MAGNUM
E N E R G Y

This guide is for quick reference only and assumes you have access to, and have read the detailed instructions in the MagWeb GT Owner's Manual (PN:64-0086 A Owner Manual, ME-MGT-MW).

Note: The MagWeb GT can be installed at any time during the system installation process. The MagWeb GT will remain in Search mode until the system is completed and Search mode is properly defeated.

Quick Reference

1. Plug the CAT5 network cable (RJ45) in to one of the available ports on your local router/modem.

2. Plug the other end of the CAT5 network cable in to the Network port on the bottom of the MagWeb GT.

   Note: Always connect the CAT5 cable before connecting to AC power.

3. Plug the supplied AC power cable in to an adjacent 110VAC outlet, and then plug the other end in to the Power Connection port on the bottom of the MagWeb GT.

   Note: Do not plug the MagWeb GT into a power strip, surge protector, or an uninterruptable power supply (UPS)—or use an outlet that shares with a power strip or surge protector. Keep such devices far away from the MagWeb GT, as they can substantially diminish communication performance by increasing line noise.

4. The MagWeb GT will acquire an IP (Internet Protocol) address from your local router/modem (*Example:* 192.168.1.101).

   If the address comes up as **192.168.131.228**, this indicates that the MagWeb GT is not communicating with the router/modem.
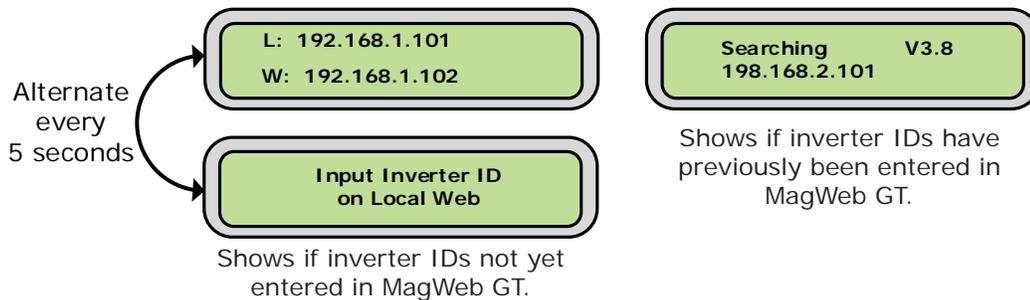
Figure 1, MagWeb GT Initialization Screens

5. Using a local computer—connected to your router/modem via either a CAT5 cable or a Wi-Fi connection—open your web browser and type the IP address (as shown on the MagWeb's LCD display - Figure 1) into the web browser. This will take you to a web page being generated by the local MagWeb GT.

   Example: 192.168.1.101
                     750W 11.45 Kwh   012

   In the above example, the '192.168.x.xxx' address is assigned by the router in the home and should be typed into the web browser as described above. The MagWeb GT Home screen appears (see Figure 2).

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ECU ID	204000000322
Lifetime Generation	2,978.61 kWh
Last System Power	3,301 W
Generation of Current Day	33.30 kWh
Last Connection to Website	2016-09-01 10:41:20
Number of Inverters	8
Last Number of Inverters Online	7
Current Software Version	V4.0NA
Current Time Zone	America/Los_Angeles
ECU Eth0 Mac Address	80:97:1B:00:6A:B7
ECU Wlan0 Mac Address	60:C5:AB:E3:B4:19
Inverter Comm. Signal Level	4

Figure 2, MagWeb GT Home Screen

6.   Select the *Administration* tab at the top left of the page.

Select the *Date, Time, Time Zone* option from the list at right, and then from the *Time Zone* drop-down list, scroll down until you find your time zone. Once selected, click the *Update* button and the MagWeb GT will set the correct time.

Note: *Before exiting this page, be sure to update the* Date Time *field at the top of the page.*

7.   Select the *ID Management* option from the list at right.

The system identifies new serial number ID's from any MicroGT 500 inverters that have recently been installed. This process may take from 20 seconds to 5 minutes, depending on your system.

8.   Select the *Home* tab at the top left to return to the MagWeb GT home screen. It may take the MagWeb GT from 1 to 10 minutes to find and report the MicroGT 500 inverters.

Note: *The amount of "noise" in your home wiring determines how quickly/ accurately this stage is completed. It is important to minimize interference from other devices—such as power strips and UPS systems.*

The MagWeb GT Home screen shows the MagWeb GT unit's ID at the top, followed by additional system data (e.g., number of inverters, number of inverters online, last system power, etc.).

The *Number of Inverters* field refers to the number of MicroGTs detected. The number of MicroGTs detected should equal the number of MicroGTs that are installed in your solar array.

9.   Select the *MicroGT Status* tab at the top left of the page. The Real Time Data screen appears showing one line of data for each PV module installed. The number of PV modules in your array should be accurately reflected by the number of units shown on this screen.

Note: *Since MicroGT 500 inverters monitor two PV modules each, the serial numbers for each of the pairs will be the same, ending in A or B.*

If you need assistance, please contact our Customer Service Department at (425) 353-8833.

Troubleshooting

There are three possible areas of trouble with the MagWeb GT:

• The MagWeb GT is not communicating with the Internet.

• The MagWeb GT is not communicating with the MicroGT inverters.

• A MicroGT inverter is not functioning properly.

MagWeb GT not Communicating with the Internet

The MagWeb GT should be plugged in to the wall and there should be other verification that the site has access to the Internet. Verification can be through another computer. If no other computers in your home have access to the Internet, do not proceed until you have independently verified that Internet access has been established.

Check the MagWeb GT's display for a signal showing either: **+W** or **-W**

• If a "**+W**" shows, the unit has access to the Internet.

• If a "**-W**" shows, the unit has not yet been able to access the Internet.

If other systems in the house have Internet access, the problem may be caused by:

• Router/modem could have a hardware issue such as a port failure, or…

• Internet system has a firewall that is blocking access, or…

• Some older routers have a very limited number of IP addresses available or has a fixed IP, and your existing computer equipment has already taken all the available IP addresses.

Symptom: The MagWeb GT display shows something like the following:

> ***Example:*** 192.168.1.101   **-W**
> 234kwh   012

The 192.168.1.101 (or some number other than 192.168.131.228) is telling you that the router is able to see the MagWeb GT, but the MagWeb GT is still not able to connect through the router to the Internet for some reason.

Solution: There is a problem with your existing hardware that will need assistance from a qualified IT professional. If your hardware is several years old, it might be cheaper to buy a new router.

MagWeb GT is not Communicating with the MicroGT Inverters

If you have installed the MagWeb GT and established an Internet connection, but not all of your modules appear on the MagWeb Home screen when searching for MicroGT 500 inverters, the following issues may have occurred:

• There could be "noise" in your wiring system—either as a result of the installation or due to grounding problems in the existing wiring.

• There may be connection issues with the AC cables connecting each MicroGT 500 inverter.

Noise in the Wiring System

The MagWeb GT is designed to communicate with the MicroGT 500 inverters through your home wiring. As long as existing house wiring is properly done, there should be no problems. However, if there are loose wires in outlets or there are too many other appliances plugged in near the MagWeb GT, then a significant amount of "line noise" can build up. Faulty electrical connections may be able to operate without actually shorting, but still be loose enough that the connection is creating noise in the line.

Also, newer power systems that are designed with surge protection devices may have a dampening effect on communication through home wiring.

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Symptom: When installing the MagWeb GT, the number of MicroGT inverters listed on the MagWeb GT Home screen is fewer than the actual number installed at the site. Also, when looking at the MagWeb GT, the bottom right number (012 as shown below) does not match the number of MicroGT 500 inverters in the installation.

> *Example:*   192.168.1.101   +W
>
>   234Kwh   **012!**

In this case, there will be an exclamation mark (**!**) because the system can tell there should be more microinverters, but it can't find them. When the system thinks all units have been found, the exclamation mark will go away.

Solution: Check the physical location of the MagWeb GT, paying special attention to how it is plugged in to the wall and what else is plugged in on this circuit.

- **Make sure the MagWeb GT is not plugged into a surge protector or an Uninterrupted Power Supply (UPS).** It should not even be plugged into the same outlet as these devices. It may be necessary to move the MagWeb GT closer to the service panel to avoid this noise.

- **If the problem persists, try plugging the MagWeb GT into a "clean" outlet very close to the service panel.** For testing purposes, it is not necessary at this point to have an Internet connection. Monitor the MagWeb GT's LCD screen for the number of microinverters that display—this is the number of detected MicroGT 500 inverters. If this is more units than were previously detected, then there exists enough noise in the house wiring to necessitate plugging the MagWeb GT close to the service panel.

- **Another temporary option is to run an extension cord from an outlet that is very close to the service panel and has the highest likelihood of being "clean".** This can then be connected to the router as described in the installation instructions on page 1. If all of the MicroGTs in the array appear, then the problem is the wiring in your home. This can be easily solved by keeping the MagWeb GT plugged in close to the service panel, and then getting Internet access by using a Wi-Fi bridge.

Faulty Connection

In some cases, the AC connections between the MicroGT 500 inverters can develop moisture or have an otherwise poor connection.

Symptom: The MicroGT unit has a history of strong performance, but starts to have problems in rainy weather. Also, the unit may register as working but may periodically show as "*NO DATA DISPLAYED*" on the MagWeb GT display.

Solution: The connections between the affected MicroGT inverter(s) should be taken apart and carefully inspected. The connections should be dry with no apparent moisture. Moisture in the AC or DC connectors will cause problems in the system, and can be remedied by placing conductive jell in each contact and reconnecting. All connections should have conductive jell.

MicroGT is not Functioning Properly

If you believe the MicroGT 500 inverters themselves are not working or defective, **DO NOT ATTEMPT TO OPEN OR REPAIR THEM**. Please contact our Customer Service Department at (425) 353-8833.