

Remote Operation of the MPQ1000 via Ethernet

Power quality meters are used in a wide variety of applications, including the following:

- Compliance testing to any PQ standard
- Power factor studies
- Load studies and load balancing
- Billing verification
- Substation monitoring
- Capacitor bank sizing
- Transformer analysis and de-rating
- Motor troubleshooting and inrush testing
- Switchgear and component failure
- Tripping breakers
- Equipment tripping offline
- Dimming/surging lighting
- Lamp flicker analysis
- Neutral overheating
- Solar (PV) analysis

We receive feedback from many our customers who use power quality (PQ) meters - including utilities, industries and service providers. They have told us that one of the most important features of a PQ meter is the ability to control the unit and view data remotely. Having to retrieve a unit from the field in order to download and then analyze the recorded data creates added expenses in time and resources.

The Megger MPQ1000 offers remote operation capabilities. You can start and stop recordings, view data and events, and transfer the data remotely. You can even schedule the day and time that you want data to be transferred.

This application note provides instructions for setting up the MPQ1000 for remote operation via Ethernet.

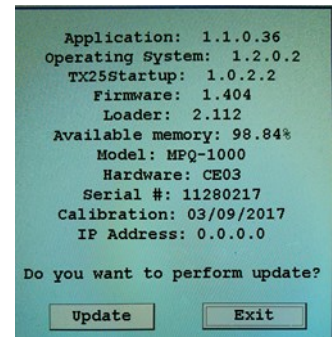
Remote Operation of the MPQ1000 via Ethernet



INITIAL CONFIGURATION

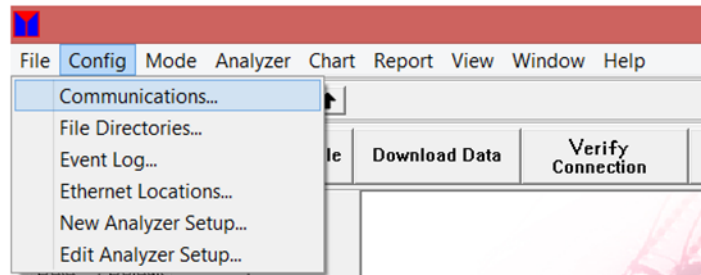
1. Connect the Ethernet bridge to MPQ1000 unit.
2. Wait approximately 2 minutes for the bridge to assign the MPQ1000 an IP address.
3. Open the HELP Screen and view the IP address.

If the IP address reads 0.0.0.0, then wait a few minutes. Close the HELP screen and then re-open the help screen. Verify that an IP address has been assigned.

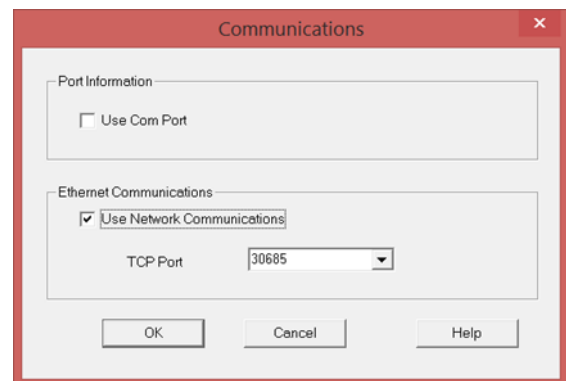


4. Connect the PC to the same network that the bridge is on.
5. Disconnect the PC from any other networks.

6. In the PC software, select CONFIG then COMMUNICATIONS.

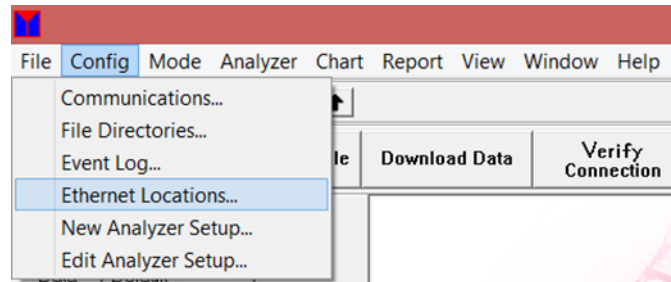


7. In the communications window, select **USE NETWORK COMMUNICATIONS**. Click OK to close the window.

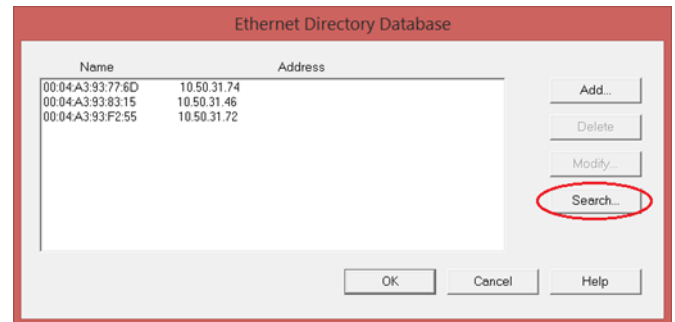


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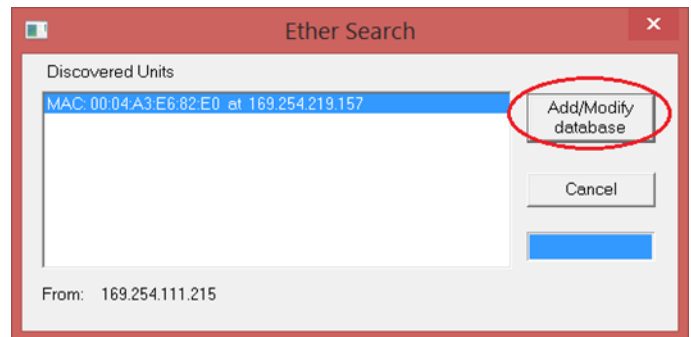
8. In the PC software, select **CONFIG** then **ETHERNET LOCATIONS**



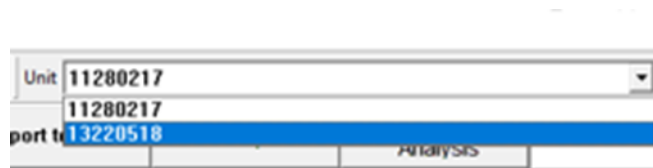
9. In the Ethernet Directory Database window, select **SEARCH**. The software will now search the network and display all MPQ units.



10. A window will open displaying the unit's MAC and IP addresses. Select the desired unit and click on the Add/Modify Database button.

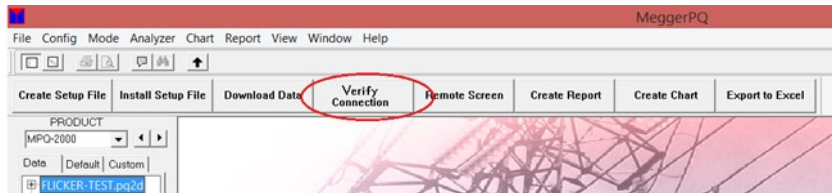


11. Click OK to close the Ethernet directory database window.
12. In the upper right quadrant of the PC software is a drop down field labeled **UNIT**. Select the Serial Number of the unit that you want to connect to.

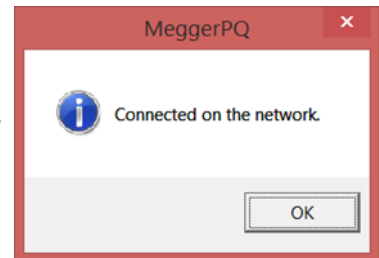


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13. In the PC software select **VERIFY CONNECTION.**



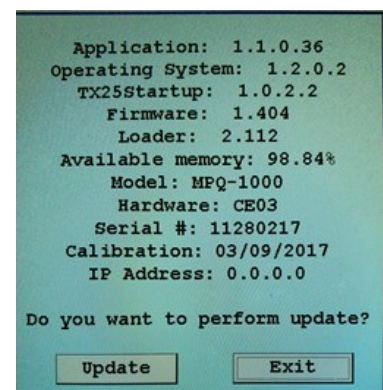
14. The software will now locate the unit and indicate that it has connected.



CONNECTING TO A UNIT ALREADY IN THE COMMUNICATIONS DATABASE

1. Connect the Ethernet bridge to MPQ1000 unit.
2. Wait approximately 2 minutes for the bridge to assign the MPQ1000 an IP address.
3. Open the HELP Screen and view the IP address.

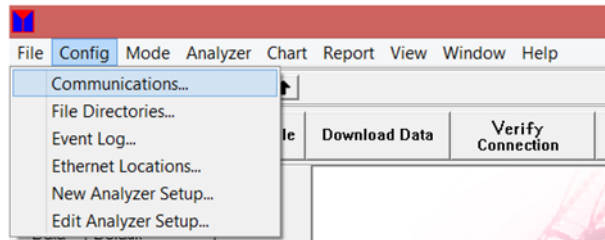
If the IP address reads 0.0.0.0, wait another few minutes, close the HELP screen and re-open the help screen. Verify that an IP address has been assigned.



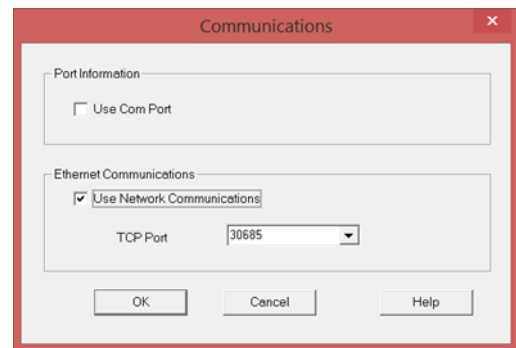
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4. Connect the PC to the same network that the bridge is on.
5. Disconnect the PC from any other networks.

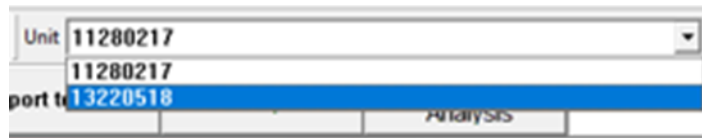
6. In the PC software, select **CONFIG** then **COMMUNICATIONS**:



7. In the communications window, select **USE NETWORK COMMUNICATIONS**. Click OK to close the window.

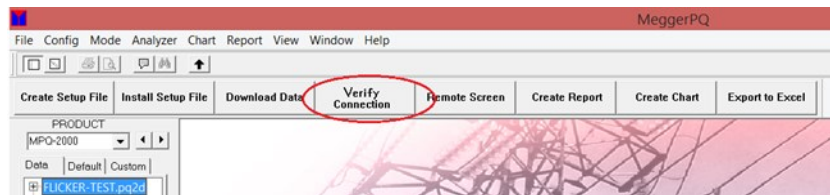


8. In the upper right quadrant of the PC software is a drop down field labeled **UNIT**. Select the Serial Number of the unit that you want to connect to.

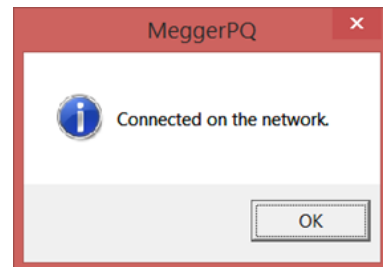


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9. In the PC software select **VERIFY CONNECTION**



The software will now locate the unit and indicate it has connected.



This ability to operate the MPQ1000 and view data remotely provides tremendous flexibility and convenience. It also provides cost savings by reducing the amount of time and resources required with other units that do not have this feature.