

WIRING INSTRUCTIONS

2015-18

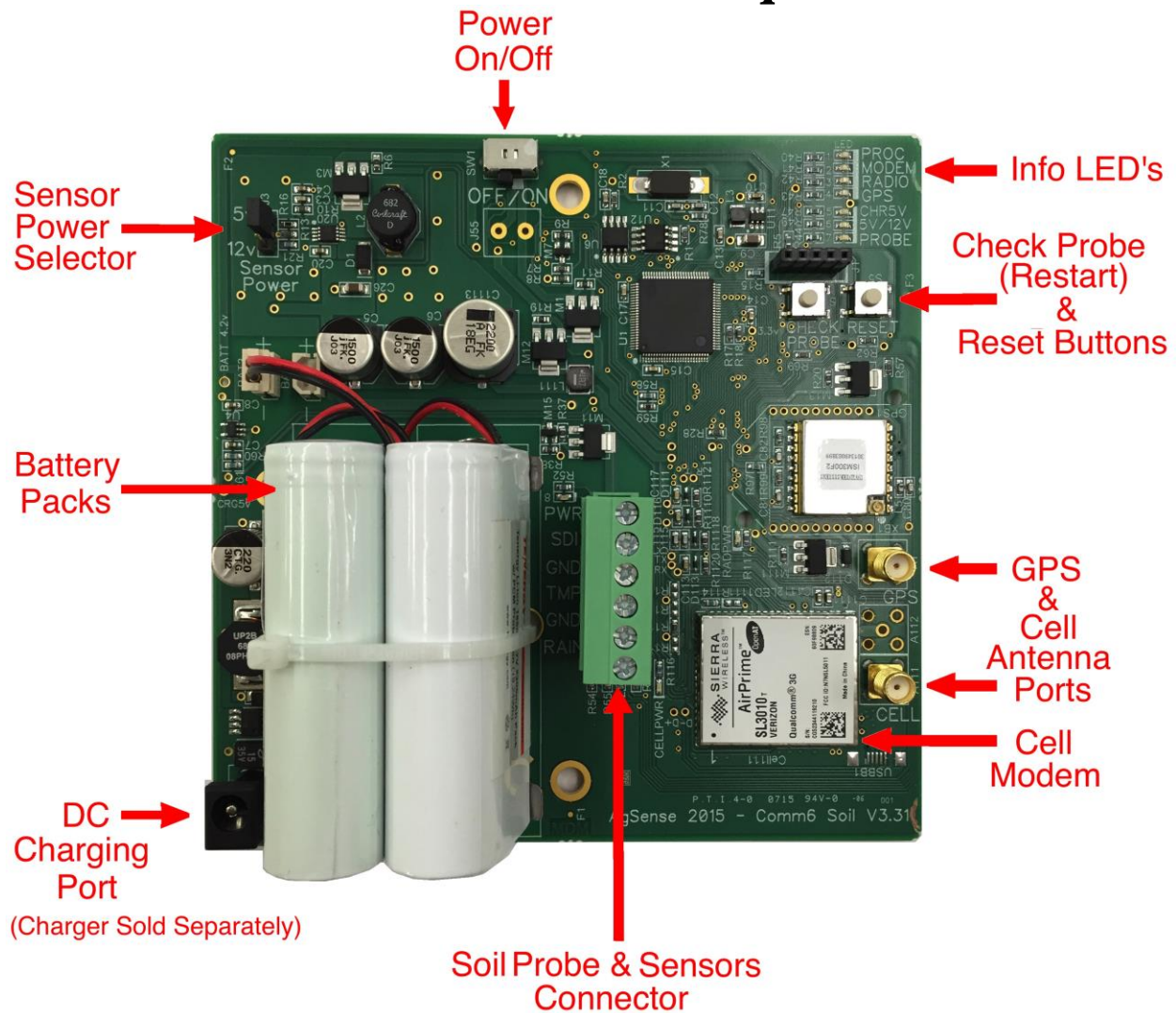
AQUA-TRAC Lite

SOIL MOISTURE MONITORING

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General Overview of the Aqua Trac Lite

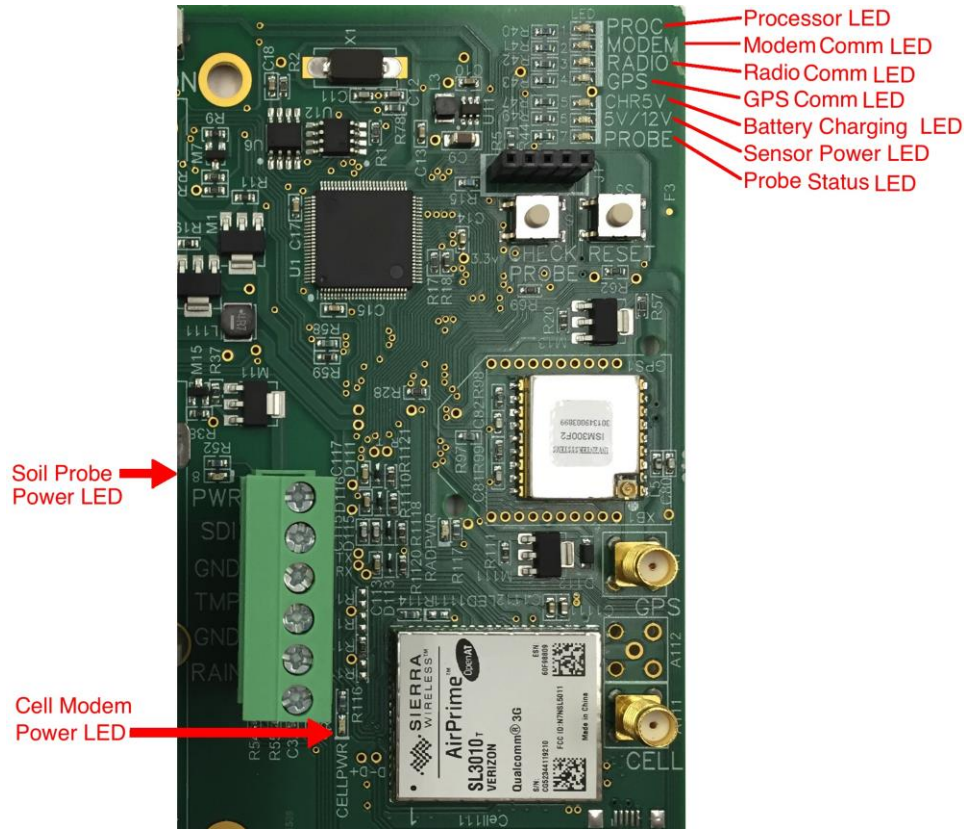


Note 1: Once all sensors are connected and unit is ready to run, you must turn the ON/OFF switch to the “ON” position, and go to the AgSense User page to finish setup and configuration of this unit to read the sensors that you have installed.

Note 2: The pins marked SENSOR POWER as shown above should have a jumper connecting the middle and 5v pins. This selects the power output to the sensors to be 5v. Do not move this jumper for any reason unless these instructions inform you to do so. Never Remove this jumper with the power switch turned on – turn the power switch off first or the attached sensors can be damaged.

Note 3: Only use the charging adapter supplied from AgSense to prevent damage to this unit. Batteries can take up to 48 hours to fully charge – please check the battery voltage to make sure they are fully charged (4.2v) at the “Batt 4.2v” hole right by the battery plug in.

Aqua Trac Lite LED Lights Overview



Note: All LED's are off most of the time due to the unit being “asleep” between taking readings. Below are the descriptions of each LED that comes on during a normal reading, or when the Check Probe button has been pushed:

PROC LED - This LED blinks at a steady rate to show the processor is working normally.

MODEM LED – This LED blinks when the cell modem is attempting to connect to a cell tower, and is on steady when the unit has a good cell connection.

RADIO LED – Not used unless unit has a radio installed – This LED blinks when the radio is attempting to connect to another unit with a radio installed, and is on steady when the unit has a good radio connection.

GPS LED – This LED blinks when the GPS is attempting to get signal, and is on steady when good GPS signal is found.

CHR5V LED – This light is on steady when power is applied to the DC Charging Port to charge the battery

5V/12V LED – This LED is on steady when the unit is taking readings from the sensors.

PROBE LED – This LED blinks when the unit is attempting to read data from the soil moisture probe, and is on steady when the unit has successfully received data from the soil moisture probe.

SOIL PROBE PWR LED – This LED is on steady when power is turned on to the soil probe.

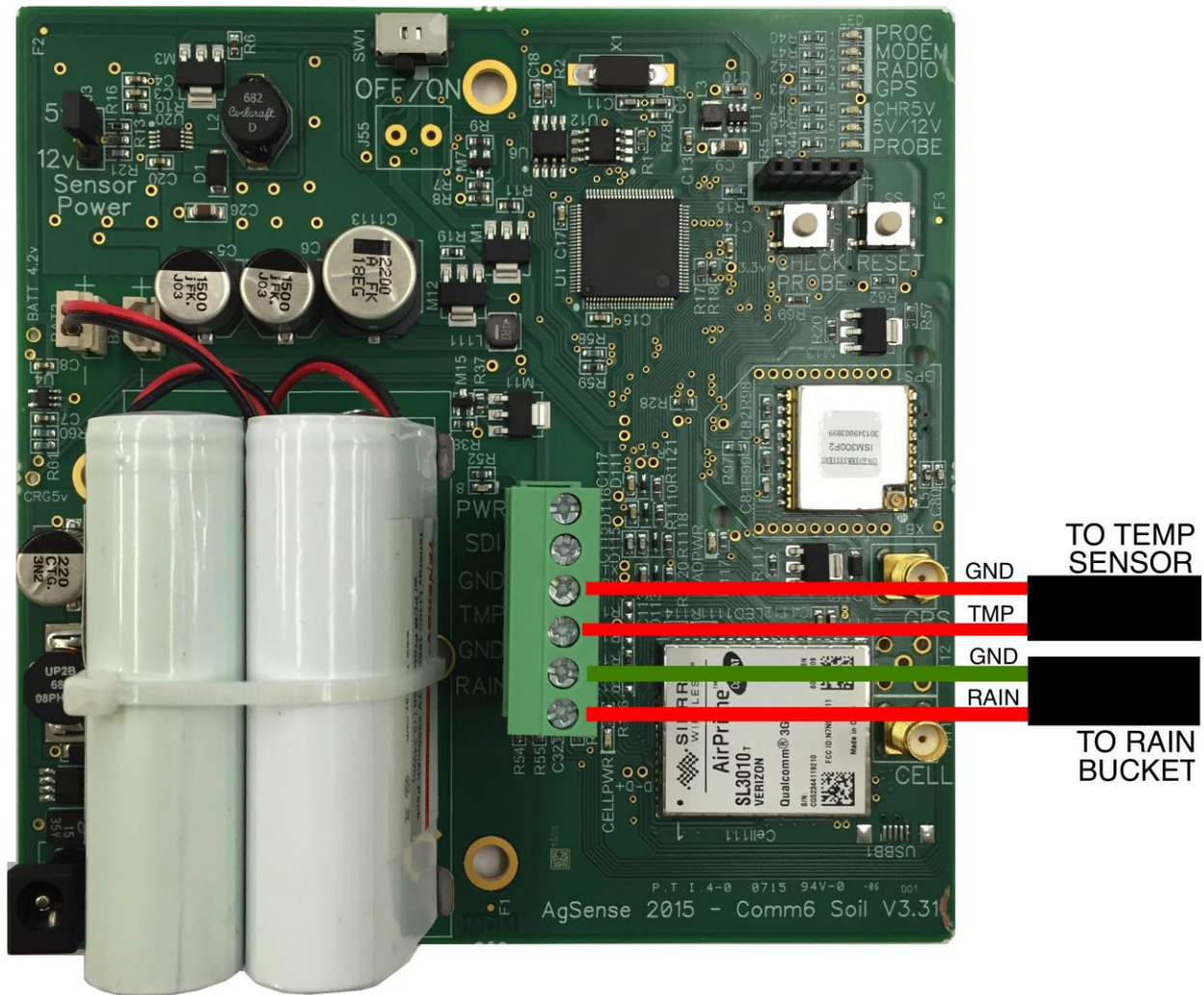
CELL PWR LED – This LED is on steady when the Cell Modem is turned on to send data.

Aqua Trac Lite Mounting Options



- The Aqua Trac Lite can be mounted on a T-post (as shown) or any other type of post with a diameter 1 ½” or less.
- Holes and Slots are available in two locations on the Aqua Trac Lite bracket that allow the installer to use any combination of U-bolts, Hose Clamps, or Large Zip Ties to attach the unit to a post.

Wiring a Rain Bucket or a Temperature Sensor to the Aqua Trac Lite Unit

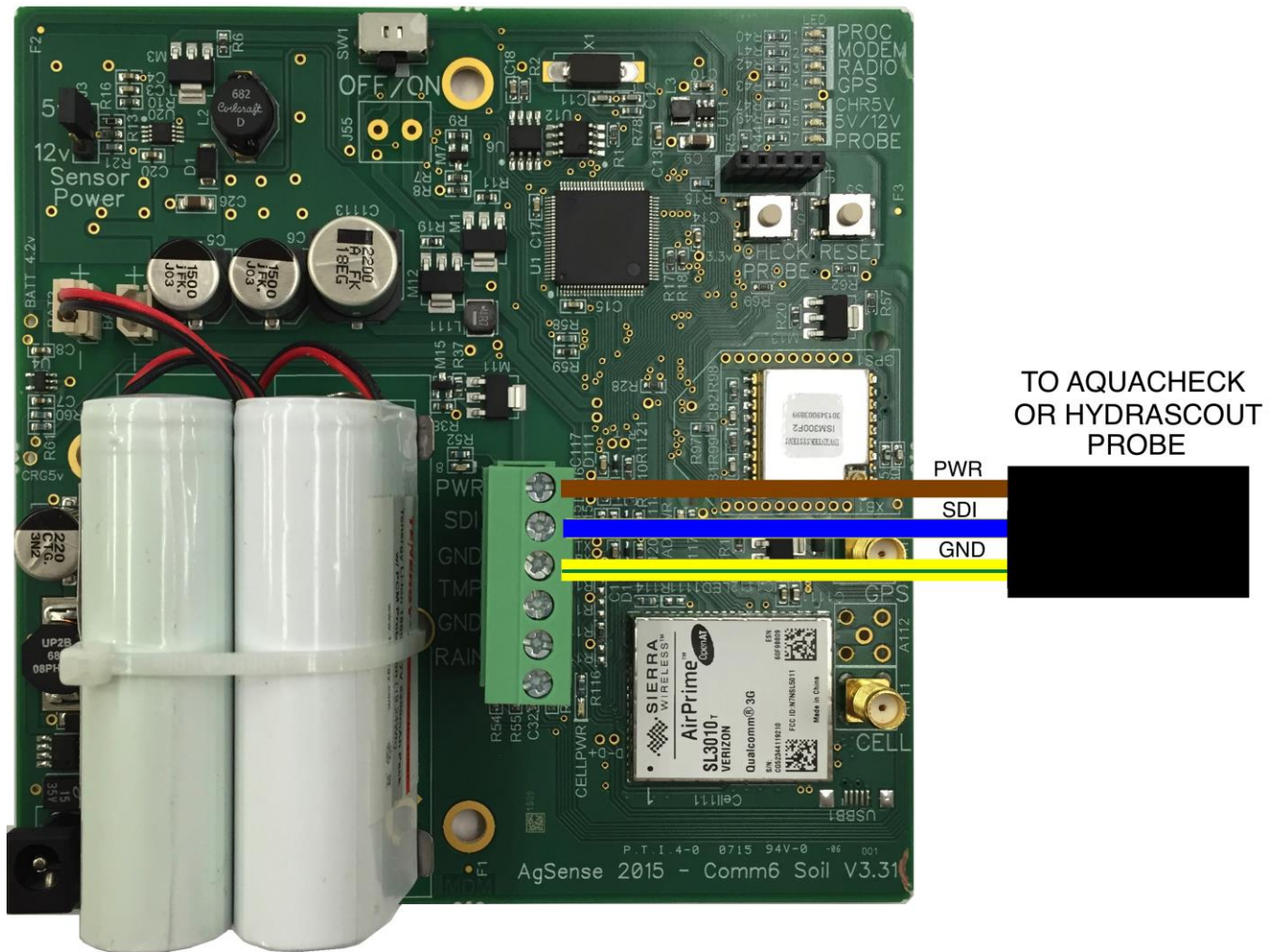


Wiring a Rain Bucket or Temperature Sensor:

1. Connect the Red wire from the Rain Bucket to the terminal marked RAIN as shown.
2. Connect the Green wire from the Rain Bucket to any terminal marked GND as shown.
1. Connect one Red wire from the Temp Sensor to the terminal marked TMP as shown.
2. Connect the other Red wire from the Temp Sensor to any terminal marked GND as shown.

NOTE: You can install both GND wires into the same terminal.

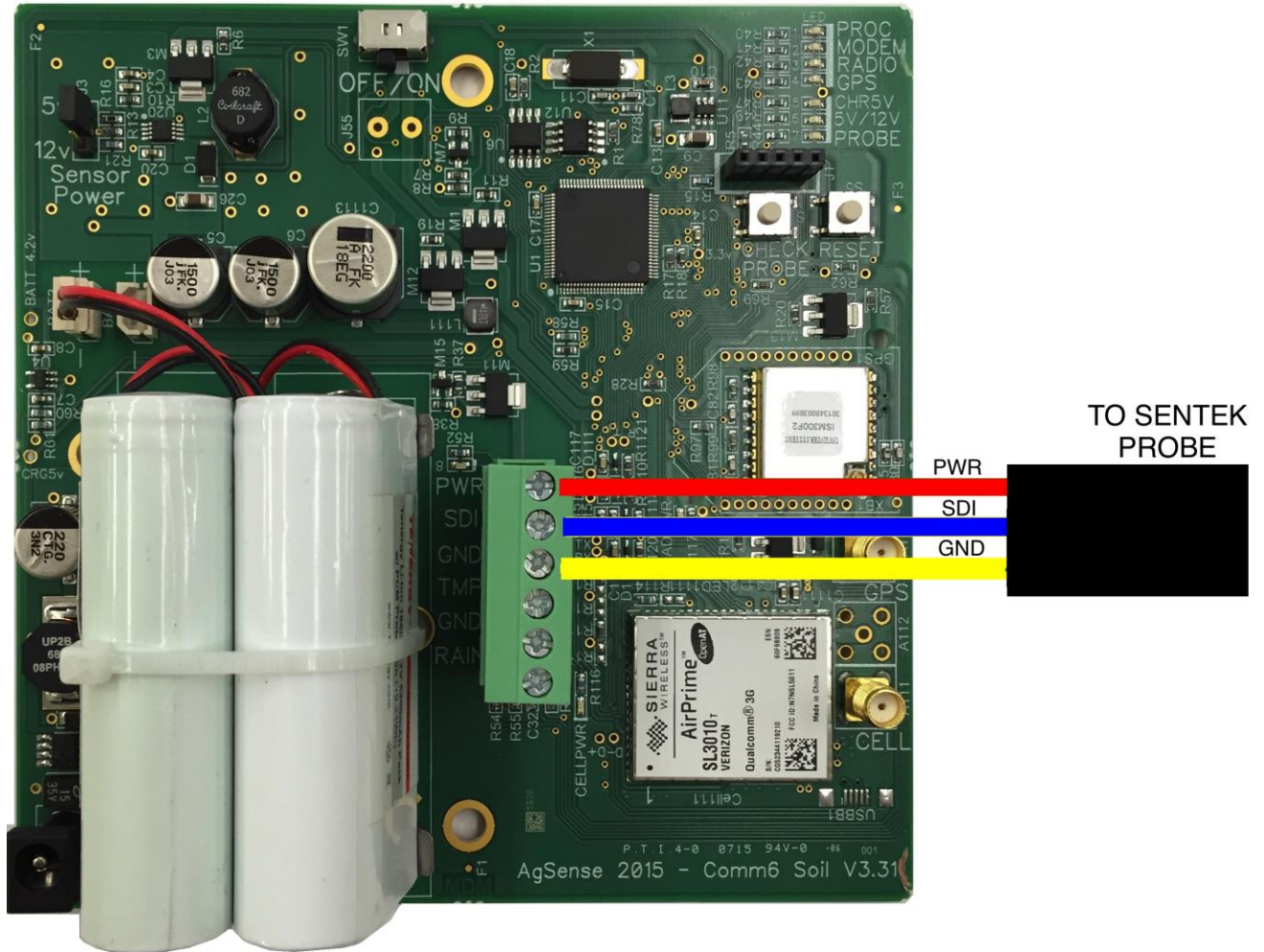
Wiring the AquaCheck, Hydrascout, or Wiseone probe to the Aqua Trac Lite Unit



Wiring the AquaCheck, Hydrascout or Wiseone probe:

1. Connect the Blue wire from the probe to the terminal marked SDI as shown.
2. Connect the Yellow/Green stripe wire from the probe to the terminal marked GND as shown above.
3. Connect the Brown wire from the probe to the terminal marked PWR as shown above.

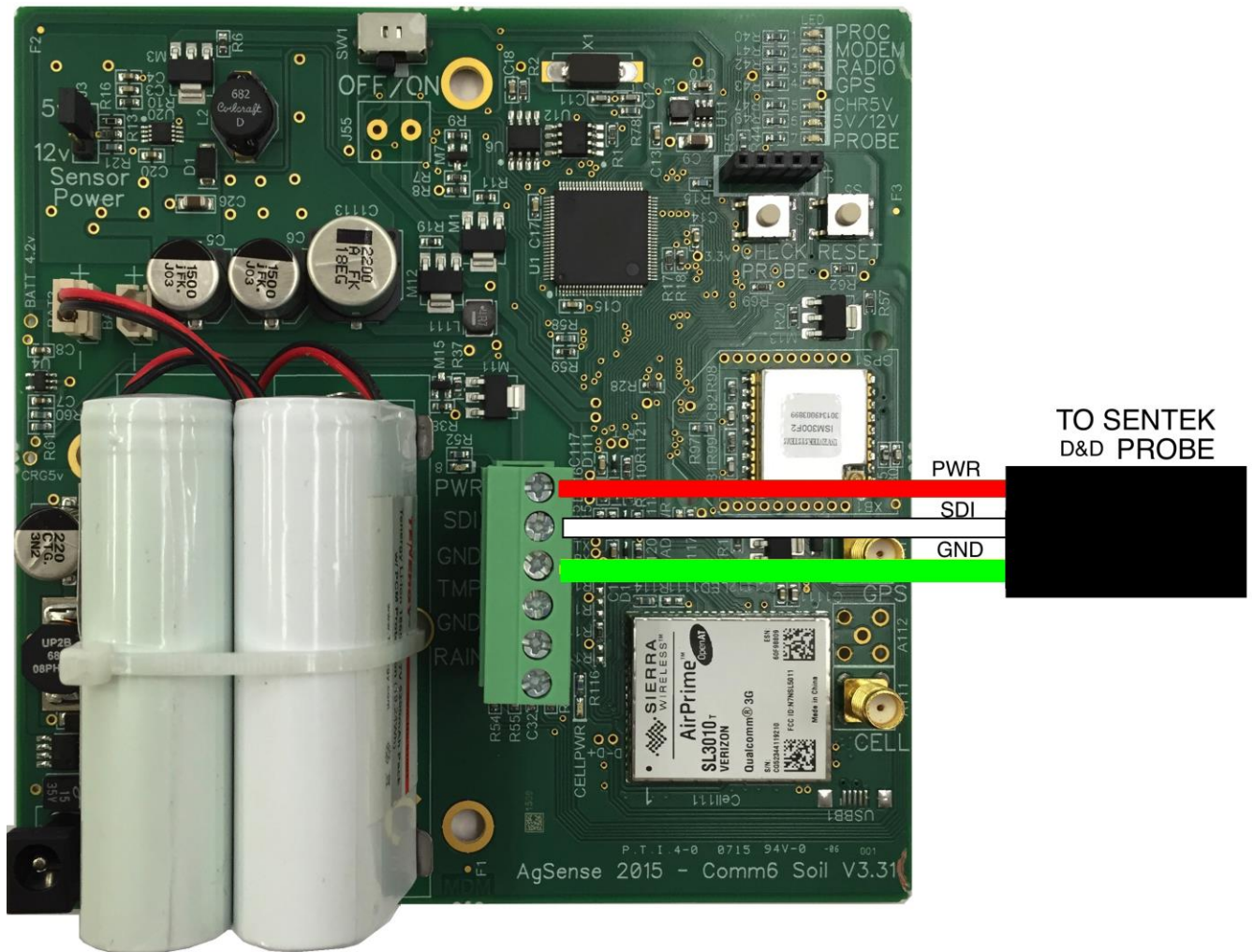
Wiring the Sentek soil moisture probe to the Aqua Trac Lite Unit



Wiring the Sentek probe:

1. Connect the Blue wire from the Sentek probe to the terminal marked SDI as shown above.
2. Connect the Yellow wire from the Sentek probe to the terminal marked GND as shown above.
3. Connect the Red wire from the Sentek probe to the terminal marked PWR as shown above.

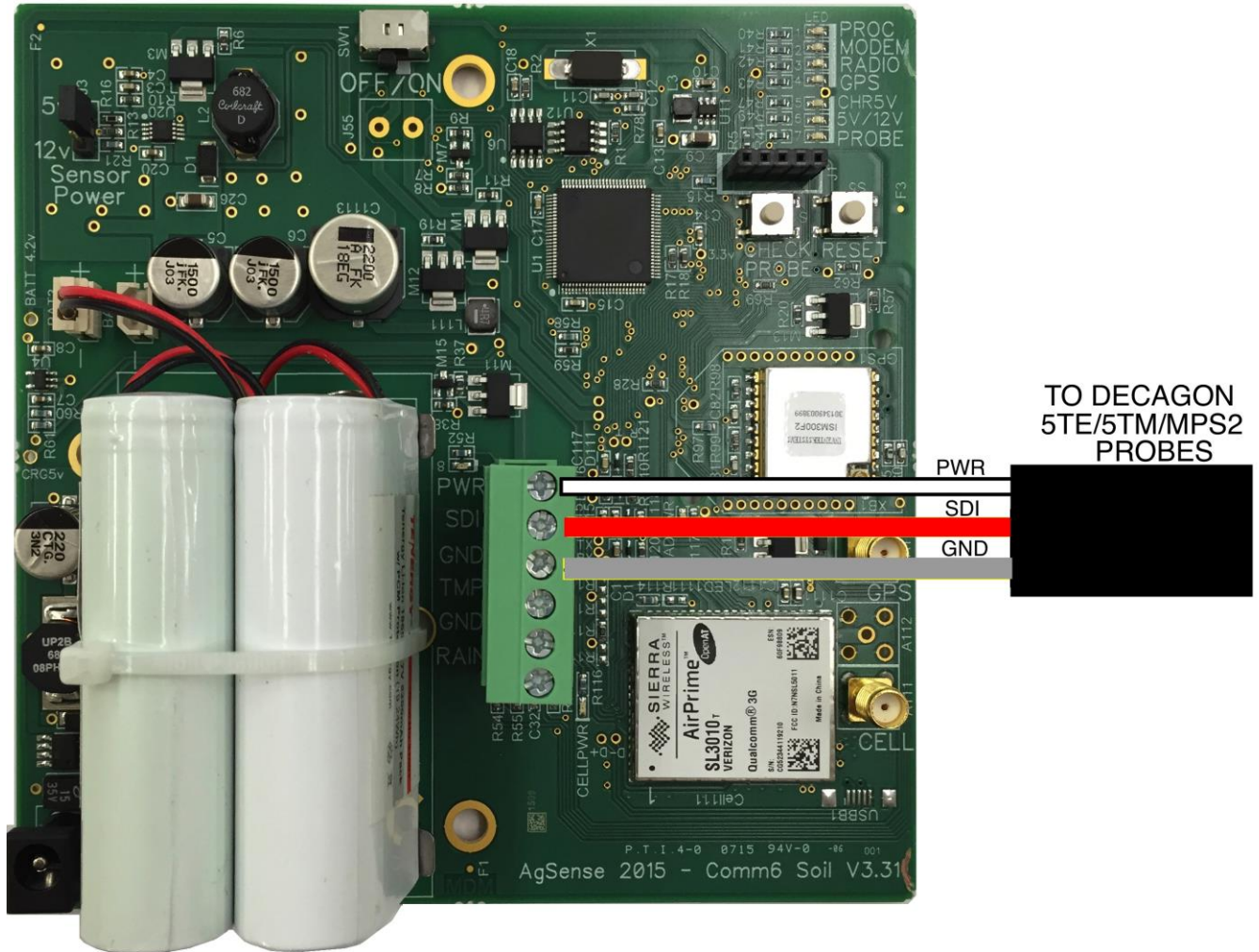
Wiring the Sentek Drill & Drop soil moisture probe to the Aqua Trac Lite Unit



Wiring the Sentek D&D probe:

1. Connect the White wire from the Sentek probe to the terminal marked SDI as shown above.
2. Connect the Green wire from the Sentek probe to the terminal marked GND as shown above.
3. Connect the Red wire from the Sentek probe to the terminal marked PWR as shown above.

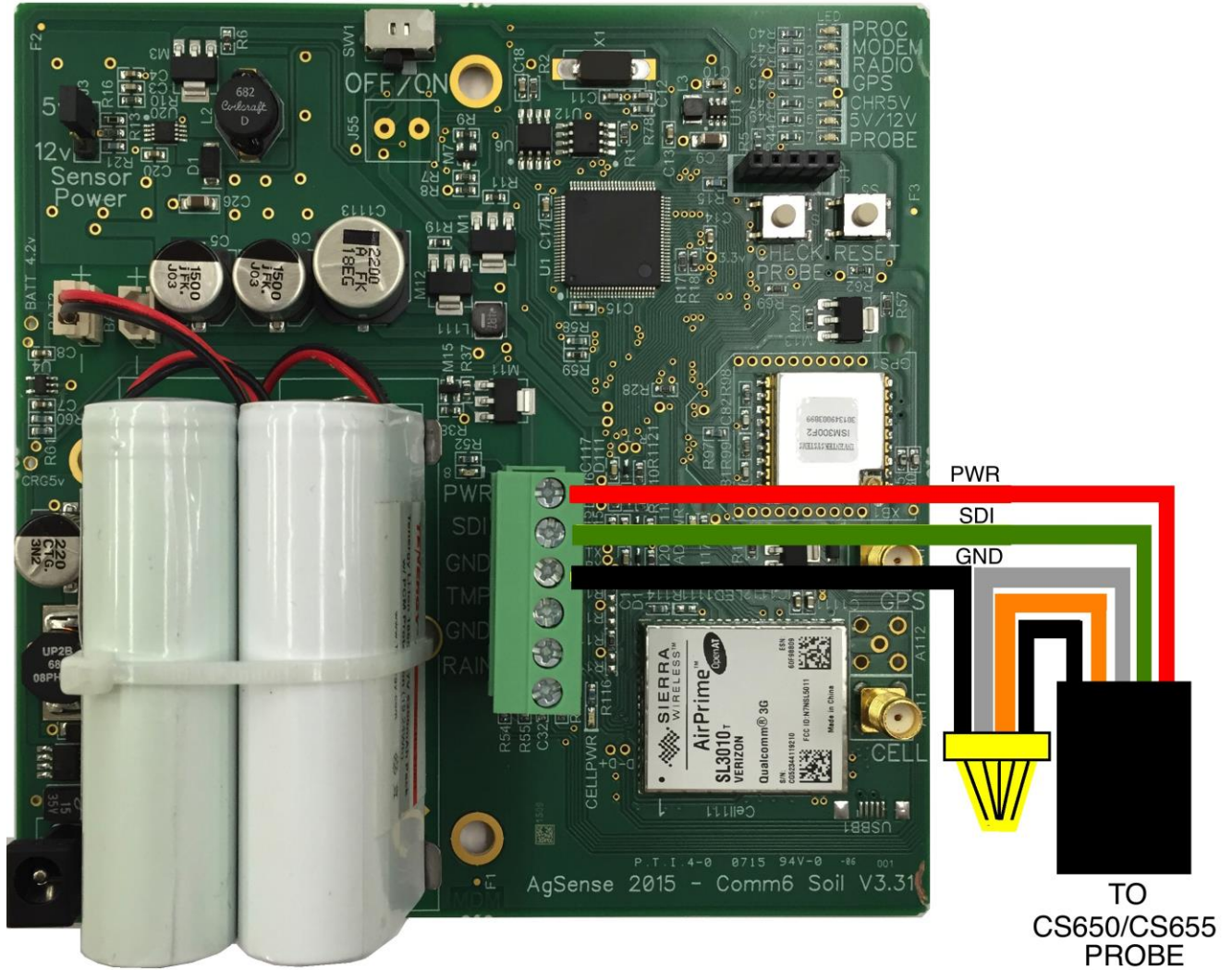
Wiring the Decagon 5TM, 5TE, or MPS-2 Sensors to the Aqua Trac Lite Unit



Wiring the Decagon 5TM, 5TE, or MPS-2 sensor:

1. Connect the Red wire from the Decagon Sensor to the terminal marked SDI as shown above.
2. Connect the Bare wire from the Decagon Sensor to the terminal marked GND as shown above.
3. Connect the White wire from the Decagon Sensor to the terminal marked PWR as shown above.

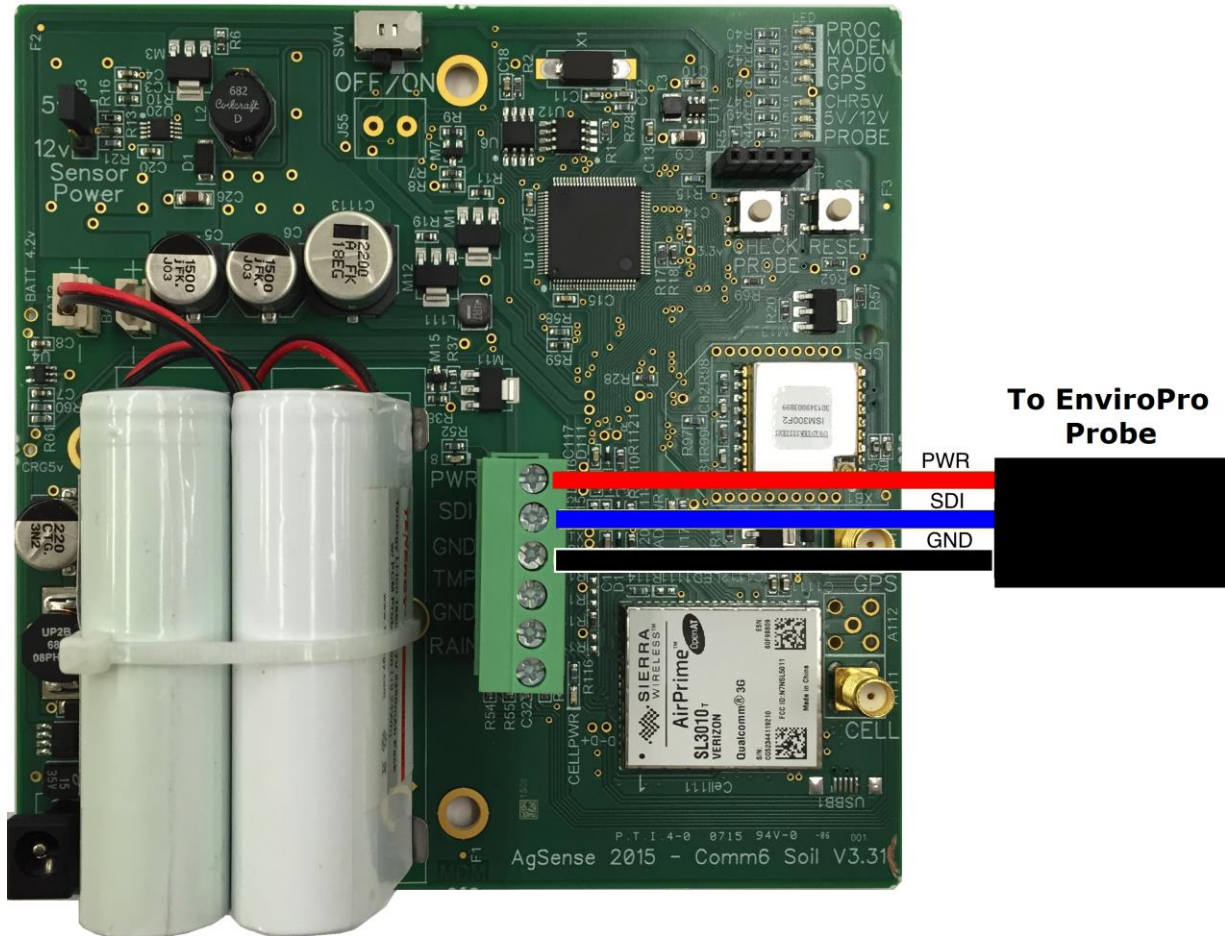
Wiring the Campbell Scientific CS650 / CS655 Sensors to the Aqua Trac Unit



Wiring the CS650 / CS655 sensors:
Find the group of terminals (3) with the group label SDI.

1. Connect the Green wire from the CS Sensor to the terminal marked SDI as shown above.
2. Connect the Clear, Black, and Orange wires from the CS Sensor to the terminal marked GND as shown above. (above shown using a wire nut to connect all 3 wires together)
3. Connect the Red wire from the CS Sensor to the terminal marked PWR as shown above.

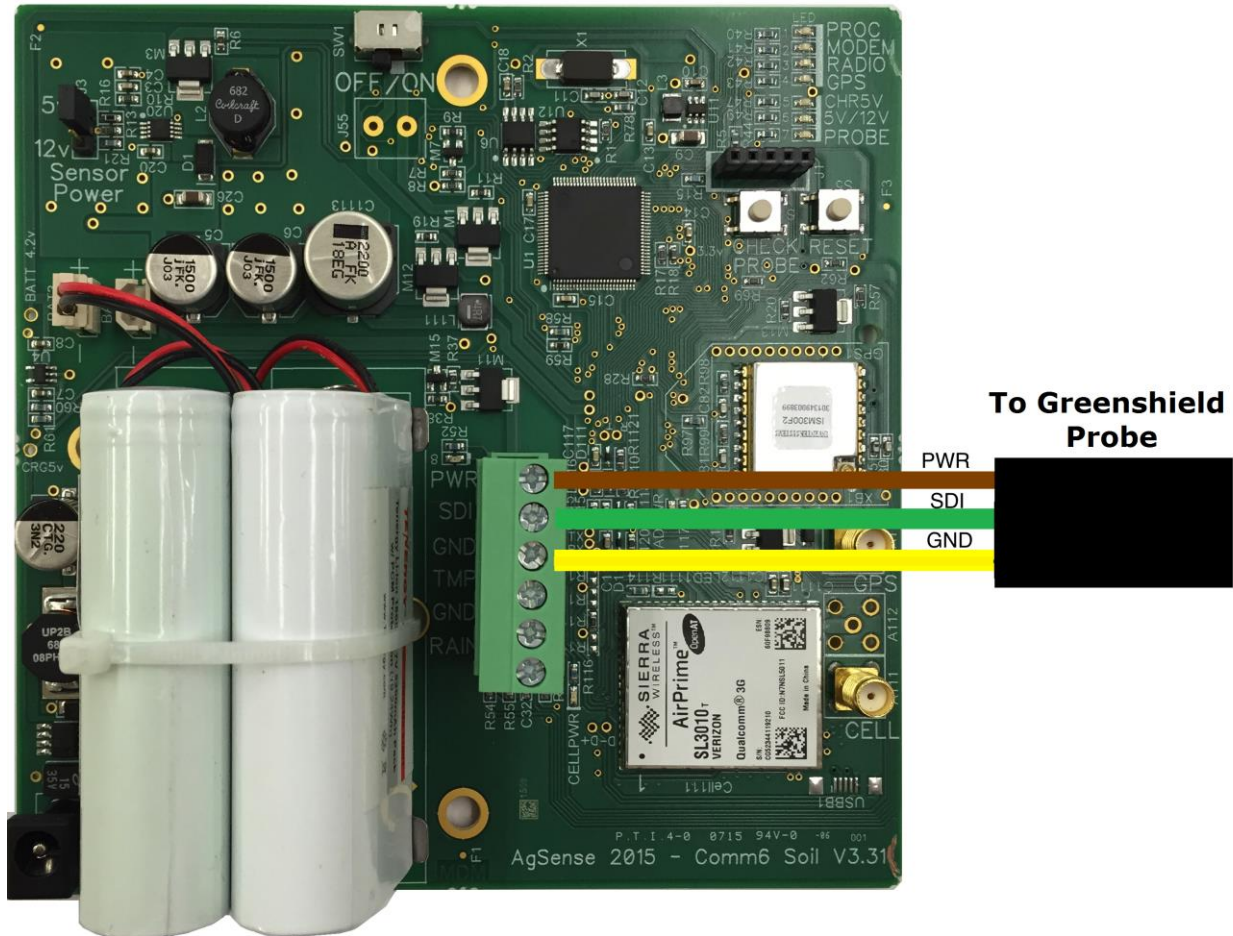
Wiring the EnviroPro Probe to the Aqua Trac Unit



Find the group of terminals (3) with the group label SDI.

1. Connect the Blue wire from the Probe to the terminal marked SDI as shown above.
2. Connect the Black wire from the Probe to the terminal marked GND as shown above.
3. Connect the Red wire from the Probe to the terminal marked PWR as shown above.

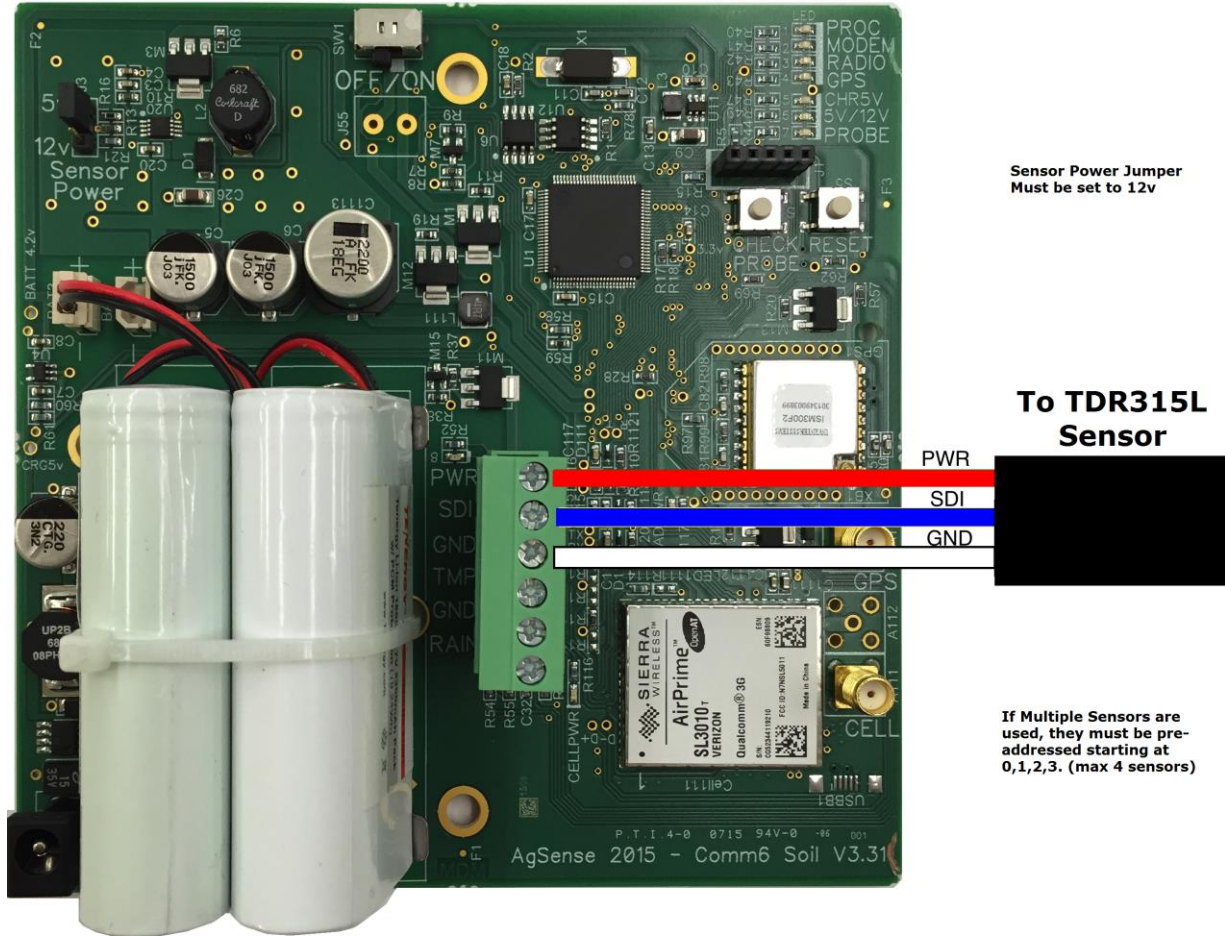
Wiring the Greenshield Probe to the Aqua Trac Unit



Find the group of terminals (3) with the group label SDI.

1. Connect the Green wire from the Probe to the terminal marked SDI as shown above.
2. Connect the Yellow wire from the Probe to the terminal marked GND as shown above.
3. Connect the Brown wire from the Probe to the terminal marked PWR as shown above.

Wiring the Acclima TDR315L Sensor to the Aqua Trac Unit



Find the group of terminals (3) with the group label SDI.

1. Connect the Blue wire from the Probe to the terminal marked SDI as shown above.
2. Connect the White wire from the Probe to the terminal marked GND as shown above.
3. Connect the Red wire from the Probe to the terminal marked PWR as shown above.
4. Make sure the Sensor Power jumper on the board is set to 12v.
5. If multiple sensors are used, they must be pre-addressed starting at address 0,1,2,3 (max of 4 sensors)

How To Configure an Aqua Trac

1. Go to the AgSense users page , click on the unit that you want to set up, then click the main configuration button.
2. Give the probe a name/field name in the Alias entry box.
3. Select the type of probe from the drop down menu.
4. Add the probe ID number if known otherwise leave blank.
5. Add the sensor depths for the probe in the spaces provided. If the depths are unknown they may be left blank. The graph will automatically drop in valves of 4", 8", 16" 24" 32" and 40".
6. If using a Temperature sensor, choose thermistor in the Sensor 5 drop down menu.
7. If using a Rain Bucket, choose Tipping Bucket in the Digital Sensor drop down menu.
8. Save configuration

Main Page Display

Once configured, the probes will display the sensors in a column with the soil moisture value just to the right. Some probes will also have an additional columns displaying salinity and/or temperature.

The latitude and longitude of the Aqua Trac can be found in the readings tab on the main page for each unit.

Warranty Information:

All warranty service provided by the AgSense service center, or an authorized technician.

**Warranty repairs require a Return Merchandise Authorization Number (RMA);
Have your dealer contact AgSense to obtain this RMA number.**

For the Period of :	AgSense will:
60 Days	Money back Guarantee if not satisfied with product.
2 Years	Repair on any unit that fails due to defect in materials or workmanship. AgSense labor and parts would be provided free of charge during the warranty period. (This does not include dealer labor.)

What is not covered:

- Service trips to your home to teach you how to use the product.
- Improper installation, delivery or maintenance. If you have an installation problem contact your dealer or installer.
- Failure of product resulting from modification to product or due to unreasonable failure to provide reasonable and necessary maintenance.
- Labor necessary to move device from one location to another.
- Improper installation of battery.
- Failure due to corrosion or water damage.
 - Units installed in direct contact with sprinklers require a tower box or other watertight protection.
- Damage to the product caused by improper power supply voltage, accident, fire, floods or acts of God.
- Damage caused after delivery.

Exclusion of implied warranties – Your sole and exclusive remedy is product repair as provided in this Limited Warranty. Any implied warranties, including the implied warranties of merchantability or fitness for a particular purpose, are limited to two years or the shortest period allowed by law.

This warranty is extended to the original purchaser and any succeeding owner for the products purchased for use within the USA.

Some states do not allow the exclusion or limitation of incidental or consequential damages. This warranty gives you specific legal rights, and you may also have the other rights which vary from state to state. To know what your legal rights are, consult your local or state consumer affairs office or your state's Attorney General.

DISCLAIMER: The use of Field Commander/Crop Link/Aqua Trac shall not be utilized by customer as a substitute for the Customer's personal observation of the manner in which Customer's irrigation equipment is functioning. AgSense specifically advises Customer that this product is designed to enhance Customer's ability to control existing irrigation equipment and to provide the Customer with additional information about existing irrigation equipment. Field Commander/Crop Link/Aqua Trac relies upon GPS, Satellite and Internet technology which not always functions properly, accordingly, AgSense disclaims any and all responsibility for the reliability of this technology. Customer acknowledges that AgSense does not have the ability to control the reliability of GPS, Satellite and Internet Technology. AgSense specifically disclaims any and all liability for Customer's failure to personally determine whether or not the irrigation equipment that belongs to Customer is functioning properly. AgSense, its agents, members or officers will not be liable for Customer's loss of profits, business interruption, or any other type of consequential damages arising because of the failure to Customer's equipment, GPS, Satellite or Internet to function properly.

CUSTOMER'S RESPONSIBILITIES: Customer agrees to keep the irrigation equipment upon which Field Commander/Crop Link/Aqua Trac is installed in good repair and maintenance. Customer acknowledges the importance of and agrees to keep all safety devices which came with Customer's irrigation equipment in working order. Customer agrees to keep an end field stop and barricades in place to prevent damage to the irrigation equipment in the event that Field Commander/Crop Link/Aqua Trac malfunctions. Customer agrees that Field Commander/Crop Link/Aqua Trac cannot solely replace the personal monitoring of the operation of irrigation equipment.

REMEDY: Customer acknowledges that Field Commander/Crop Link/Aqua Trac's sole obligation and Customer's exclusive remedy in the event of any material and continuing nonconformity, defect, or error in the information service shall be to take reasonable corrective actions upon discovery of the problem.

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