Troubleshooting Internet Problems at Kachoolie Sites

The most common cause of Kachoolie data failing to appear on Kachoolie Cloud is the Internet connection between the store and the Kachoolie Cloud server.

This is a brief guide, if followed accurately, can fix Internet connection problems remotely with local assistance by a store clerk thereby saving a technician visit.

Understanding How Kachoolie Communicates with Kachoolie Cloud

The key to troubleshooting is understanding how Kachoolie communications works.
Kachoolie devices are designed to acquire a local IP address from the router to which it is connected. This is called DHCP. The router must be setup for DHCP which is the default setting for most routers.
The Kachoolie device MUST be connected to the router and the router MUST be connected to the Internet.

The Kachoolie device uses a cat5 or cat6 Ethernet cable with RJ45 connectors at both ends.

The Kachoolie device is either a circuit board with a piggy back processor or a blue box. The circuit board is only used with TLS350 and sometimes TLS300 tank gauges. All other gauges use the blue box.

The Ethernet cable plugs into a socket on the box or board. On either side of the socket are two LED lamps. When lit, one is amber and the other is green. There are also blue lamps on the processor which are visible through the translucent box or through the bracket in the case of the board. These lamps are the easiest way to troubleshoot communications.

Procedure for Solving Communication Problems

1. Call the store. Be polite. Explain that you need help to solve the problem that the tank gauge is not communicating. Explain that until the problem gets fixed someone has to call the store daily or more frequently to get inventory information. If the clerk is busy ask when you can call back.
2. Ask if the Internet is working at the store. The clerk will probably know if the Internet is down because other systems will not be working. If its down ask when it will be fixed and then check that communications have been resumed after the Internet is working.
3. Ask if there have been any recent service calls around the time when the Kachoolie stopped reporting. Frequently a service call can cause the cable to be disconnected at the router, or the power supply outlet which was used for the Kachoolie box being appropriated for some other device.
4. Identify which Kachoolie device is installed by asking if they have a blue box connected to the gauge and also the gauge type, which is normally printed on the gauge. Sometimes you need to call the gauge a Veeder Root or the device where they get a printout of tank levels.
5. Explain where the clerk can see the amber and green lamps. For the circuit board Kachoolie the clerk must look under the gauge. Ask the clerks if they see any lamps and if they are flashing. The clerk should see blue, green and amber lamps.

Checking for power and that the Kachoolie is running

Flashing blue lamps indicate that the Kachoolie has power and is running

If there are no blue lamps lit there is no power to the Kachoolie. Check that the power supply is connected if its a box Kachoolie. Check that the gauge has power and the board is firmly inserted if its not a blue box.

If there is a single blue light that is not flashing then the Kachoolie requires power cycling. It has power but is not running. This is very rare. If its a blue box, remove the power plug for 5 seconds and plug it back in. If its a board, then find the little button just in front of where the Ethernet cable is connected on the board. Hold the button in for 5 seconds then release. Wait until the blue lamp goes out or the blue lamps are flashing. If the blue light goes out then push the button again for 5 seconds and then release. The blue lights will flash after a few minutes.

Checking that the Ethernet cable is connected.

Lit amber and green lamps indicate that the cable is connected at both sides. The green lamp may be flashing.

If both lamps are off, make sure that the cable is connected at both ends and the router is powered. The router should have lamps lit and or flashing.

Checking that the router has provided an IP address.

The green light should be flashing if the Kachoolie is communicating with the router.

Infrequent flashing indicates that the Kachoolie is asking for an IP address and is not getting an IP address. If the flashing does not become regular after a few minutes, then power cycle the router and after the router is up, power cycle the Kachoolie. (See above for power cycling)

Checking that the router is connected to the Internet.

In some cases the router provides an IP address but the router is not connected to the Internet. The green led lamp will be flashing regularly. In this case inquire if there are any other devices connected to the router and ask if they are connecting OK to the Internet. Power cycling the router and then the Kachoolie per above can sometimes “unstick” the router.

Check if the Internet connection is working.

Kachoolie requires an Internet connection where outgoing access to the Internet is required. The easiest way to check this requirement is to move the Ethernet cable that was connected to the Kachoolie to a computer that has its networking configured for DHCP and WiFi is turned off. If the computer cannot browse the Internet then Kachoolie cannot communicate. Ask if the Internet providers has been changed recently or if the router has been replaced. Check if the Kachoolie Ethernet cable is connected to a router. In some cases switches are added to add ports. If the switch is connected directly to the modem instead of to a router, then there is no device providing the DHCP service. The Kachoolie will never get an address.
In some cases such as Irving stations where Irving manages the Internet connections, they lock down outgoing connections.
Contact us and we will work with the IT person to open the outgoing ports used by Kachoolie.