EI Link - Single Phase

Quick Start Guide - TSS-1PS

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:

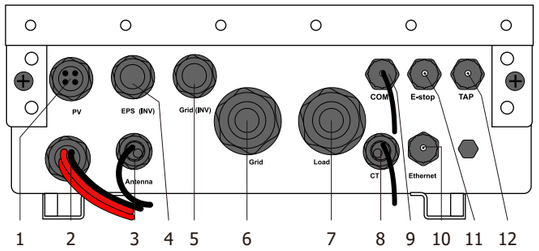
1. **EI Battery**
2. **EI Inverter**
3. **EI Link**
4. **EI BMS**

EI Inverter | EI Battery | EI Link

1.1 Package Contents

Index	Item	Quantity
1	EI Link	1
2	6mm² ferrules	5
3	16mm² ferrules	5
4	16mm² ring terminal	1
5	Flange nut	4
6	Wall anchor, washer, lag bolt	2
7	Grounding wire	1
8	Quick start guide	1
9	EI Link bracket	1
10	Bridge bracket	1
11	BMS bracket	1
12	Waterproof RJ45 connector (Spare)	3
13	CCA antenna	1
14	TAP	1

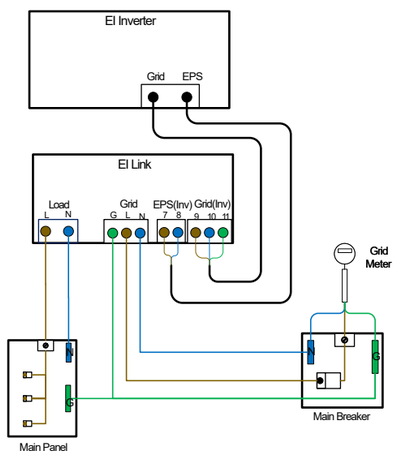
1.2 EI Link Overview



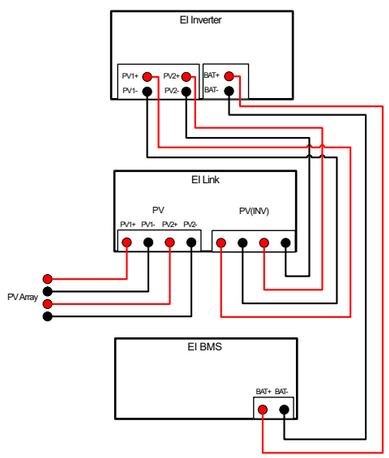
1. PV
2. PV (INV)
3. Antenna
4. EPS (INV)
5. Grid (INV)
6. Grid
7. Load
8. CT
9. COM
10. Ethernet
11. E-stop
12. TAP

1.3 Wiring Diagrams

AC Connections



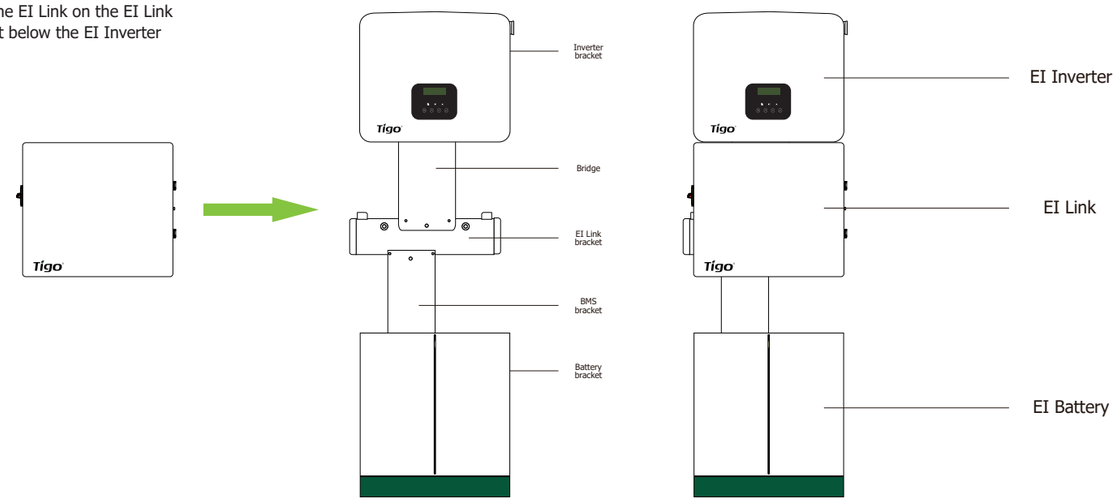
DC Connections



2. Installation

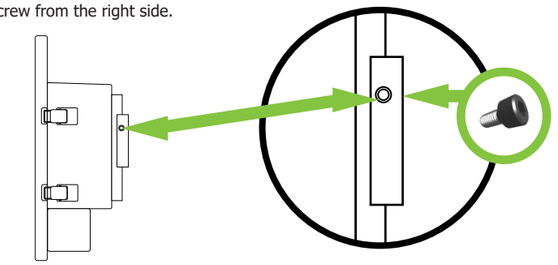
2.1 Mount EI Link

Slide the EI Link on the EI Link bracket below the EI Inverter



2.2 Secure EI Link

Remove the door and plastic cover of EI Link, slide it on to the middle bracket and lock it with the M5 screw from the right side.



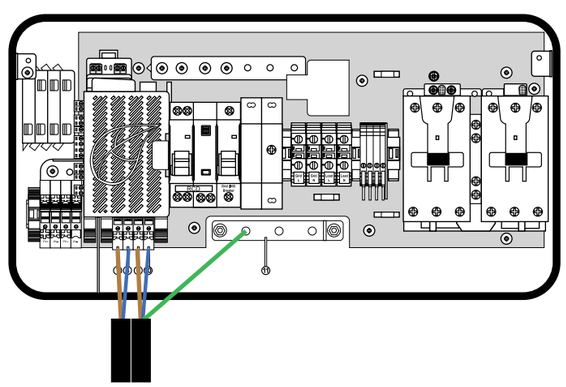
3. Electrical Connections

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

3.1 Connect Inverter to EI Link

1. Run the EPS and GRID cables from the inverter through the EPS (INV) and GRID (INV) strain relief ports on the bottom of the EI Link
2. Connect the inverter EPS cable to the EI Link EPS (INV) terminals. Torque to 1.5 NM.
3. Connect the inverter GRID cable to the EI Link GRID (INV) terminals. Torque to 1.5 NM.
4. Connect the inverter GRID grounding cable to the grounding bar. Torque to 1.5 NM.

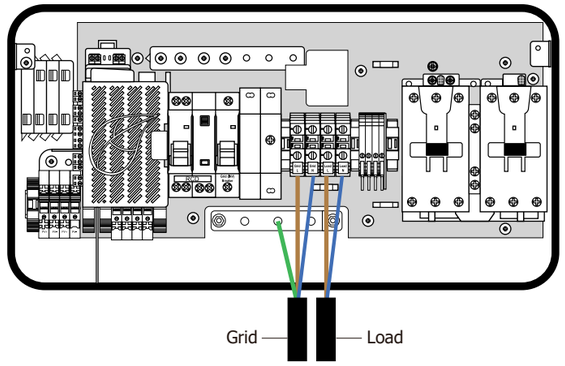
EPS (INV)		Grid (INV)		
7	8	9	10	11
Line (L)	Neutral (N)	Line (L)	Neutral (N)	Ground (PE)



3.2 GRID and Load

1. Run the utility grid conductors from a breaker on the main panel into the EI Link GRID strain relief port.
2. Run the conductors from the backup load panel into the EI Link LOAD strain relief port.
3. Strip the 10mm of insulation off all wire ends and crimp them with the provided 16mm² ferrules
4. Connect the wires to the corresponding terminals numbered 7 to 10 accordingly
5. Crimp the grounding cable with provided 16mm² grounding terminal
6. Connect the grounding cable to the grounding bar. Torque to 1.5 NM

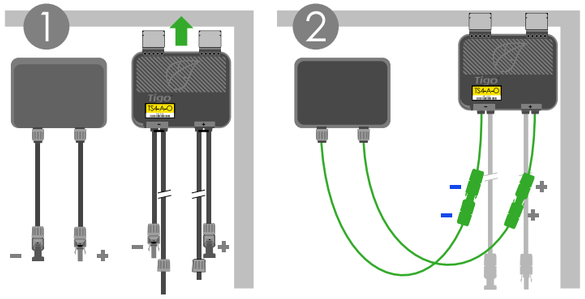
Grid			Load	
L	N	Ground	L	N
Line (L)	Neutral (N)	Ground (PE)	Line (L)	Neutral (N)



3.3 TS4

⚠ **CAUTION - To prevent damage to the TS4, always connect PV modules to the TS4 input before connecting output conductors in the string. Refer to the TS4 Installation Manuals for the TS4 installation requirements.**

1. Install the TS4 module-level power electronics (MLPE) on the back of the PV modules.
2. Connect the PV module to the TS4 input conductors.
3. Connect the TS4 output conductors together to form a string.
4. If using the TS4-A-F/TS4-A-2F, no additional steps are necessary.
5. Remove each barcode sticker from the TS4-A-O and place in the grid on the last page of this document in the position and orientation of the module as it is in the array. If using the TS4-A-F/ TS4-A-2F, this step is not necessary.



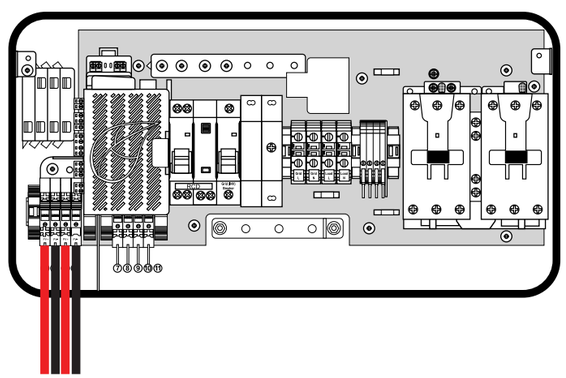
Scan here for the TS4 downloads

Downloads

3.4 Connect PV Array

1. Run the PV array conductors through the EI Link strain relief port labeled PV
2. Strip 10mm of insulation and crimp ends with the provided 6mm² ferrules
3. Connect the PV ends to the appropriate PV terminals. Torque to 1.5 NM.

PV			
1	2	3	4
PV 1+	PV 1-	PV 2+	PV 2-



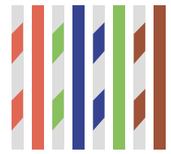
3.5 TAP

1. Using CAT5/6, crimp the wires onto the provided waterproof RJ-45 connector using the pin out diagram below.
2. Connect the other end of the wires to the corresponding terminals in the TAP as shown.

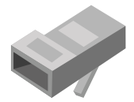
RJ45 Pin	Wire color (T568B)	Signal definition	Function
1	White/Orange	GND	DC - from CCA
2	Orange		
3	White/Green	VCC	DC + from CCA
4	Blue		
5	White/Blue	N/A	Not in use
6	Green		
7	White/Brown	RS485B	RS485 communication with CCA
8	Brown	RS485A	

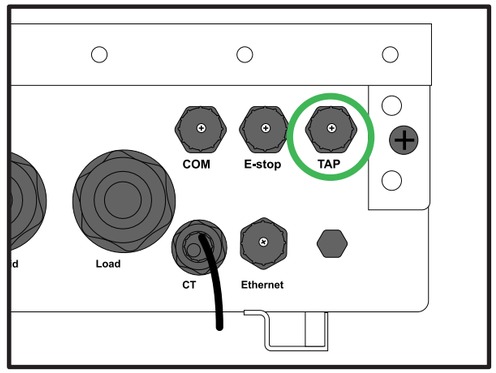
T568B

1 2 3 4 5 6 7 8

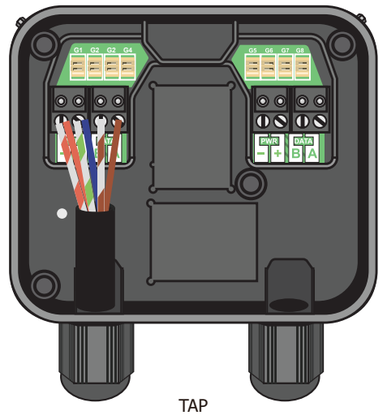


RJ-45 Male Plug





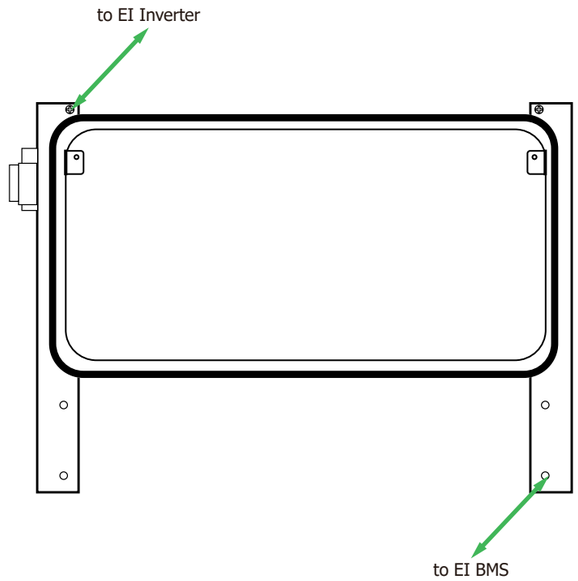
EI Link



TAP

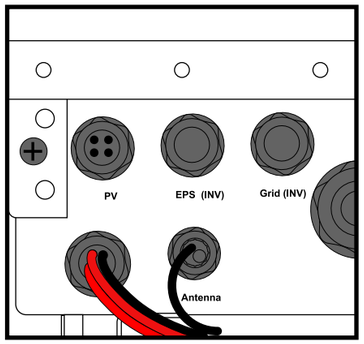
3.6 Connect External Grounding

1. Connect the grounding cable from the EI Inverter to the EI Link as shown.
2. Torque to 1.5 NM
3. Connect the grounding cable from the EI BMS (when installed) to the EI Link as shown.
4. Torque to 1.5 NM

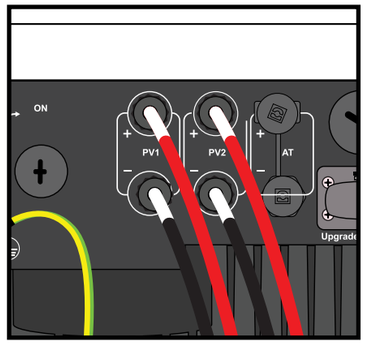


3.7 EI Link PV Connections to EI Inverter

- Connect EI Link PV (INV) preinstalled cables to EI Inverter PV1+/- and PV2+/-.



EI Link



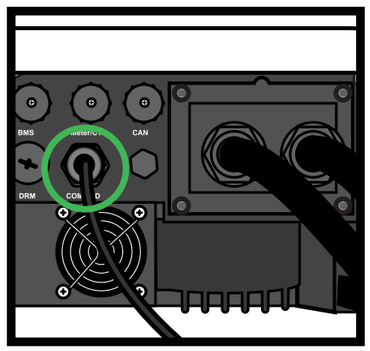
EI Inverter

4. Communication

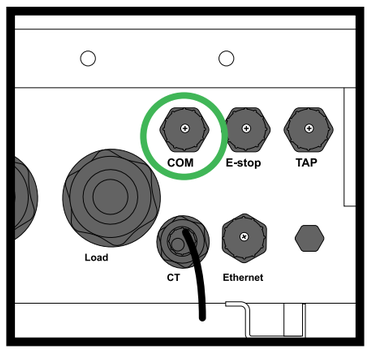
4.1 EI Link COM

Refer to the EI Inverter Quick Start Guide for the EI Link to Inverter communication connection. Connect the EI Link COM wire to the EI Inverter COM port.

Note: You must make this connection before powering up the system!



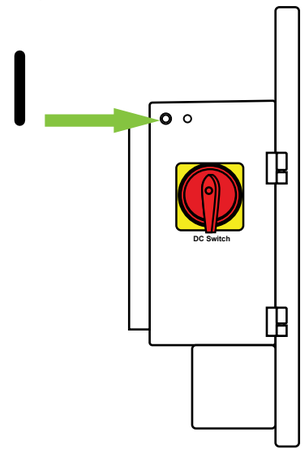
EI Inverter



EI Link

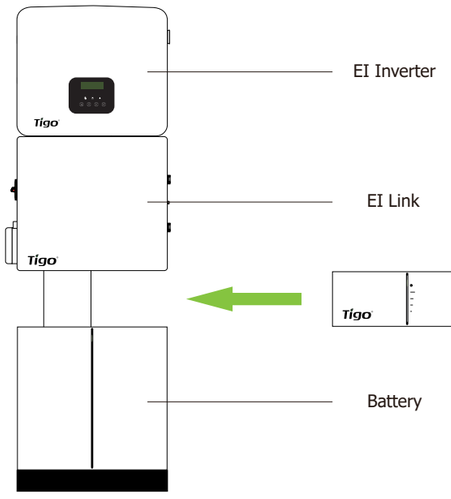
4.2 Connect the CCA Antenna

Carefully screw WiFi antenna in the WiFi antenna port on the top left corner of the EI Link.



5. BMS Installation

Note: Proceed to the Battery Quick Start Guide Section 2.5 for the next part of the installation.



EI Battery

Battery QSG QR Code

6. Your Customer Service Contact

Americas: +1 408 402 0802
International: 00800 2255 8446

https://support.tigoenergy.com/

EI Link

Community

Support