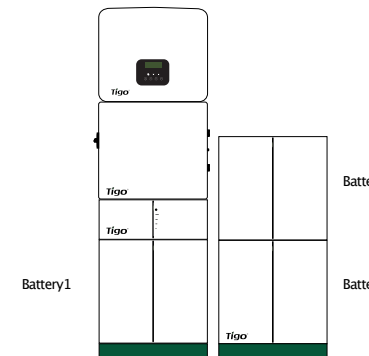
3.1.3. Battery Connections (Two Batteries)

1. BMS to Battery1 connections:
 - Battery Module Power Cable from BMS B+ to Battery1 B+.
 - Comm Communication Cable from BMS COMM to Battery 1 COMM1.
 - Grounding Wire from BMS Ground to Battery1 Ground.
2. BMS to Battery2 connections:
 - Battery Module Power Cable from BMS B- to Battery2 B-
3. Battery1 to Battery2 connections:
 - Battery Module Power Cable from Battery1 B- to Battery2 B+.
 - Comm Communication Cable from Battery1 COMM2 to Battery2 COMM1.
 - Grounding Wire from Battery1 Ground to Battery2 Ground.



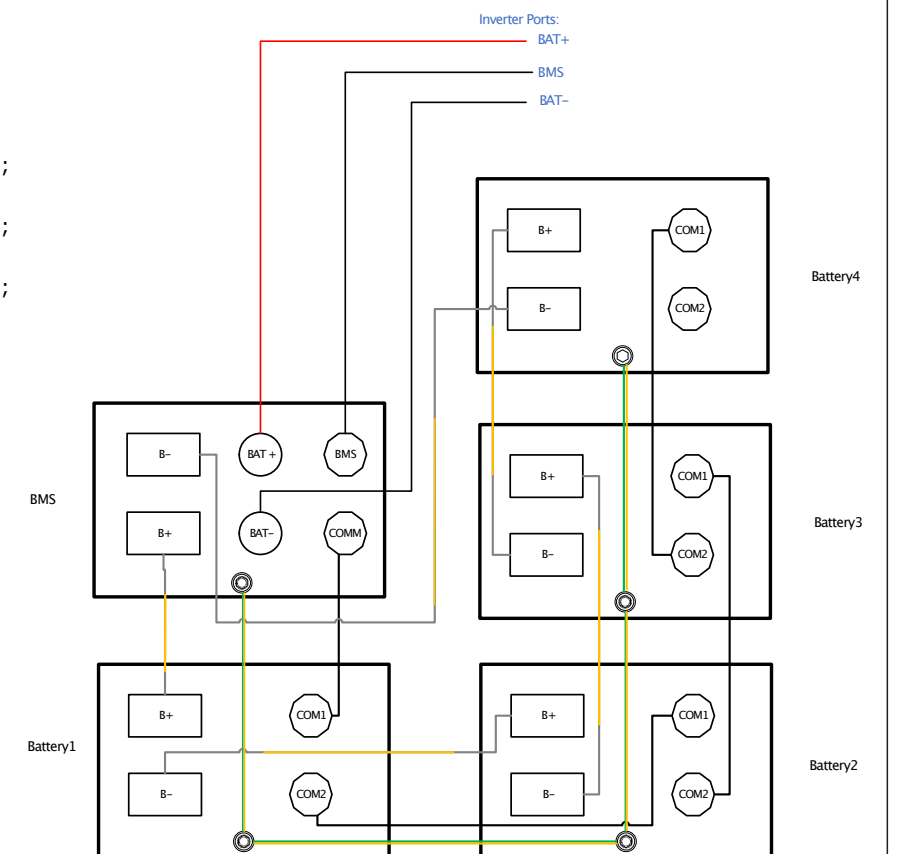
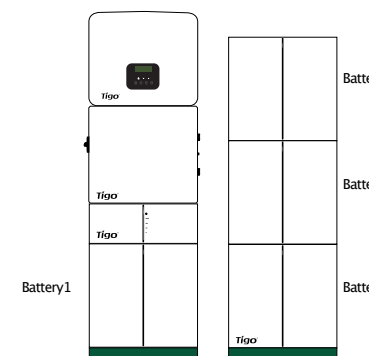
3.1.4 Three Batteries

1. BMS to Battery1: B+ to B+; COMM to COMM1; Ground to Ground
2. BMS to Battery3: B- to B-
3. Battery1 to Battery2: B- to B+; COMM2 to COMM1; Ground to Ground
4. Battery2 to Battery3: B- to B+; COMM2 to COMM1; Ground to Ground



3.1.5 Four Batteries

1. BMS to Battery1: B+ to B+; COMM to COMM1; Ground to Ground.
2. BMS to Battery3: B- to B-
3. Battery1 to Battery2: B- to B+; COMM2 to COMM1; Ground to Ground.
4. Battery2 to Battery3: B- to B+; COMM2 to COMM1; Ground to Ground.
5. Battery3 to Battery4: B- to B+; COMM2 to COMM1; Ground to Ground.



4. Your Customer Service Contact

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