

Troubleshooting

Frequently asked questions involving meter troubleshooting.

- [Why does the UI look garbled after a firmware upgrade?](#)
- [I can't connect to my device anymore, what should I do?](#)
- [How do I clear browser cache and/or stored credentials?](#)
- [What does the message "Error: Failed to save epoch." mean?](#)
- [Unexpected readings in Channel Checker](#)

Why does the UI look garbled after a firmware upgrade?

This is typically an issue with web browser caching. Please clear the browser's cache or use the browser's Reload/Refresh button to fix the problem. More information on clearing browser cache is [available here](#). Keep in mind the instructions for your specific browser may vary.

Note that this should not be an issue when updating from [firmware](#) version 2.15 or later.

I can't connect to my device anymore, what should I do?

Changing the "Hostname" in Settings -> Network Settings will cause remote access to the proxy server to be unavailable (e.g., the meter will no longer be accessible at <http://DEVNAME.egaug.es> , <http://DEVNAME.d.egaug.net> or <https://DEVNAME.egaug.io>)

First, power-cycle the eGauge. See the answer to the question "[How do I power-cycle the eGauge?](#)" for details on how to do this.

Second, try unplugging the HomePlug adapter and then plugging it back in, if applicable. This retrains the HomePlug-adapter and will often bring the device back.

Third, let's find out if the device can be accessed locally. We will use **DEVNAME** as a stand-in for the [name of your device](#) (e.g., for eGauge9999 or whatever the name of your device is). Using a computer that is connected to the same LAN as the eGauge, open a browser and open one of the following two URLs, depending on the type of your computer:

<http://DEVNAME/> (on Windows-computers)
<http://DEVNAME.local/> (on Mac or Linux computers)

If this URL loads and you get a graph that's updating, the eGauge is working fine and accessible through your LAN. If the URL does not load, check the following:

- EG4xxx: Check the [Status LCD](#) on the front of the eGauge to verify the link type and connection quality. Verify that the heartbeat icon is pulsing regularly.
- For the eGauge2 (Without built-in Ethernet port): Verify that the HomePlug adapter is plugged into a wall-outlet (NO surge protectors) and that all LEDs are green. If you have a Netgear adapter, all three LEDs should be a steady green, although the bottom LED may flicker from time to time, indicating network traffic. If you have an Actiontec adapter, both the Power and Link LEDs should be mostly green, except for the occasional flicker, indicating traffic on the powerline or the LAN, respectively.
- For the EG301x and EG41xx (Built-in Ethernet port, with HomePlug): Verify that the HomePlug adapter is plugged into a wall-outlet and that all LEDs are lit. If you have an Actiontec adapter, the PWR, LK, and ETH LEDs should be illuminated, except for the occasional flicker, indicating traffic on the powerline or the LAN, respectively. With the TP-Link HomePlug adapter, all 3 LEDs should be illuminated.
- For the EG300x (Built in Ethernet port, no HomePlug) and EG4xxx using direct Ethernet: Verify both LEDs on the Ethernet port are illuminated (There will be both a green and

yellow LED). On the EG4xxx, verify that the [LCD Display](#) shows an Ethernet icon.

- eGauge2 and EG30xx: Check the [Status LED](#) on the front of the eGauge. For EG301x, it should be green blinking green. If it is blinking blue, it may indicate the the HomePlug speed is too low. Blinking blue is correct for the EG300x. If the Status LED is any color other than green or blue, contact eGauge support.

Caution: The eGauge is installed in an enclosure with wires carrying high voltage. If you cannot see the Status LED (eGauge2 and EG30xx) or Status LCD (EG4xxx) without opening the enclosure, please contact a licensed electrician.

Fourth, let's find out whether the eGauge is connected to a server at [egaug.net](#). Open a browser on a computer and try to load this URL (replace **DEVNAME** with the [device name](#) of your eGauge):

```
https://DEVNAME.egaug.es/
```

```
On devices sold after January 1,2024 try: https://DEVNAME.egaug.io/
```

If the page loads fine and results in a graph that updates once per second, your eGauge is fully operational. If the page does not load, it indicates a problem in your LAN environment. For example, the DHCP server on your LAN may be providing incorrect network information, or security settings/software may prevent the eGauge from reaching the proxy server. If possible, power cycle the router and/or modem as applicable and repeat the steps above. This can sometimes resolve connectivity issues that are not related to security settings. If this does not resolve the issue, please consult an IT professional for further help.

When contacting eGauge support, please provide the following details:

- Verification the eGauge was power cycled
- Which color(s) and pattern(s) the eGauge [Status LED](#) is showing (EG30xx and eGauge2)
- The information displayed on the [Status LCD](#) (EG4xxx only)

In addition, if eGauge2, or EG301x/EG4xxx with HomePlug:

- Verification the HomePlug adapter was power cycled
- Verification the HomePlug adapter is not connected to a surge protector
- Whether the HomePlug adapter has been re-located or moved from the original working position
- Which [HomePlug adapter LEDs](#) are illuminated

In addition, if EG30xx or EG4xxx with hardwired Ethernet:

- Whether the LEDs on the eGauge Ethernet port are illuminated
- Whether the Ethernet icon on the [Status LCD](#) is displayed (EG4xxx only)

How do I clear browser cache and/or stored credentials?

In some instances (including upgrading from a firmware version older than [2.15](#)) the eGauge interface may not load correctly. Should this happen, the first troubleshooting step is clearing browser cache. Browser cache is data stored by the web browser to increase the loading speed of a webpage. However, this can have the effect of forcing the browser to use older data. In essence, part of the web page is out of date, which causes (among other things) graphical issues. Devices with firmware 2.15 or newer should not have this issue.

Most modern browsers will attempt to store website credentials. If credentials that do not have the authorization to make changes are stored (for example, if a password was typed incorrectly), the eGauge interface will show the error "Sorry, you are not authorized to make this change." instead of prompting for a username and password when settings are changed. If this message appears **without entering credentials**, then the browser is providing incorrect credentials to the eGauge. To resolve this, the credentials must be cleared from browser memory.

To clear browser cache and/or stored credentials:

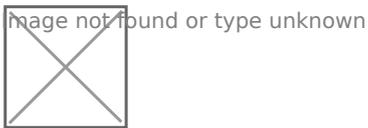
- Press Ctrl+Shift+Delete (Cmd+Shift+Delete on Mac)
- Select the item(s) to clear
- Click the appropriate button to clear the selected item(s)

Note that some browsers (for example, mobile browsers) may have a different process. It may be necessary to search for browser-specific instructions if the steps above do not work. See the tutorial document below for more information:



What does the message "Error: Failed to save epoch." mean?

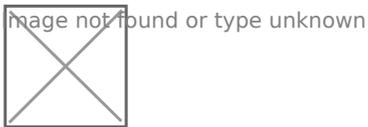
When attempting to save settings, the following error message may appear:



Rebooting the meter first is recommended, as this usually resolves the issue. The eGauge should also be on the latest firmware, so a [firmware upgrade](#) may be necessary.

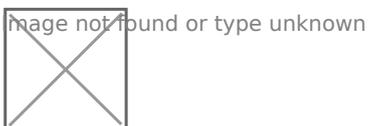
This error message can appear when either of two conditions are met:

1. The date in the "Date & time when recording started" field under **Settings -> General Settings** is older than the database capacity of the eGauge.



To correct this, set the "Date & time when recording started" field to a time more recent than the limit of the database capacity. To check your database capacity, append /cgi-bin/get?db to the end of the eGauge URL. For example: <http://DEVNAME.egaug.es/cgi-bin/get?db> (replace **DEVNAME** with the [device name](#) of the eGauge). Note that this may not work on older firmware. The same approach can be used with devices connecting to the newer version of the proxy, For example: <http://DEVNAME.egaug.io/cgi-bin/get?db>

2. The date in the "Date & Time" field under **Settings -> Date & Time** is set to a point in the future.



To correct this, set the "Date & Time" to the current date and time as displayed on your computer. If the eGauge is connected to an NTP server this setting does not have to be precise; as long as the date and time is within a few minutes of the actual date and time the eGauge will automatically correct the offset.

Unexpected readings in Channel Checker

This article covers common physical reasons for unexpected sensor readings in the channel checker or register values including AC (RMS), DC (mean), and Frequency readings.

This article applies to both CTs to measure amperage and [Sensor Hub](#) compatible sensors.

Incorrect readings in the meter and channel checker may be caused by a combination of physical sensor issues and configuration. For additional troubleshooting information for *power calculations* (wattage and power factor), or if you are **unsure how to access the channel checker**, [visit this article](#).

If you would like to view the raw signals the eGauge meter is reading, you may do so using the [Waveform View](#).

Understanding Frequency Calculations

Starting in meter firmware v4.0.5, frequency of a signal is calculated by the number of zero-crossings. Prior to v4.0.5, frequency was counted based on signal amplitudes.

This means DC signals prior to v4.0.5 will show a frequency value which may be due to ripple voltage, noise, or AC-components in the DC signal. In firmware v4.0.5 and greater, frequency will not show on DC values if the signal does not cross the zero-axis.

The following assumes the meter is using firmware v4.0.5 or greater and therefore counts frequency based on the signal zero-crossing.

No sensor connection

If there is no sensor or voltage connected to an input, the input will "bounce" unpredictably. RMS, DC, and frequency values for the non-connected input may show significantly higher than zero, especially if the sensor configured but not connected has a "bias" associated with it. This is expected and not an issue.

Low or no signal

If the input signal is nonexistent or too low, electrical noise, EMI and radio signals in the environment can be picked up on the signal lines and cause zero-crossings that result in high frequency readings. This is expected and normal, as the signal amplitude (e.g., amperage level) may be non-zero but insignificant.

In the case of amperage readings and power calculations, even if there is a higher than expected RMS reading for the amperage due to high noise levels, when power (watts) are calculated the majority of the noise is canceled out.

If validating amperage readings with another meter, ensure there is sufficient minimum load for the CT amperage rating.

CT not fully clamped

Some CTs require 2 clicks to fully shut. If a CT is not fully closed, it will read incorrect amperage and frequency values, sometimes intermittently.

Non-twisted pair wire

It is critical to use twisted pair wire for CT or other sensor extensions to the meter. Twisted pair wire ensures there will be minimal effect from outside interference and radio signals. When a signal wire is not twisted, it will act as an antenna.

Line voltages do not use twisted pair wire.

Extension mix-ups

It is possible to splice multiple sensors together accidentally, for example when running multiple CTs or sensors in a single CAT5 cable, if a pair on one end is switched two different sensor outputs will be connected to a single input of the meter. The results will be unpredictable and can affect multiple sensor inputs.

Bad splices or pinched wires

As eGauge sensors use a low voltage, 333mV signal to the meter, the line is sensitive to imperfections in the wire. For example, using wire nuts made for power connections will not make a good connection for a low voltage signal cable and will result in bad readings. Similarly, a pinched wire will result in a poor contact point and can disrupt readings, sometimes even intermittently.

Ensure CT or sensor leads using a 2-pin plug have the leads fully secured and in contact.

Incorrect RJ-11 cable for Sensor Hub Sensors

Sensor Hub compatible sensors use an RJ-11 style cable to connect the sensor to the hub. The eGauge uses "straight-through" RJ-11 style, rather than "reverse" which is typically used for telephones. See [this article](#) for more information.

Incompatible Sensors

It is possible for an incompatible sensor (e.g., amperage-output, higher than 333mV, etc) to affect other sensor inputs besides the one it is connected to. This may cause damage to the meter or sensors.

Incorrectly configured or connected sensor or CT

If using non-CTid [sensors](#), it is possible to configure an input for a different kind of CT than is actually physically connected in the port. This will result in incorrect readings.