Network Troubleshooting 101

Step 1: Identifying Type of Network Setup

Before proceeding further, it is necessary to identify the hardware components of the Tigo Energy Cloud Connect or Management Unit's (MMU) network connection. The simplest network setup involves a direct, hard-wired connection:

1. Network router

2. Ethernet cable connected from router to Cloud Connect/MMU

3. Cloud Connect/MMU

Non-standard network setups will sometimes include a third-party device that is meant to connect the Cloud Connect/MMU to the wireless signal that is broadcasted by a Wi-Fi router. Here is an example of this kind of setup:

1. Wi-Fi router

2. Wireless Adapter (e.g. Netgear or Linksys)

3. Ethernet cable connected from Adapter to Cloud Connect/MMU

4. Cloud Connect/MMU

Step 2: Diagnosing the Problem

Follow these steps to perform a network test:

1. Press MENU, then ENTER

2. Use arrow keys to find 3. NETWORK; press ENTER

3. Use arrow keys again to fine 3.2. TEST; press ENTER to initiate network test.

4. Record messages on display and use table (below) for guidance.

Message	Description	Corrective Action
"Connecting..."	Trying to access Tigo Energy's server.	N/A
"Success"	Cloud Connect/MMU has successfully accessed the server.	N/A

"Error: Checking"	Cloud Connect/MMU could not connect to the server, and is diagnosing cause of problem.	N/A
"Cable unplugged"	No physical cable detected.	Check cable connection and re-initiate network test
"Check proxy svr"	Cloud Connect/MMU is configured to access the web via HTTPS proxy server, and it is either inaccessible or the site does not have a proxy server.	Verify proxy settings on Cloud Connect/MMU. If site does have proxy, verify it allows access to *.tigoenergy.com. Re-initiate network test. If site has no proxy (default is off for Cloud Connect/MMU and for most networks), turn proxy off by going to: 3.4 "Set Proxy" on Cloud Connect/MMU menu > "Are you sure?" press ENTER for Yes > "Proxy Server?" press MENU for no.
"No Default GW"	Missing default gateway. Either DHCP server is not replying (i.e. the router), or static IP configuration entry is not present (only applies to networks requiring static IP setup)	Verify physical connection of cabling at router. Verify configuration of router allows Cloud Connect/MMU to access network. Re-initiate network test.
"Cannot ping GW"	Default gateway did not respond to ping. May not be a problem depending on router configuration.	Verify physical connection of cabling at router. Re-initiate network test.
"Cannot ping DNS"	Global public DNS server (8.8.8.8) is not responding. Indicates possible inability to connect to internet. May not be a problem depending on router configuration.	Verify physical connection of cabling from router to modem. If other devices in house are not connected to internet, call your service provider for assistance. May be a problem with modem or router.
"Cannot ping Tigo"	Cannot exchange ICMP packets with Tigo Data Center. May not be a problem depending on router configuration.	Contact Tigo Energy's Technical Support team by phone at +1.844.805.8550, or by email at support@tigoenergy.com.

![Tigo energy logo]

Step 3: Resolving Present Issues

If your Cloud Connect/MMU only shows you the message "Error" or you are not sure how to perform some of the fixes described above, try the following steps to reconnect the Cloud Connect/MMU to the Internet:

1. Verify that the Ethernet cable is good by unplugging the end that is in the Cloud Connect/MMU, and plug it into a laptop or desktop computer. Make sure that the wireless Internet receiver is turned OFF on the computer to ensure that you are only connecting to the network via the cable. Try browsing a website that you do not frequent often (e.g. news.google.com). If you are able to browse new websites, then this confirms that the Ethernet cable is viable.

2. Unplug the Ethernet cable from the Cloud Connect/MMU and wait 10 seconds before plugging it back in. Renew the IP address on the Cloud Connect/MMU by following these steps:

    1. Press MENU, then ENTER

    2. Use arrow keys to find 3. NETWORK, press ENTER

    3. Use arrow keys to fine 3.5. RENEW, press ENTER

    4. A new IP address should display if the request was successful.

    5. Perform network test again, and see if you get SUCCESS as the result. If not, then proceed to the next step.

3. Unplug power supply of the Cloud Connect/MMU, wait 10 seconds, then plug back in. This will reboot the unit completely. Perform network test again. If you get ERROR, then proceed to next step.

Step 4: Rebooting Entire Network

In some cases, a full reboot of all devices inside of the Cloud Connect/MMU's network needs to be done. This is accomplished by the following steps:

   1. Reboot the router by unplugging its power supply, waiting 10 seconds, then plug it back in. Wait for the lights on the unit to stabilize before proceeding to the next step.

   2. If you have a third party device (e.g. wireless network bridge, or wireless adapter) that is allowing Internet to pass to the Cloud Connect/MMU, please reboot this unit next after the router lights stabilize. If you do not have one of these devices, proceed to the next step.

   3. Reboot the Cloud Connect/MMU (i.e. unplug, wait a few seconds, then plug back in) and wait for text to appear on the display. Try doing a network test again and record the messages that you see. If it goes immediately to "Success", this indicates that your Cloud Connect/MMU is reconnected to the Internet.

If all troubleshooting methods fail, please contact Tigo Energy's Technical Support team at 1.844.805.8550 or 1.408.402.0802 ext 2, or by email at support@tigoenergy.com.