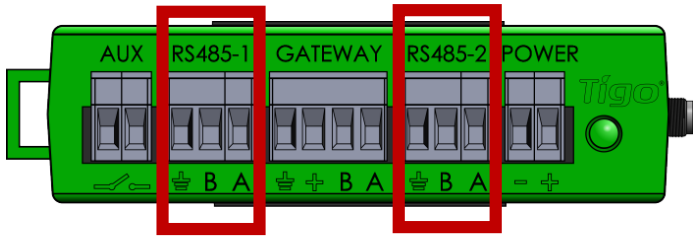
Tigo®

solis inverters

Tigo Cloud Connect or
Cloud Connect Advanced



Terminal (RS485-1 or -2)

B A

Solis-5K-2G-US

CC or CCA
RS485-1 or RS485-2

B — **Data -**

A — **Data +**

Solis Terminal

READ AND SAVE THESE IMPORTANT SAFETY INSTRUCTIONS

LETHAL VOLTAGE MAY BE PRESENT IN ANY PV INSTALLATION

Follow all inverter installation instructions during the following installation process

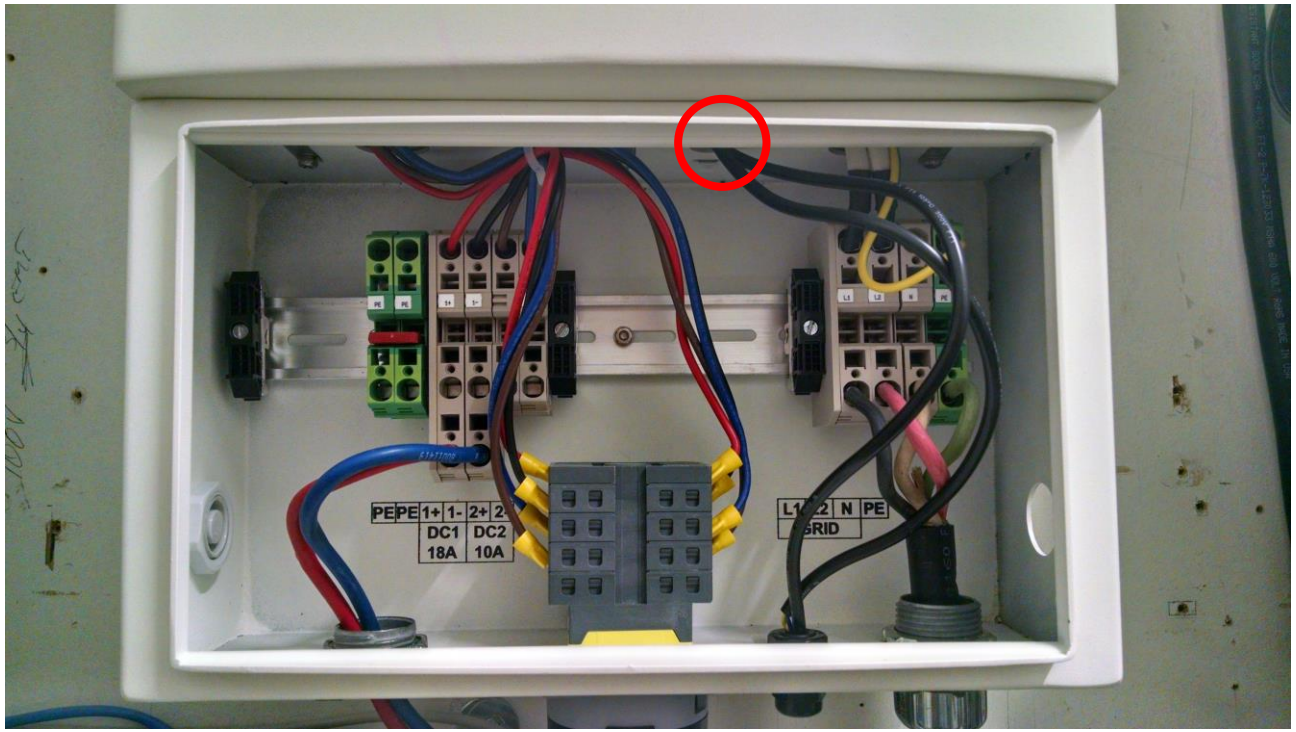
For Solis 5K-2G Installation and Operation Instructions, click here

- This manual contains important instructions for installation and maintenance of Tigo Energy® product Cloud Connect Advanced and related Tigo Energy software applications.
- Risk of electric shock, do not remove cover, disassemble, or repair, no user serviceable parts inside. Refer servicing to qualified service personnel.
- Before installing or using the Tigo Energy® System, please read all instructions and warning markings on the Tigo Energy products, appropriate sections of your inverter manual, photovoltaic (PV) module installation manual, and other available safety guides.
- Failure to adhere to these instructions may result in injury or death, damage to the system or voiding the factory warranty.
- To reduce risk of fire and shock hazard, install this device with strict adherence to National Electric Code (NEC) ANSI/NFPA 70 and/or local electrical codes. Use caution when handling PV module electrical cables
- Installation must be performed by trained professionals only. Tigo Energy does not assume liability for loss or damage resulting from improper handling, installation, or misuse of products.
- Remove all metallic jewelry prior to installing the Cloud Connect Advanced.
- Do not operate the Tigo Energy Module Maximizers or Smart Modules if they have been physically damaged. Check existing cables and connectors, ensuring they are in good condition and appropriate in rating. Do not operate Tigo Energy Module Maximizers or Smart Modules with damaged or substandard wiring or connectors. Tigo Energy Module Maximizers must be mounted on the high end of the PV module back-sheet or racking system, and in any case above ground.
- Do not connect or disconnect under load. Turning off the Inverter and/or the Tigo Energy products may not reduce this risk. Internal capacitors within the inverter can remain charged for several minutes after disconnecting all power sources. Verify capacitors have discharged by measuring voltage across inverter terminals prior to disconnecting wiring if service is required.

1. This guide is a walkthrough for connecting a Cloud Connect Advanced (CCA) to a Solis 5K-2G inverter for monitoring.

   Before beginning installation, ensure DC inputs and AC breaker for the inverter are turned off.
   Tigo is not responsible for damages or injuries that occur as a result of following this guide.

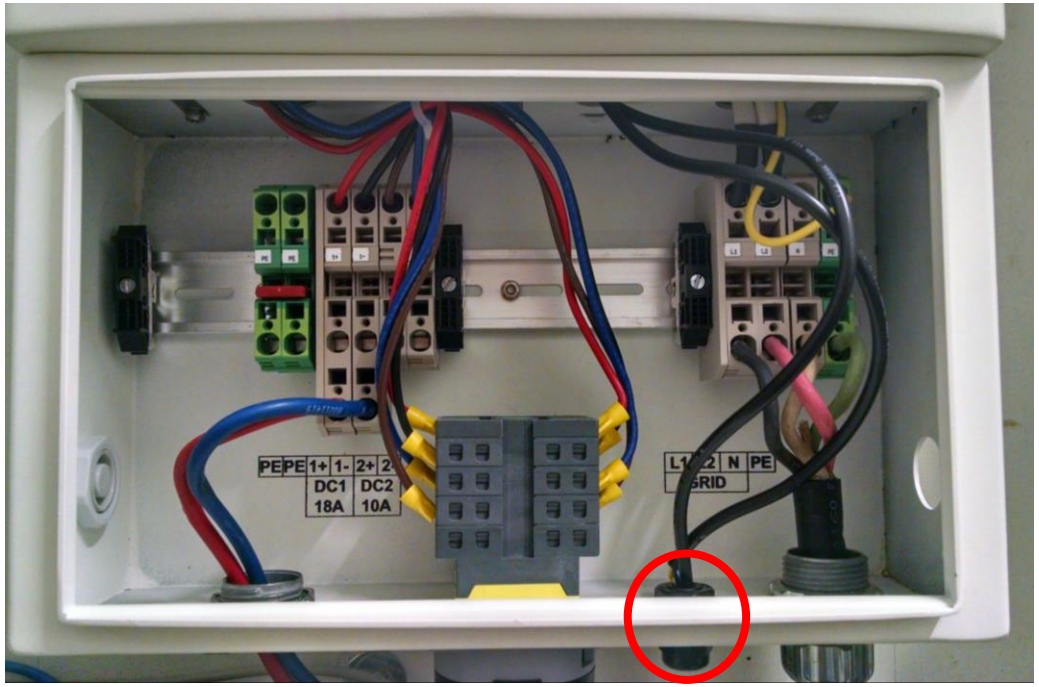
2. In the inverter compartment, locate two sets of wires coming out a small opening from the top of the inverter

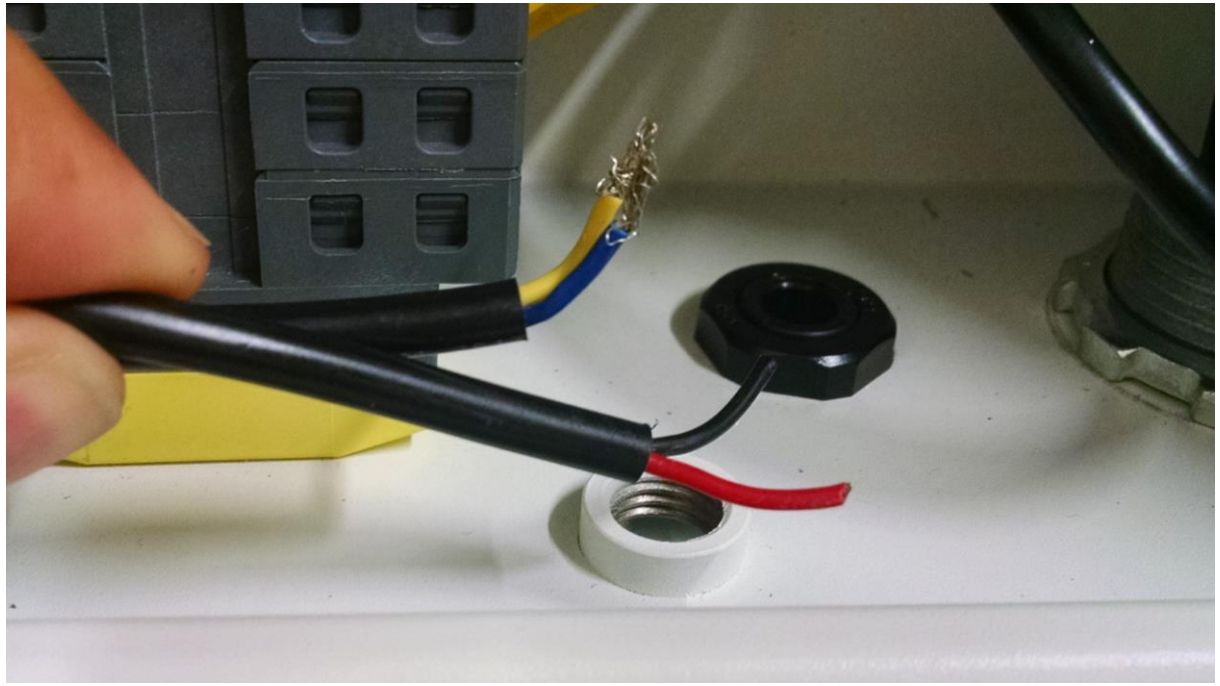


3. Cut both pairs of wires from the small connector at the bottom of the compartment, ensuring that at least 4cm of wire remains in case the wires have to be re-connected later.

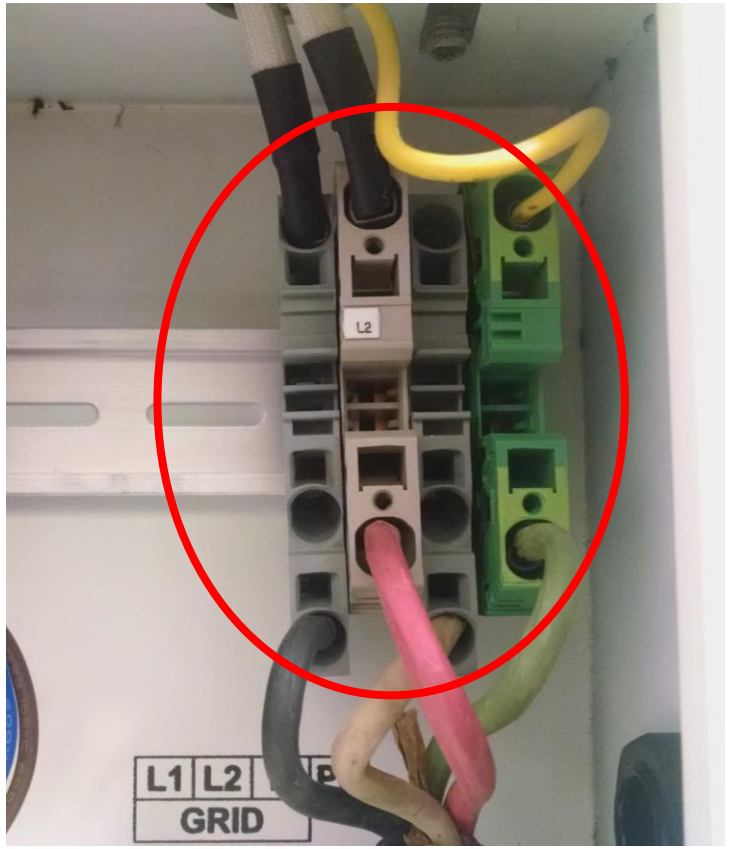
One is a pair of black and red wires, the other, a pair of blue and yellow.

4. Add a cap to the red wire before proceeding



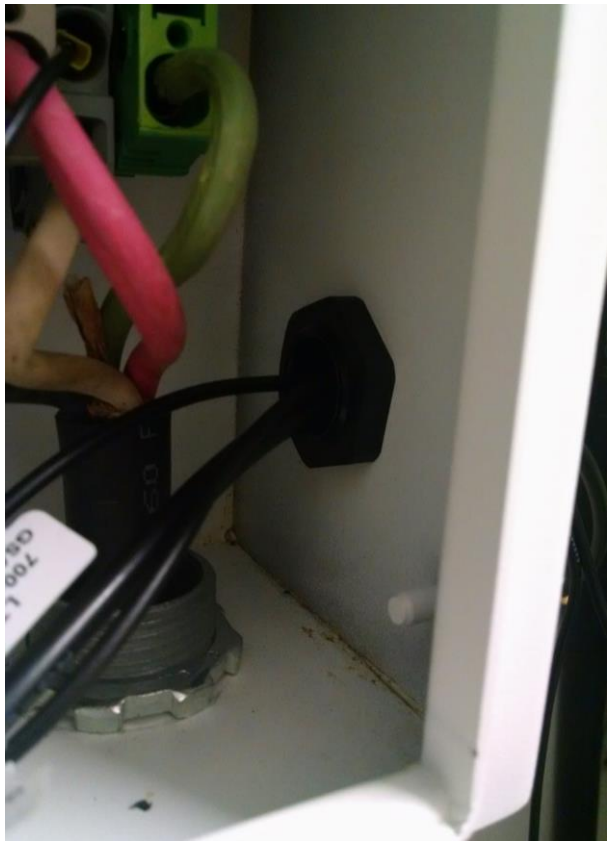


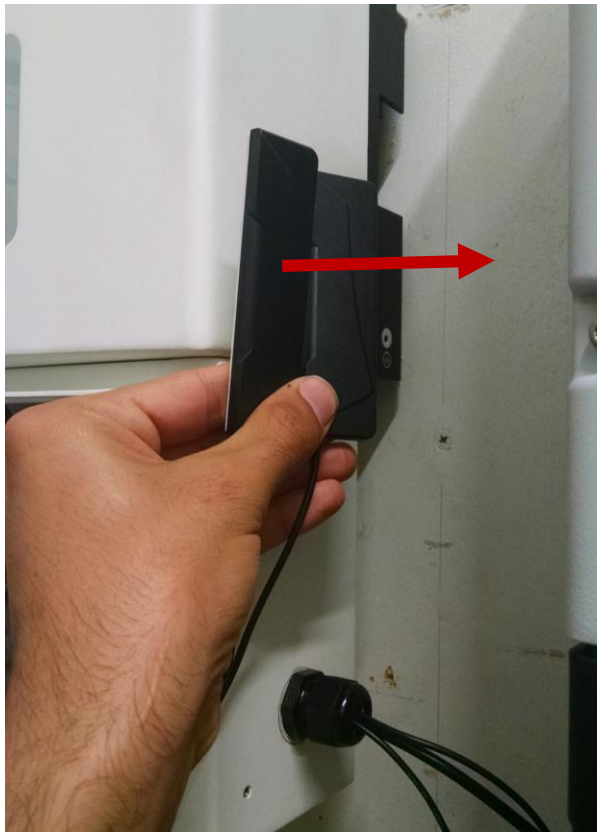
5. Follow provided instructions from Ginlong-Solis to replace AC terminal blocks (separate instructions) While replacing the terminal blocks, shift the terminal block set to the right about 0.5 to 1.0 inch to make room for the CCA.



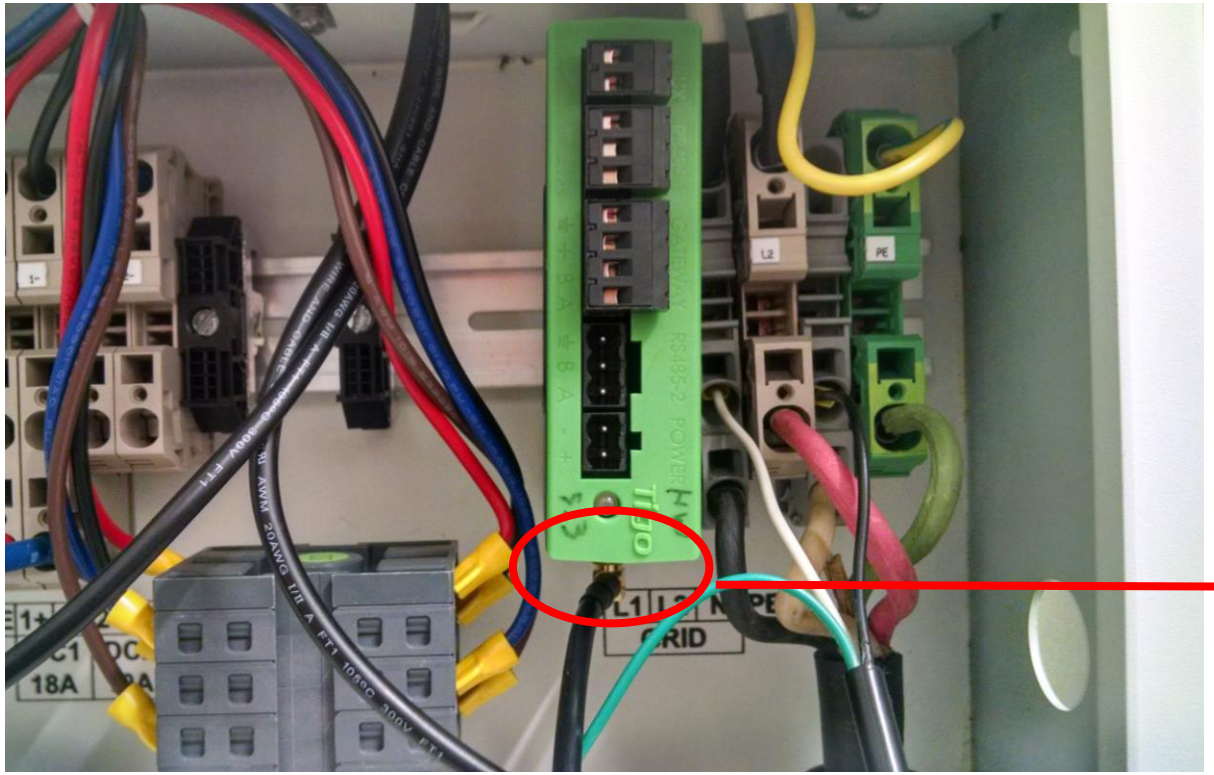
6. Add a cable gland to the punch-out hole on the right side of the inverter.
NOTE: Only use NEMA 4X compliant glands.

7. Run the three CCA antennae wires (1 WiFi, 2 cellular) into the gland, and affix the antennae to a nearby surface. (NOT the inverter)
Add a drip loop to the wires or add sealant to gland to make sure moisture does not enter the inverter.

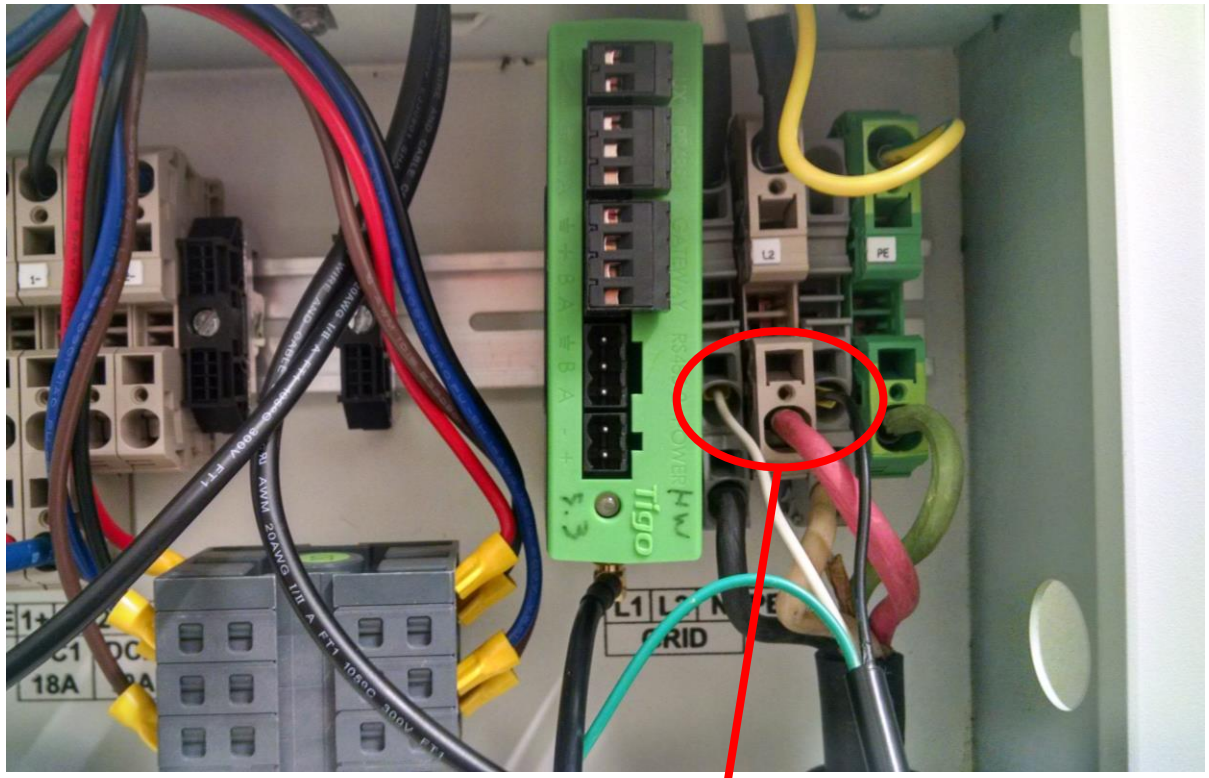




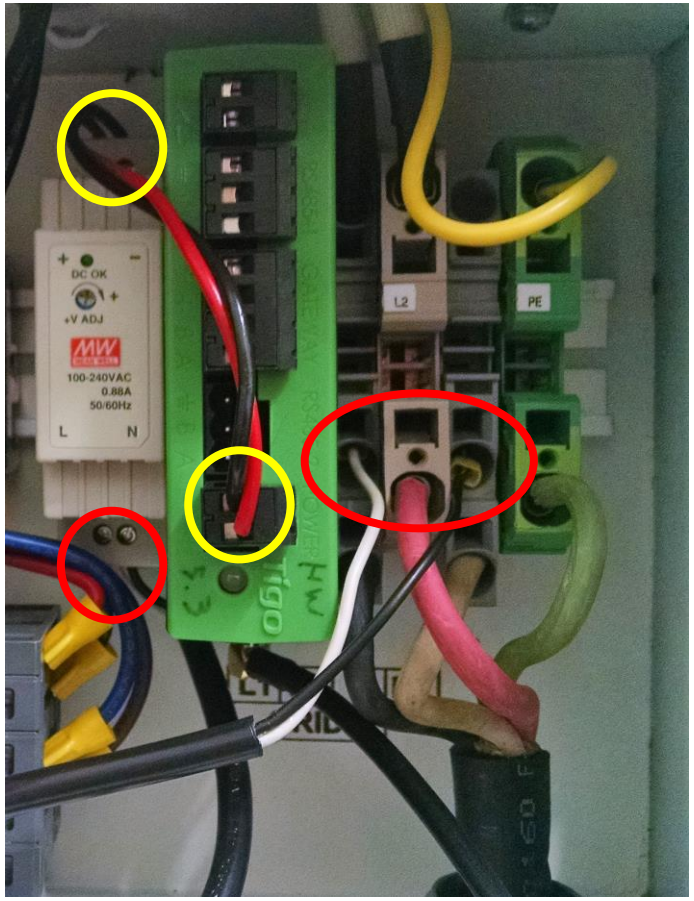
8. Connect WiFi and Cellular antennae (1 WiFi, 2 Cellular) to the three connectors on the bottom of the CCA and add the CCA to the inverter DIN rail.



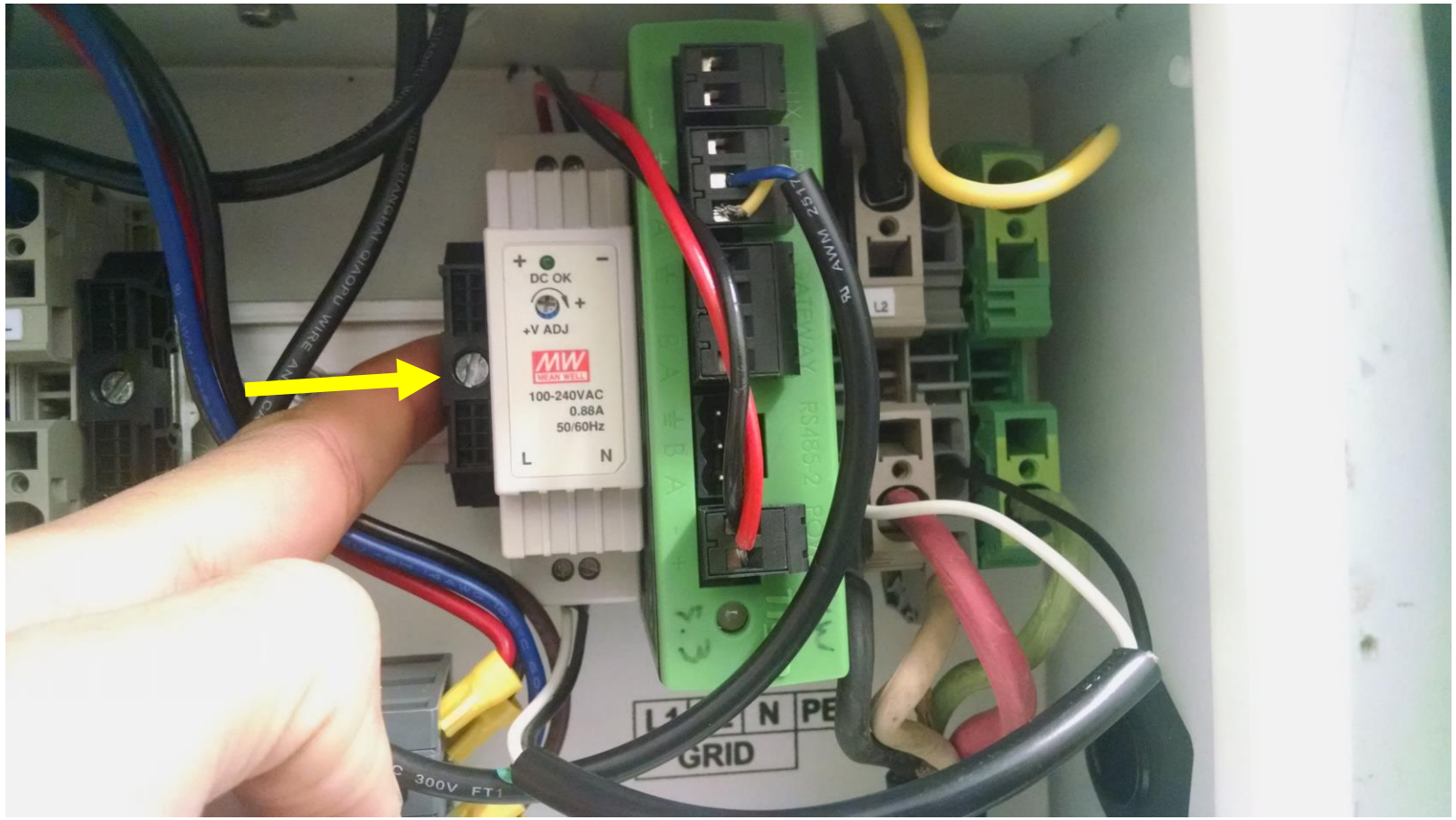
9. Wire the AC line and neutral from terminal blocks to the DIN rail power supply's L and N inputs, respectively. (see red circles)
10. Wire the DIN rail power supply's +/- outputs to the CCA's power input. (see yellow circles)
11. Add the power supply to the inverter DIN rail **after** completing 9. and 10. above for ease of installation.



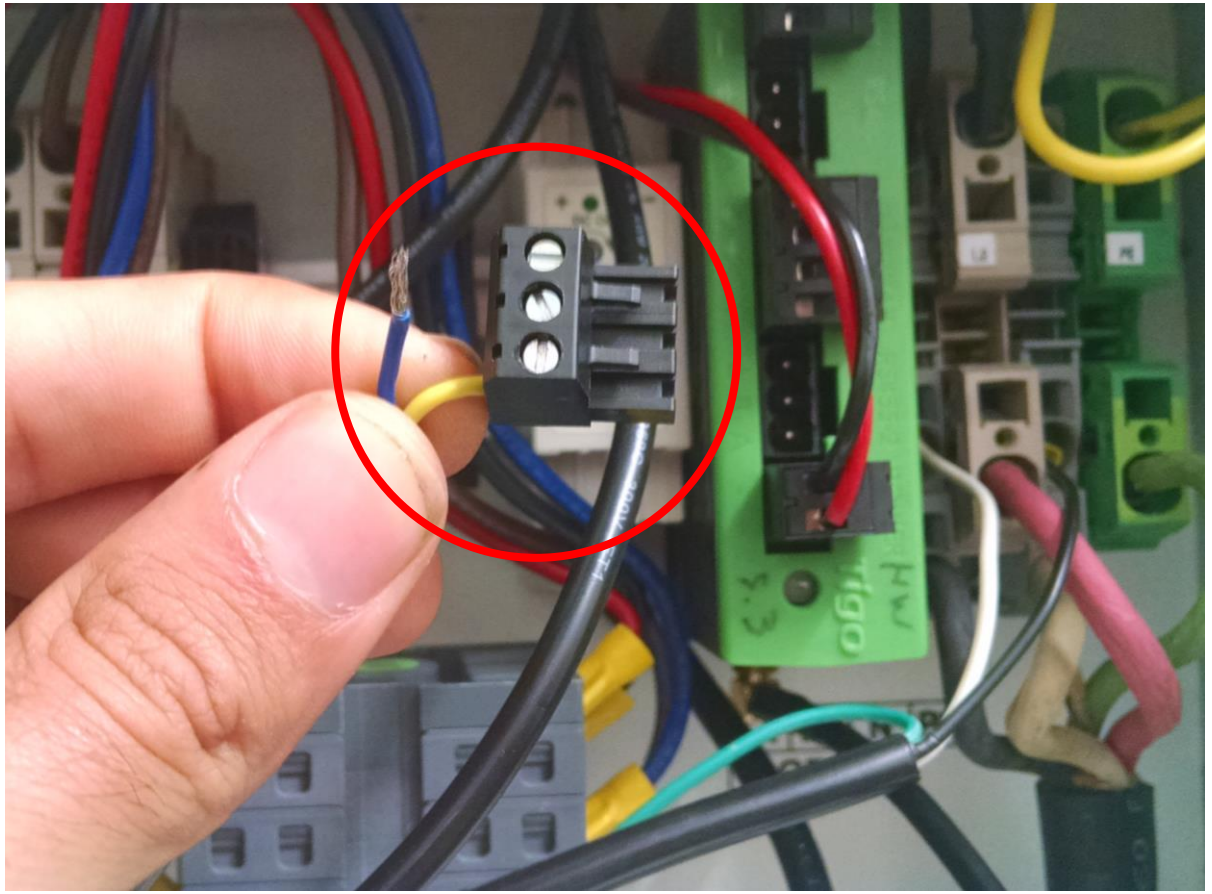
Wire to DIN rail power supply L and N,
*Wire **before** adding power supply to DIN rail for ease of installation*



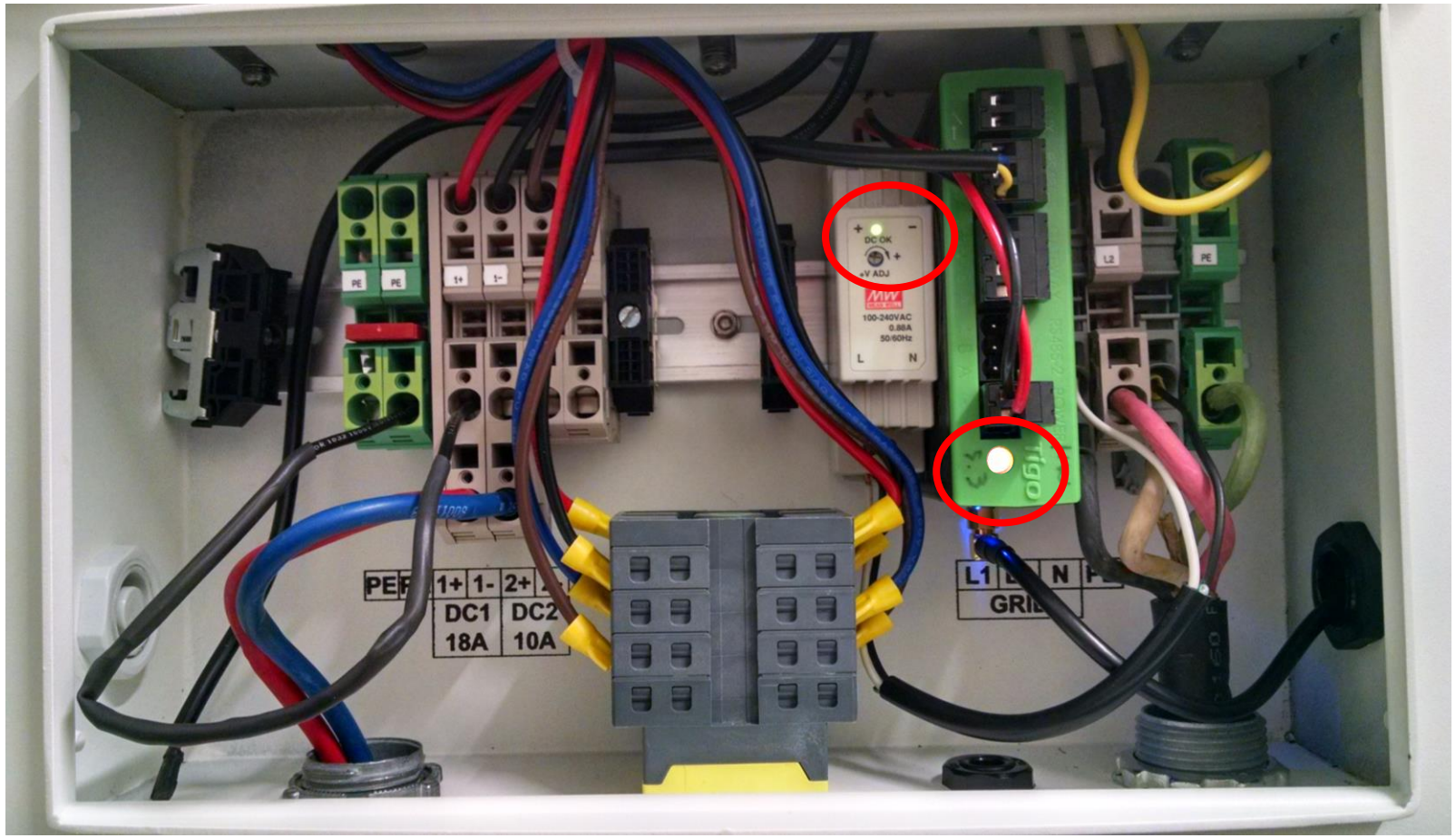
12. Ensure that a DIN rail endstop plate is flush against the DIN rail power supply, CCA, and terminal blocks



13. Locate the blue and yellow wires from step 2.
14. Wire the blue wire to B and the yellow wire to A of an RS485 port on the CCA.
NOTE: It may help to disconnect the RS485 connector from the CCA for the wiring process as shown below



15. Once these steps are completed, verify all connections are complete, and then power on the AC breaker and DC switch. The CCA and DIN rail power supply LEDs should shine as shown.
16. Double check blue/yellow RS485 connections, and then close the inverter compartment.



17. Congratulations! You have completed the installation!

You may now commission the system per Tigo instructions found here:

https://support.tigoenergy.com/hc/en-us/articles/229444247