

A Bergey WindPower Company Manual

POWERSYNC 25 QUICK INSTALLATION GUIDE

Part No. PS 25 RO
Rev R0.2_km_REV ms
February 2024

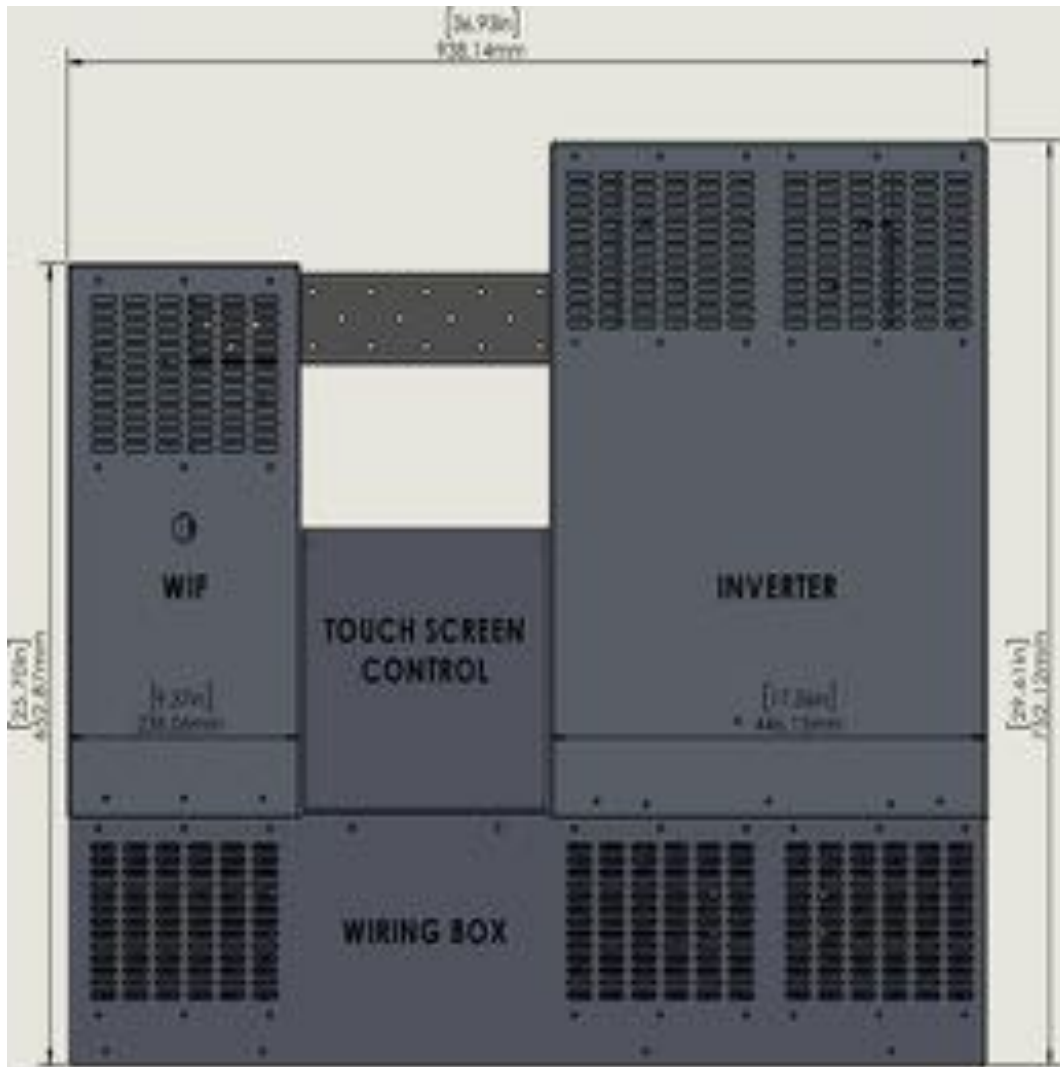


**Bergey WindPower Company, All Rights Reserved
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TOOL LIST

- Drill
- Drill bits
- Level
- 2.5 MM long allen key
- 5mm allen key
- Jewelers flathead screwdriver
- Stud finder
- 90 degree phillips-head screw driver
- Wire strippers
- Computer monitor
- Mouse
- Keyboard
- Internet connection to NUC – This is highly recommended

ENCLOSURE DIMENSIONS



NOTE: A computer monitor/mouse/keyboard (not provided) are recommended to be installed with the NUC computer that will act as the inverter display.

ASSEMBLY INSTRUCTIONS

1. Start by locating the wall studs or structure that is planned to carry the weight of the inverter. Placing a screw in the center of the main load bearing bracket makes it simple to ensure it was level. Properly secure the main load bearing bracket.



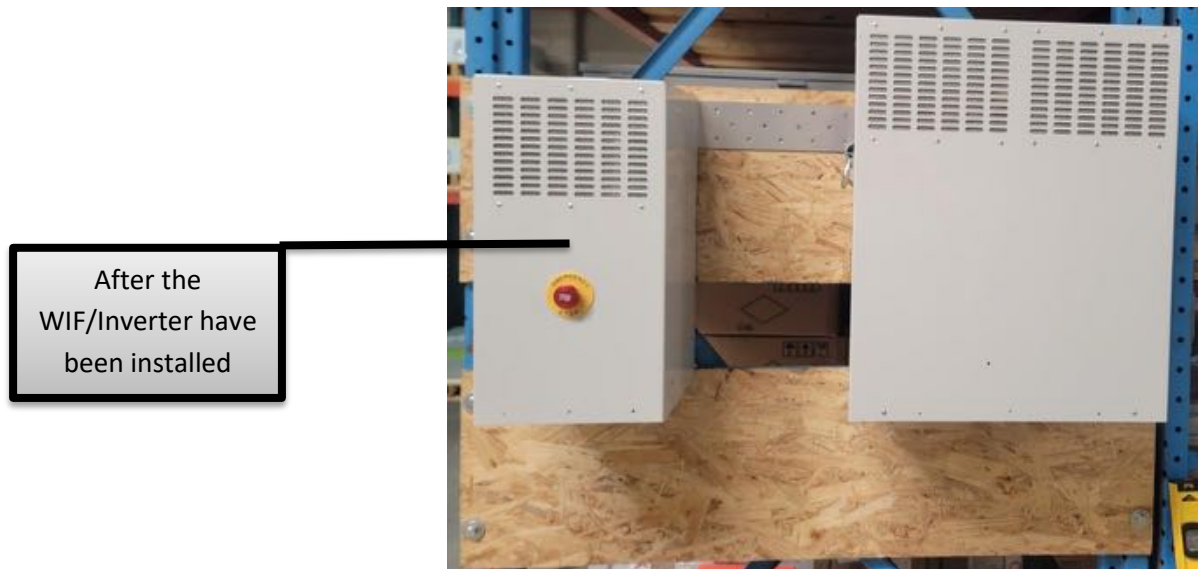
2. Locate the WIF (wind interface). The rear of the WIF is slotted to slide down and rest on the main support bracket.

NOTE: Slide the WIF down at an angle for ease of installation



3. Locate the inverter. The rear of the inverter is slotted to slide down and rest on the main support bracket.

NOTE: Slide the inverter down at an angle for ease of installation



4. Locate the “L” shaped sheet metal that is the back of the wiring box.

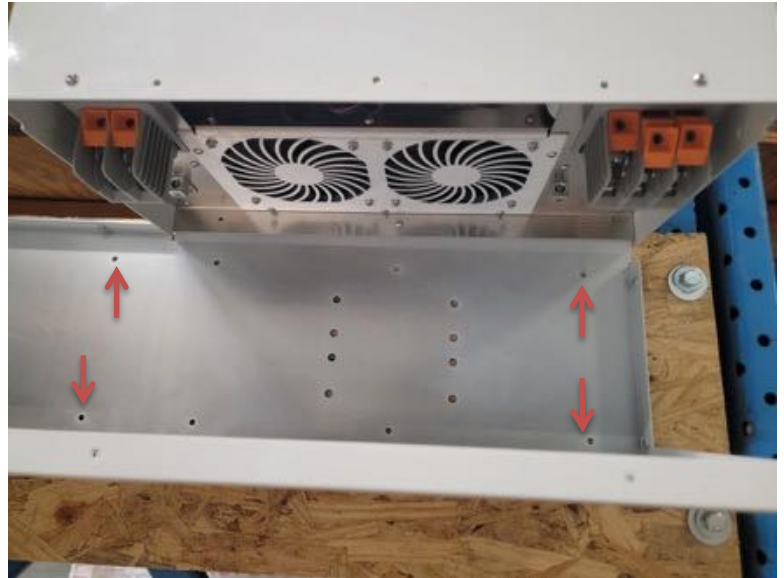


5. Next we are going to slide the L shaped piece back into place. Note the tabs slide behind the “lips” of the WIF and inverter as shown below.

WIF

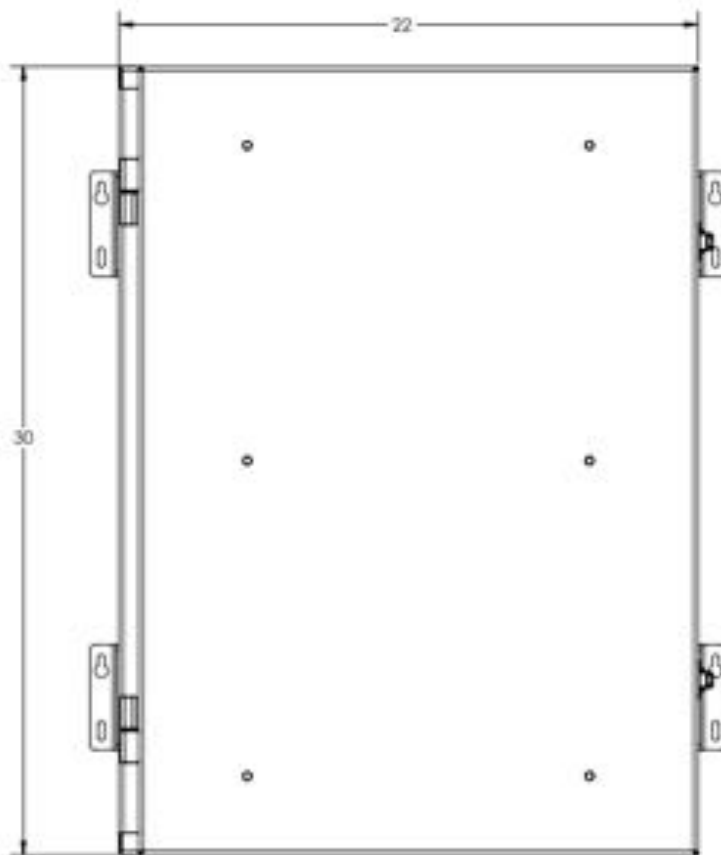


Inverter



6. Screw the back of the wire box in place using the M4 screws. You can now mount back wire box to the wall.

7. Mount the Dump Load within ~50 feet of the inverter.
(Note: the factory supplied wire length is +/- 14 feet to connect the WIF to the dump load)

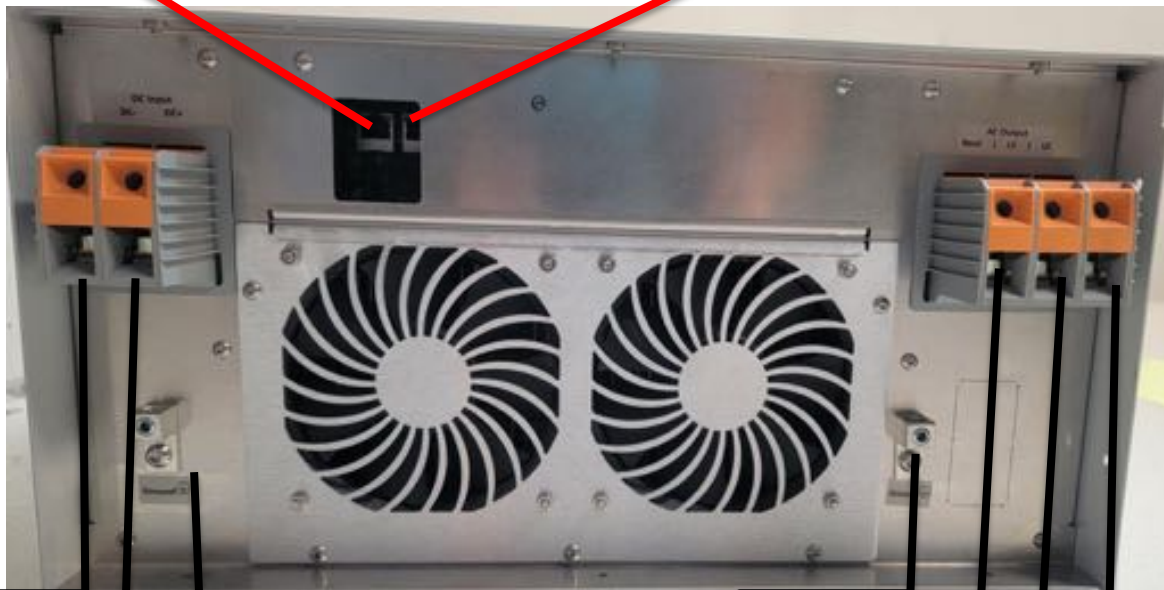


8. Wire the WIF/Inverter/Dump load

Communication wire to WIF (Right)

3' Purple RJ45

Empty for Accessory (Left)



-DC in (left)

+DC in (right)

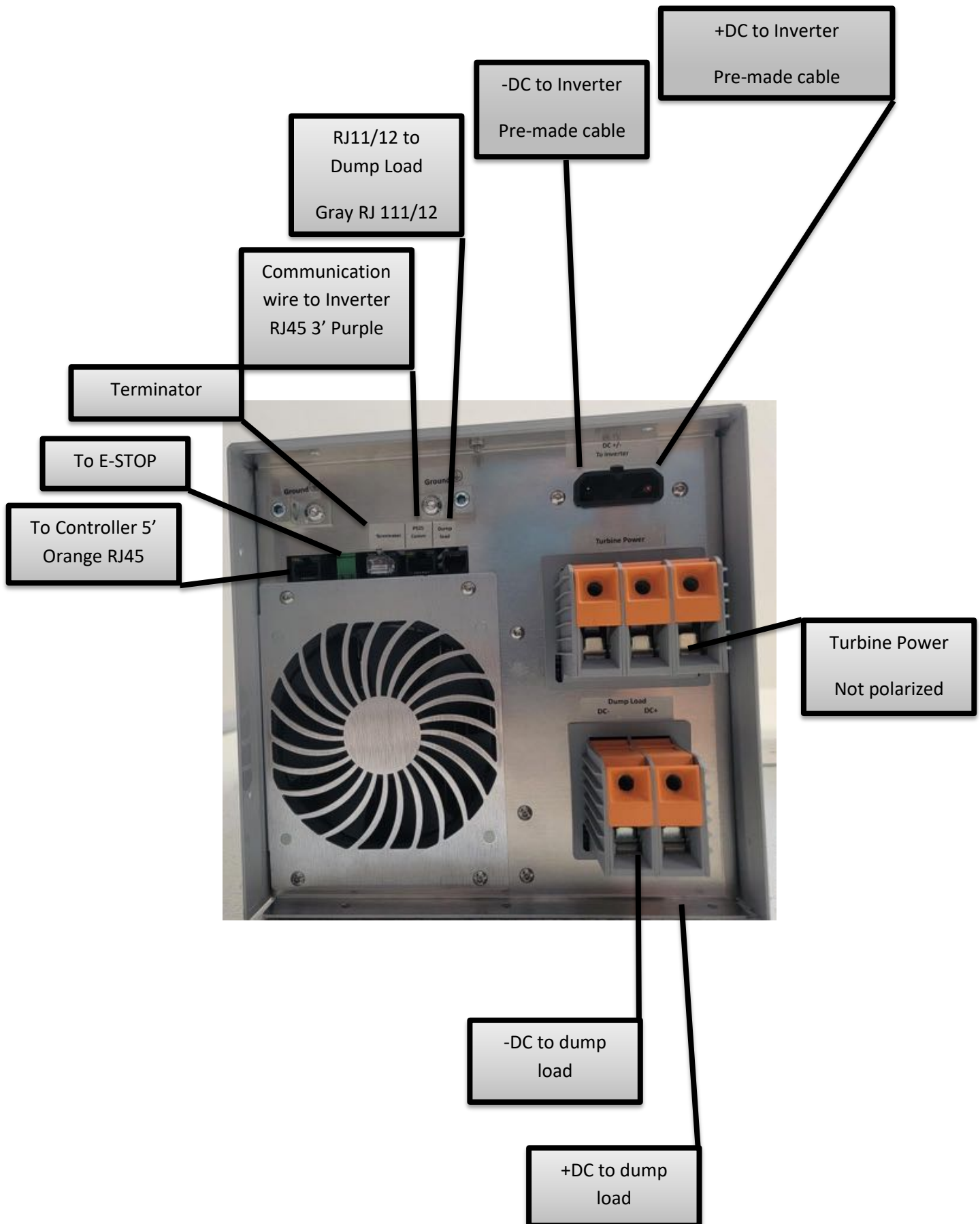
Ground

Ground

Utility Grid
Neutral (far left)

L1 120/240

L2 120/240



Dump Load



DC +/- from WIF
Not polarized

Gray RJ11/12 from
dump load (or custom
wire)

9. Locate the front of the wire box.



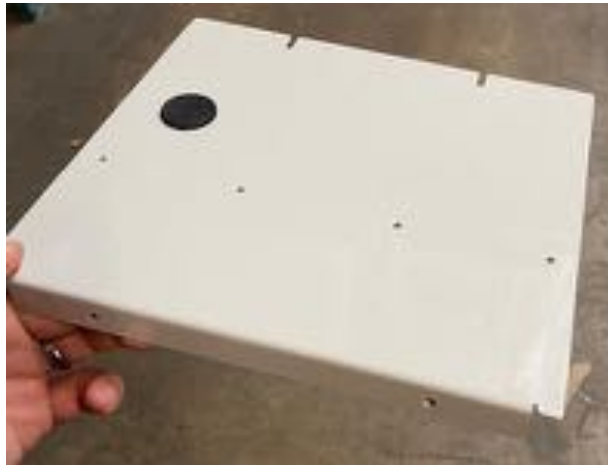
10. Slide the front of the wire box into the WIF/Inverter enclosures. Once properly installed use the provided M4's to screw front of the wiring box together.



11. Locate the top of the wiring box.

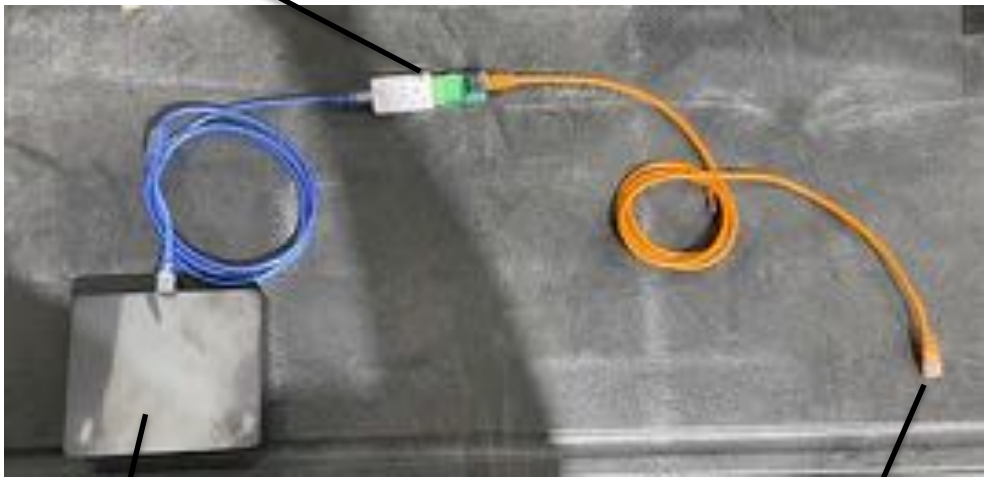
12. Install the top of wiring box and screw together using M4's

NOTE: the "lip" of the top of the enclosure is behind the front of the wiring box (as shown below)



Note: Pass 5' orange RJ45 through grommet leaving toroid (donut shaped) in wire trough. The RJ45 connects to CAN adaptor.

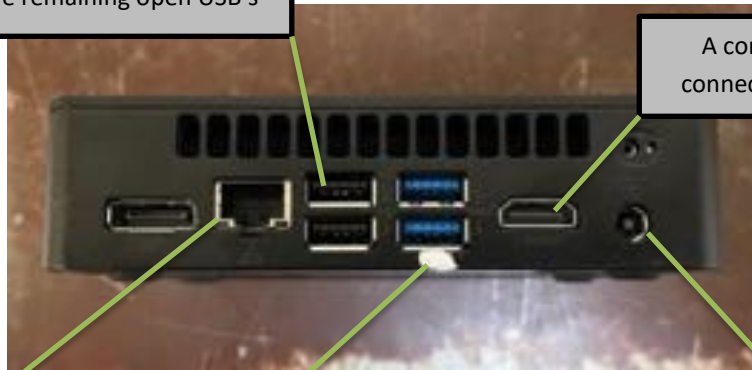
CAN Adaptor



NUC (Computer) USB connects to port indicated by white dot (see next image)

Connects to WIF, through wiring box with toroid left inside

NOTE: The mouse and keyboard can be connected to the remaining open USB's



A computer monitor can be connected using the HDMI port

Internet connection

Port for communication

110 VAC required

Connect the 5' orange RJ45 to the bottom right USB port (Through CAN Adaptor), indicated by a white dot.

NUC and cables can be placed on the top of the wiring box.



NOTE: CAN adaptor and cables can become easily disconnected. If disconnection occurs, IG-monitoring app should be closed and reopened to re-establish connection.

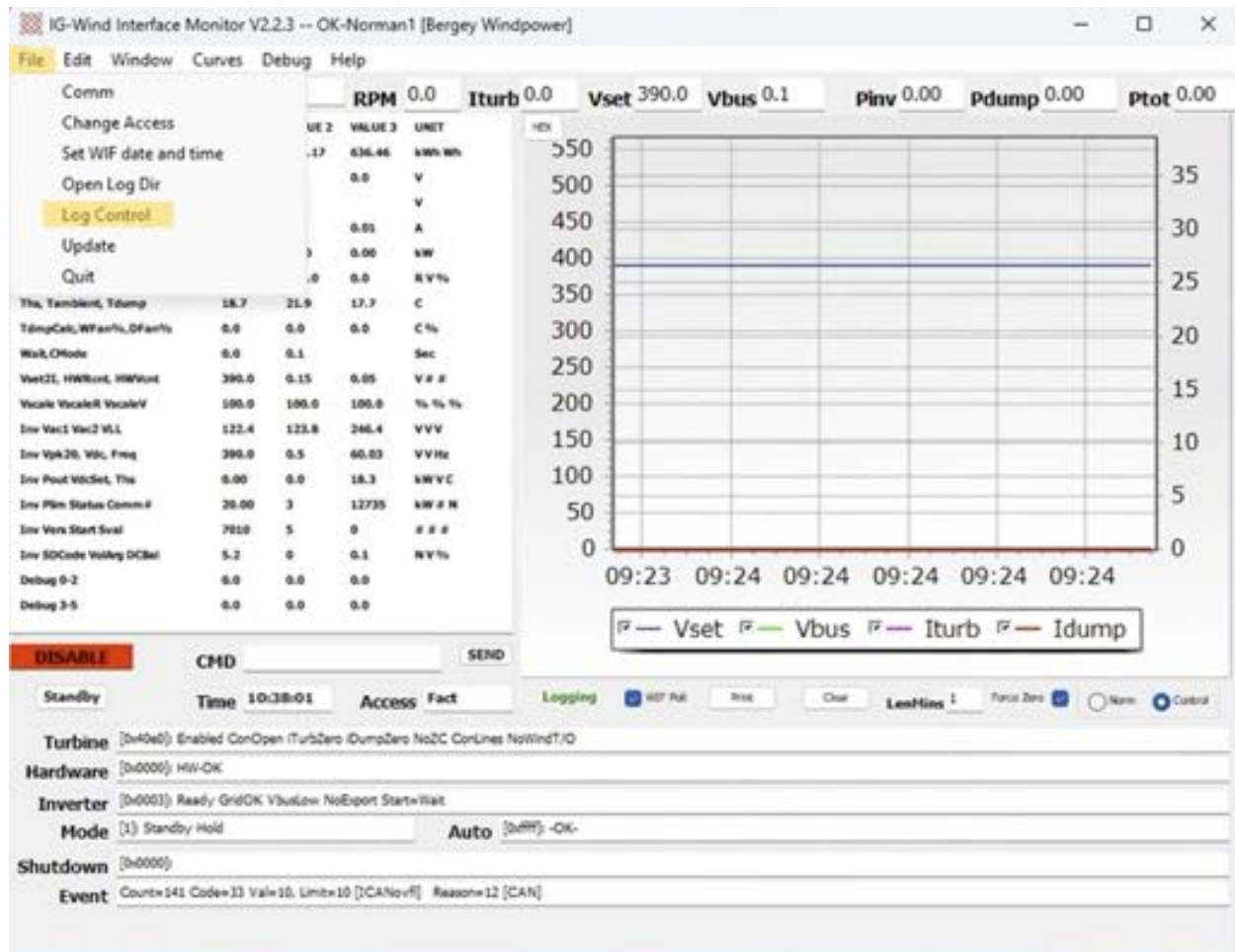
Red and Green LED lights on CAN adaptor will blink 3 times every time a cable becomes connected.

Red and Green LED lights on CAN adaptor should flicker when IG-Monitoring app is connected, and data is being transferred.

If no connection and monitoring occurs, close out of IG-Monitoring app, disconnect a cable from the CAN adaptor, reconnect cable then reopen IG-Monitoring app.

Ensure during install you go to “File” -> “Log Control” and set the Site ID to “City-State” of installation and hit “Set”.

Also change Customer to the name of system owner and hit “Set”.



The screenshot shows the 'WIF Data Logging - UID=A21E2C05' window. The 'Setup' tab is active. The 'Log Files' section has checkboxes for 'CSV File', 'CSV Run Only', 'Web Post', 'Events', and 'MQTT'. The 'Graph Save' section has checkboxes for 'Power Curve' and 'Volt-Amp'. The 'Site ID' field is set to 'OK-Norman1' and the 'Customer' field is set to 'Bergey Windpower'. Both fields have 'SET' buttons next to them.

Customer set to [Bergey Windpower]