

## PAN-42 Troubleshooting Checklist

Conduct the following tests below if you see irregular data such as mismatched power readings, uncommon/mirrored power factors, red triangle errors on Deployment Tool, or lack of data readings.

- Ensure the PAN-42 is a 3P/3S configured device on the platform (unless you are truly measuring only 1 phase of the device, then it should be 3P/1S or 1P/1S)
- Check the CT Rate is correct (For 600A/5A current transformers, enter “600”)
- Confirm Current Factor is correct (If 1 of 4 conductors in a phase are measured by CT, Current Factor is 4; If not applicable, it is 1)
- Confirm Voltage Factor is correct (If voltage is higher than 480V and a step-down transformer is used, set the factor to the magnitude of the transformer; If not applicable, it is 1)
- Check the PAN-42’s LEDs are all solid green and the Tx light in the right corner is blinking
- If the setup is a 3-wire delta connection, confirm the neutral input is floating/not connected
- Confirm the current limiting protection switches are open
- Validate that the safety components on the voltage (fuse blocks) and current side (MCBs) are installed
- Confirm the phases are correctly aligned on the PAN-42 side as well as the CT side (sometimes the conductors are mislabeled in the panel)
- Confirm Voltage Phases on the left side are connected as top = Phase 1, middle = Phase 2, next = Phase 3, and bottom = Neutral and that Current Phases on the right side are connected as top = Phase 3, middle = Phase 2, and bottom = Phase 1
- Check that the CT is oriented in the correct direction on the line (arrow on the CT should be pointing towards the load and the + and – wire connections on the PAN-42 are in the right spot)
- Check the steady state current amount on the CT is at least 10% of the CT rating (For a 600A/5A CT, the steady state current draw on the line should be at least 60A; if less, resize the CT to something smaller/more fitting)
- Make sure the PAN-42 isn’t too close to the Bridge due to its stronger data delivery (RSSI range should be between -30dBm thru -75dBm; distance of at least 2.5 meters away)
- Enable the “Auto Correction” layer on Energy Time View to see if there are any red dots on the PAN-42’s data (if populated, check the PAN-42/Bridge’s environment for RF interference)

If all the above are correct, measure the line with a true RMS multimeter and timestamp the current reading and check the software to compare the measurements. If these manual reads match the PAN-42 reads, begin troubleshooting device being measured and/or the utility meter company (if applicable). If these reads do not match, begin RMA process by submitting a [support ticket](#). Include in the ticket a high-level configuration of the setup, add video and pictures of the situation, and add a short description of the problem.